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Tishk International University



Salahaddin University

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on
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Keynote Speakers, Full Papers, Participants and Conference Program

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Preface

Over the course of centuries, society has undergone transformation from the Stone Age to the era of nuclear power. In the past, the primary focus was on development and expansion, but today, the central concern has shifted to sustainability. Whether considering the smallest entities or large nations, a crucial requirement for both companies and countries is a thoughtful comprehension of this shift. The thought of the conference materialized with the sponsorship of “*Khoshnaw Group of Companies*”, “*AGRO Ubezpieczenia*”, Warsaw, Poland.

5th International Conference on Accounting, Business, Economics and Politics - 2023 (5th ICAPEB-2023) organized by the collaboration of the Faculty of Administrative Sciences and Economics of Tishk International University and Collage of Administration and Economics Salahaddin University, held at the Institute of Management, University of Szczecin, Szczecin, Poland on September 25 - 26, 2023, based on the themes on trends in leadership and entrepreneurship, financial inclusion for social, political, and sustainability development, digital transformation: accounting and business in the digital age, trends in the post-Russian war in Ukraine and peace-building, economic aspects of agricultural insurance in the context of sustainable farm development, quantitative methods: merging with digital technologies and going global.

This conference proceeding book provides a broader scope for learning with the latest update of information on Accounting, Business, Economics, and Politics provided by the researchers. All 65 Abstract and 18 full papers have passed through the blind peer review process and have been checked for contribution to academia. Papers are across the industry with extensive learning and practicality that can have a positive impact on future research. This conference proceeding is the roadmap for future conferences and academic development for the Faculty of Administrative Sciences and Economics.

The conference organizing committee is thankful to the conference keynote speaker, all presenters, guests, invitees, sponsors, Salahaddin University, and Tishk International University.

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Keynote Speakers



Keynote Speaker I

Krzysztof Kompa, Ph.D. Prof.

Executive Vice-President of CEST International
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Senior Associate in College of Business and
Economics

at the University of Johannesburg, South Africa

Dr Krzysztof Kompa is a scientist with over 50 years of professional experience, including 17 years on managerial positions in business. He is an assistant professor emeritus of the Warsaw University of Life Sciences (SGGW in Warsaw/Poland) and a Senior Research Associate in the College of Business and Economics at the University of Johannesburg (South Africa).

He collaborates with Shanghai Lixin University SLU (Shanghai/China) and Shandong University of Finance and Economics SDUFE (Jinan/China) as a guest professor, and has visited universities in Albania, Belgium, China, Germany, Iran, Italy, Montenegro, Spain, South Africa and the USA with invited lectures and courses.

In the last years (2012-2022), he has authored or co-authored 6 books, more than 80 peer-reviewed papers and chapters (also in WoS and Scopus-listed journals) and delivered more than 120 conference papers. The Best Paper Award Winner at the Pan-African IBC 2022 conference. He has managed 4 research grants funded by Polish Authorities.

Key drivers of dividend payouts. A case study of polish Energy Companies

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DOI: [10.23918/ICABEP2023p1](https://doi.org/10.23918/ICABEP2023p1)

Abstract:

Public companies' dividend policy, which determines the structure of dividend distribution to its shareholders, is permanently the subject of intensive research. Presented work stays in line with this research. In Poland, only about 30% of public companies pay dividend and it seems that the State Treasury companies pay dividends more often than others. The purpose of our research is to identify the determinants of dividend payouts in years 2011-2020, in quite stable pre-pandemic and pre-war period, as well as to compare energy companies with other non-financial public firms in terms of synthetic measure of effectiveness. This paper focuses on the public companies operating in the energy sector in Poland because most energy companies are State Treasury ones, and the energy sector plays the crucial role in today's world, implied on the economy, and social well-being, up to environmental protection and states' physical security. Investigations are provided applying Vector Measure Construction Method techniques, correlation analysis and pooled regression. We consider such potential determinants of dividend payouts as: size of the company, general economic situation, financial standing of the company, type of ownership, subsector, structure of statutory bodies of companies, etc. Financial efficiency of firms is measured by single financial ratios and by synthetic measure of company's financial efficiency. Using vector synthetic measure of firms' efficiency is one of the crucial novelties of this research. The research shows that the dividend policy of energy companies in Poland is irregular and dividend payouts significantly depend on firms' financial efficiency, the size of their assets, and lagged dividend payouts. It is also visible that companies decide about dividend payout looking on current economic situation. The value of our research consists in identification of dividend payouts determinants of public energy companies operating in Poland.

Keywords: Dividends, Shareholders, Public Firms, Vector, Public Energy Companies.



Keynote Speaker II

dr. hab. Jaroslaw Korpysa, Prof. US

Director Doctoral School,
Chair of the Scientific Committee UNESCO,
Chair for Social Sustainability,
University of Szczecin, Poland

Professor Jaroslaw Korpysa is Director Doctoral School of the University of Szczecin, Chair of the scientific committee UNESCO Chair for Social Sustainability and working at Department of Support Decision's Methods and Cognitive Neuroscience, Szczecin University (Poland).

He has published many articles (124) about entrepreneurship, academic entrepreneurship, spin – off companies. He was fellower 6th and 7th FP, Human Resources and Mobility Activity, Marii Curie Action at University of Vilnius (Lithuania), University of St. Gallen (Switzerland) and Institute of World Economy and International Relations, National Academy of Sciences of Ukraine. His scientific interests: academic, entrepreneurship, modern business theories, competitive strategy, risk management, labour market.

He participated in national and international conferences (more than 70) and in the scientific projects (12) funding by MEiN, NCNN, NCBiR and the European Commission.

Decision Criteria and Determining Factors Importance Validation for Sustainability of Entrepreneurial Startups

dr. hab. Jaroslaw Korpysa, prof. US

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Abstract:

The main goal of the study is to assess the Decision criteria, and the determining factor for the sustainability of entrepreneurial startups. Both of these concepts are in the development phase are the outcome of entrepreneurial ecosystem and individual behavior and traits. The current study solved the research problem by statistical assessment of decision criteria and determining factors categorizing them with their importance may provide requisites to lead a successful entrepreneurial startup. The research conducted based on research questions, objectives, conceptual model, and hypothesis tested based on data collected implementing a survey questionnaire on a sample established entrepreneurs. Which further concludes that five components of decision criteria are Region, Competition, Funding Opportunities, Tax System, and Country Economic Situation, whereas the eight components Consciousness and Reliable, Pursuit Results, Flexibility, Stress Resistance, Skills Identification Exploitation Potential Market Opportunities, Leadership, Creativity, and Innovation, and Delegation Decision Making of determining factor are required for a successful entrepreneurial startups.

Keywords: Decision Criteria, Sustainability, Entrepreneurial Startups.



Keynote Speaker III

Dr. Mohammad Salih Mustafa

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Dr. Mohammad Salih Mustafa is the Head of the International Relations and Diplomacy Department at Tishk International University in Erbil, Kurdistan Region, Iraq, and an Associate Fellow of the British Academy.

He holds a PhD in Ethno-Political Studies from the University of Exeter and an MA in Near and Middle Eastern Studies from the School of Oriental and African Studies (SOAS), University of London. His research interests include Middle Eastern Politics, Religious Nationalism, Islamism, Kurdish Studies, Kurdistan Region, Muslim Brotherhood, Counter Terrorism, and Security.

Dr. Mustafa has several publications to his credit, including 'Nationalism and Islamism in the Kurdistan Region of Iraq: the Emergence of the Kurdistan Islamic Union,' published by Routledge (2020); 'The Anti-Kurdish Thoughts of ISIS,' published in the Review of Middle East Studies, Cambridge University Press (2023); 'The Trajectory and Current State of Intra-Kurdish Politics in the Kurdistan Region, the Role and Influence of Iran and Turkey,' published in the Turkish Journal of Security Studies (2016); and 'Iran's Role in the Kurdistan Region,' published in Aljazeera Centre for Studies (2016).

The Middle East's Predominant Issue

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DOI: 10.23918/ICABEP2023p3

Abstract:

The Middle East is one of the global regions most embroiled in turmoil. Yet, the production of oil has made it one of the most lucrative. The region, too, has already witnessed a series of wars at different levels. This paper tries to determine the overarching issue that has triggered much of this turbulence in the Middle East. This will be established by looking at a series of interconnected events and their economic consequences. Document analysis will be employed for this study. Highlighting major events such as the eight-year Iraq-Iran war and tracing subsequent connected episodes such as the invasion of Kuwait by the former Iraqi regime in 1990, economic sanctions on Iraq, the presence of foreign troops in the Arab Gulf states, and liberating Kuwait will be covered in this project. Also, this paper claims that relevant events that led to the Arab Spring and its aftermath were brought about for the same reason. All the themes covered will be supported by data-driven evidence, which supports and explains the claim that this paper argues.

Keywords: Middle East, Iraq, Iran, Kuwait, Kurds, Arab Gulf States, Israel, Arab Spring



Keynote Speaker IV

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Dr. Ghouisia Khatoon is currently working as Professor & Head at the Department of Accounting, Faculty of Administrative Sciences & Economics, Tishk International University, Erbil, Kurdistan Region, Iraq.

She has worked as an Associate Professor in Prince Sultan University and as an Assistant Professor in Princess Nourah University, Kingdom of Saudi Arabia. She has to her credit bachelor's in commerce, master's in commerce, master's in business administration, Post Graduate Diploma in Management, Post Graduate Diploma in Financial Management, Diploma in Management and PhD in Venture Capital Finance (PhD Thesis evaluated by Australian Catholic University, Australia). She has more than two decades of experience in teaching and research. She has authored 18 books and published 40 research articles in the journals of repute including Scopus indexed journals and journals indexed in Web of Science such as WILEY, Inderscience Publishers, Taylor & Francis and MDPI. She is the recipient of Best Paper Award on 'Strategies for inclusive growth' at SBJIT, Bangalore, India, and Distinguished teacher award from MTC Global. She is also the recipient of MTC Global Outstanding Researcher Award -2022.

She has presented research papers in international conferences at China, Spain, Romania, Malaysia, UAE, Jordan, and Iraq. She has chaired sessions and delivered keynote address in international conferences and reviewed papers for Springer, Information Sciences Letters (Scopus, Q2) and Eurasian Journal of management and Social Sciences. Her areas of Expertise include Green Finance, Start-Up Finance, FDI, Auditing, IFRS, Forensic Accounting, Financial Literacy, Fintech, Venture Capital, Environmental Accounting, Gender diversity and Corporate Performance.

Empowering the Underprivileged - A Peep into the Challenges and Strategies

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DOI: [10.23918/ICABEP2023p4](https://doi.org/10.23918/ICABEP2023p4)

Abstract:

Financial inclusion is provision of financial services to the underprivileged section of the community at affordable cost. The financial inclusion comprises enabling adults to own a bank account, provision of deposit schemes, loan facility, credit cards, insurance etc. Since the poor section of the community cannot afford to provide collateral, they have no access to formal financial services, and they resort to the private money lenders who charge excessive interest rates, and this drags weaker section into the debt trap lifelong. The solution is to empower the unbanked population, but bringing this vulnerable population within the framework of financial inclusion is a major challenge. Thus, the fundamental aim of this piece of research is to visit the existing literature to understand the challenges encountered to bring the underprivileged population closer to formal financial system and offer innovative strategies to overcome the challenges.

Keywords: Financial Services, Financial Inclusion, Underprivileged, Empowerment

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Full Papers

Forecast the Erbil International Airport Data Using Statistical Methods

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DOI: 10.23918/ICABEP2023p15

Abstract:

This paper concentrates to use two advanced statistical methods (Box–Jenkins and Adaline Neural Network) to forecast future values using data from the past values of a variable of all people that they had taken Erbil Airport as a way to move to other countries. The real data set were collected and obtained from Erbil International Airport and The sample observation consisted of (72) month, from the Airport transfer process during a certain time period 2017-2022. For the purpose of choosing the best model fit for these two models, the values of three criteria measures Mean Square Error (MSE), Mean Absolute Deviation (MAD) and Akaike Information Criterion (AIC) have been obtained from the estimated models. Additionally, the results showed that although the parameter estimations of the two models are not directly comparable, the results of all two models are not similar. Software packages StataV.16, SPSS V.26 and Matlab (R2013a) were used to fit the models.
Keywords: Artificial Neural Network, Adaline Neural Network, Box-Jenkins methodology, ARIMA models.

1. Introduction

The purpose of this article is to compare forecasts of real-world data using a time series statistical method and an artificial neural network (ANN). This paper focuses on predicting future values of a variable based on its past behavior. Traditionally, this problem is resolved using statistical analysis; first, a time-series model is constructed, and then statistical prediction algorithms are applied to acquire future values. Time series modeling is a highly effective technique, but its construction requires the knowledge or discovery of initial conditions (Husek, 2007), (Meloun, Militký, 2004). Time-series data is widely used in the areas of statistics, economics, finance, and forecasting, as well as in domains that contain temporal information. Time-series analysis is a set of analytical methods which seek to detect and analyze the temporal component within a dataset, with the goal of uncovering significant statistics and trends.

Usually, this method includes using time-series models to effectively analyze the data and uncover its inherent properties. Time-series forecasting involves utilizing these models to make predictions

about future values by leveraging historical observations. (Chenhui, 2021).

There are several techniques and approaches for developing forecasting models. This study focuses solely on time series forecasting models, specifically the Auto Regressive Integrated Moving Average (ARIMA). Box and Jenkins have identified these models, it is possible to analyze and make predictions on any data set with ANNs in general. Our key objectives are to use time series neural networks and compare the results with conventional statistical approaches. In the methodology section where the author explained very well the approaches and stated that Artificial neural networks, one of the methods developed in recent years, have demonstrated their ability and efficacy, relative to conventional statistical methods, to predict and solve problems reliably and easily. The major difference between ANNs and classical models such as ARIMA is the absence of priori assumptions that are normally required for these trading applications (Box and Jenkins, 1976).

2. Time Series Analysis

Time series analysis is a specific way of analyzing a sequence of data points collected over an interval of time. In time series analysis, analysts record data points at consistent intervals over a set period of time rather than just recording the data points intermittently or randomly. Forecasting is the process of predicting future events based on past and present data. Time-series forecasting is a type of forecasting that predicts future events based on time-stamped data points. Time-series forecasting models are an essential tool for any organization or individual who wants to make informed decisions based on future events or trends. From stock market predictions to weather forecasting, time-series models help us to understand and forecast changes over time. A time series is a set of observations x_t , each one being recorded at a specific time t . A discrete time series is one in which the set T_0 of times at which observations are made is a discrete set, as is the case, for example, when observations are made at fixed time intervals. Continuous time series are obtained when observations are recorded continuously over some time interval, e.g., when $T_0 = [0, 1]$ (Brockwell and Davis, 2016).

2.1 Box-Jenkins methodology

The Box-Jenkins methodology is a strategy for identifying estimating and forecasting autoregressive integrated moving average models, The methodology consists of a four-step iterative cycle of:

- Model Identification; Identification by looking at the sample autocorrelations and the partial autocorrelations of the possible models.
- Model Estimation; Estimation by certain optimization methods of the unknown parameters. diagnostic checks on model adequacy; Testing the adequacy of the fitted model on model residuals by performing the normal probability map, ACF and PACF.
- Model forecasting stage: Prediction of future results on the basis of known data (Stencl, et.al, 2010).

2.2 Auto Regressive Integrated Moving Average Model

ARIMA stands for Auto-Regressive Integrated Moving Average. It is a well-known time-series model that is broadly used in statistics and econometrics. It is a generalization of the Autoregressive Moving Average (ARMA) model to overcome the disadvantage that the ARMA is only sufficient to stationary time-series data by introducing differencing into the model. ARIMA model is a form of regression analysis, and it is extensively used to understand the data and make future predictions based on historical values. (Chenhui, 2021) (Abd Saleh, 2013).

Autoregressive moving average (ARMA) models are part of the Box-Jenkins methodology for time series forecasting (Wedding, Cios, 1995).

- Autoregressive (AR): It refers to a model with a variable that regresses on its own lagged values. The number of lagged observations (i.e., the lag order) is indicated by p.
- Integrated (I): It is the time of differencing applied to the raw data that allows the time-series data to become stationary. It is also known as the degree of differencing and is indicated by d.
- Moving Average (MA): It indicates the dependency between an observation and a residual error from a moving average model applied to lagged observations. The order of the moving average is expressed as q.

ARIMA models have a wide range of applications. Javier Contreras et al. used ARIMA models to analyze the time-series data of hourly prices in the Spanish electricity markets and predict the next-day price with a reasonable average error of around 10%. (Chenhui, 2021)

The processes type are AR(p), MA(q), ARMA(p,q), ARIMA (p, d, q). The questions in mind we have are: how does one know whether it follows a purely AR process or a purely MA process or an ARMA process or an ARIMA process (Din, 2015):

$$AR_{(p)}: x_t = \sum_{i=1}^p \phi_i x_{t-i} + \varepsilon_t \quad , \quad MA_{(q)}: x_t = \sum_{i=1}^q \theta_i \varepsilon_{t-i} + \varepsilon_t \quad \dots (1)$$

$$AR_{(1)}: x_t = \phi x_{t-1} + \varepsilon_t \quad , \quad \text{which is a random walk for } \phi = 1$$

$$MA_{(1)}: x_t = \theta \varepsilon_{t-1} + \varepsilon_t \quad , \quad \text{where the residuals } \{\varepsilon_t\} \text{ are white noise distributed as:}$$

$$\varepsilon_t \sim i. i. d. N(0, \sigma^2)$$

The stochastic process $\{\varepsilon_t\}$ is called white noise (WN), if at every moment, the random variable ε_t is normally distributed, with zero mean and constant variance, i. e. meet the conditions:

$$E(\varepsilon_t) = 0 \quad , \quad E(\varepsilon_t^2) = \sigma^2 \quad ; \quad Cov(\varepsilon_t, \varepsilon_{t+k}) = 0 \quad , \quad t \neq k \quad \dots (2)$$

When using the delay operator (lag) $L(x_t) = x_{t-1}$, the processes can write (Din, 2015)::

$$AR(p): \left(1 - \sum_{i=1}^p \phi_i L^i \right) x_t = \varepsilon_t \quad , i. e. \quad \Phi(L)x_t = \varepsilon_t \quad , \quad AR(1): (1 - \phi L)x_t = \varepsilon_t \quad \dots (3)$$

$$MA(q): x_t = \left(1 + \sum_{i=1}^q \theta_i L^i \right) \varepsilon_t, \quad i.e. x_t = \Theta(L)\varepsilon_t, \quad MA(1): x_t = (1 + \theta L)\varepsilon_t \dots (4)$$

Where:

ϕ, Φ = autoregressive parameters.

θ, Θ = moving average parameters

3. Adaline Neural Network

Adaline Neural Network It is a single linear unit Adaptive Linear neuron using a bipolar activation function (+1, -1). The delta rule is used for training to minimize the Mean Squared Error between the actual output and the target output. The weights and the bias are adjustable. In Fig. 1, the structure of Adaline can be seen. First, initialize weight, input data to calculate the net of the Adaline network, then apply the activation function to that output, compare with the original output if both are equal, then give the output an error back to the network and update the weight according to the error, which is calculated by the delta learning rule. Depending on equation (2)

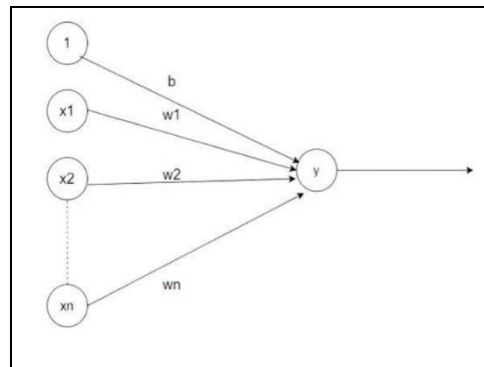


Fig.1: Structure of Adaline Network

The difference between the expected value and the forecast value is squared to determine the error in the Adaline in a single iteration, or $(y - \hat{y})^2$. For all of the scenarios with $j = 1, 2, \dots, n$ in a given dataset, this procedure of comparing the expected and Forecast values is repeated.

3.1 Algorithm of Adaline Neural Network

Step 1: Initialize weight. Not zeros, but small random values are used. Set the learning rate α .

Step 2: While the stopping condition is false, do steps 3 to 7. Step 3: For each training set, perform steps 4 to 6.

Step 4: Set the activation of the input unit $x_i = s_i$ for $i = 1, 2, \dots, n$.

Step 5: Compute the net input to the output unit.

$$y_{im} = \sum_{i=1}^n w_i x_i + b \quad \dots (5)$$

Here, b is the bias, and n is the total number of neurons.

Step 6: Update the weights and bias for $i = 1$ to n .

$$w_i(\text{new}) = w_i(\text{old}) + (t - y_{im})x_i \quad \dots (6)$$

$$b(\text{new}) = b(\text{old}) + (t - y_{im}) \quad \dots (7)$$

Where w_i , y_{im} and t are the weight, forecast output, and true value respectively, and calculate

$$\text{Error} = (t - y_{im})^2 \quad \dots (8)$$

When the forecast output and the true value are the same then the weight will not change.

Step 7: Test the stopping condition. The stopping condition may be when the weight changes at a low rate or no change.

3.2 Measurements of Selecting Model

a. Mean Squared Error (MSE): it is measures to forecast the error variance.

$$MSE = \frac{1}{n} \sum_{i=1}^n (x_i - \hat{x}_i)^2 \quad \dots (9)$$

Where F_i : the forecasted values, n : is the sample size, X_i : the actual observation at time t .

b. Mean Absolute Deviation: it is the average distance of a dataset between each data point and the mean. It gives us an idea of the variability in a dataset.

$$MAD = \frac{\sum_{i=1}^n |x_i - \bar{x}|}{n} \quad \dots (10)$$

c. Akaike's Information Criterion (AIC): It is a general criterion in the construction and modeling of time series created by Japanese scientist Akaike, and it is employed in diagnosing the rankings of time series models. It used to compare the quality of a set of statistical models to each other. The following formula is used to compute the AIC value.

$$AIC_{(k)} = 2k - n \ln(\sigma_\varepsilon^2) \quad \dots (7)$$

Where n : is the sample size, σ_ε^2 : Residuals variance. k : The number of estimated parameters.

4. Application Part

In this Part, we analyze actual data by using statistical methods to forecast the total passengers by two powerful techniques. Eight variables (EIA Pax aircraft Movement, Male arrivals, Male departures, Female arrivals, Female departures, Domestic passenger, Infant Passengers less than 2 years old and adult passengers older than 2 years old) can be defined as X_1, X_2, \dots, X_8 . And used three criterions for selecting the best model; Mean Square Error (MSE), Mean Absolute Deviation (MAD) and Akaike Information Criterion (AIC).

1.1 Data Collection

The data were used for time series analysis and ANN in this paper, considered monthly data and these are delivered as monthly totals. Often, the seasonal effect becomes much cleaner and easier to

understand if we switch to the daily average per month rather than considering the monthly total. From simplified patterns, we humans as well as prediction models usually are more successful in extracting the relevant information. The numbers of international passenger bookings (in thousands) monthly on an airline in the Erbil were obtained from the Erbil International Airport for the period time 2017-2022. Where the sample dataset of this study was limited of (6) year's ago; beginning from 1st January 2017 through to 31st December 2022 of all people that they had taken Erbil International Airport as a way to move to other countries. The sample observation consisted of (72) month, total international Passengers is a main variable under study (dependent variable) during period of six years was measured.

1.2 Apply of Time Series analysis

The most important means of visualization is the time series plot, where the data are plotted versus time/index.

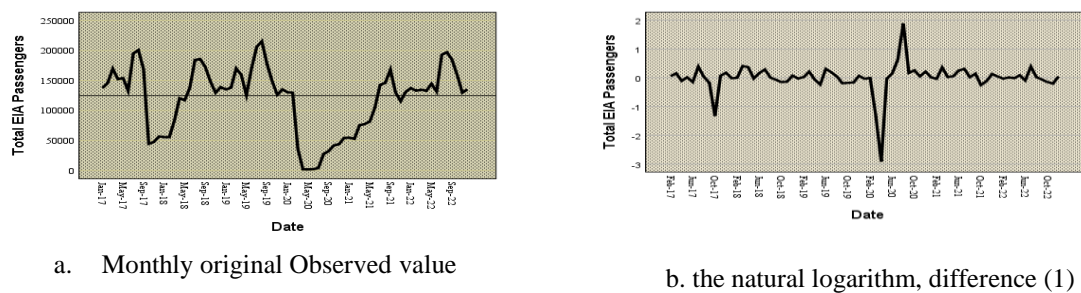


Fig. 2: Graphic representation of the original and transformed time series.

Figure (2, a.) above shows number of total passengers distributed for seven years ago in Erbil airport; where the Y-axis represents the total EIA against the X- axis which is the time. The line has different behavior look at the (2017 and 2020), this express that the air movement internationally demand for travelling did not show highly significant improvement as a new epicenter of COVID-19 emerged in several countries, leading to a re-imposition of travel restrictions in (2020). The struggle against ISIS, which began in 2017, has had a significant impact (affected) on Kurds' daily lives, particularly through its effects on the KRG economy, which led to stopped travelling on Erbil airport during period of time. as we saw in line of 2017.

Figure (2, a.) shows that the process is not stationary, and it is necessary to differentiate it first. we checked the stationary condition for the original data series before transformed data series, and the Autocorrelation Function (ACF) and the Partial Auto Correlation Function (PACF) also confirmed the series is not stationary look at the figure (3).

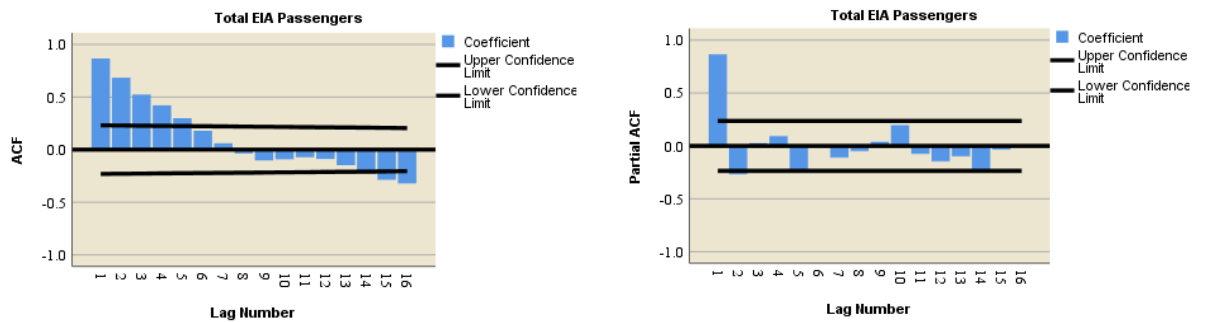


Fig. 3: Graphic representation of ACF and Partial ACF of the original time series data

Figure (3) gives a plot of the ACF and PACF of the original series, here we notice that the ACF does not tail off. the series is non-stationary and differencing will be needed. we suggest to apply some transformations, such as logarithms and one differentiating data series to ensure that the assumption of stationary of the ARIMA model is approximately satisfied as figure (2, b.), look at the ACF and PACF of the transformed data look at the figures (4) and Appendixes.

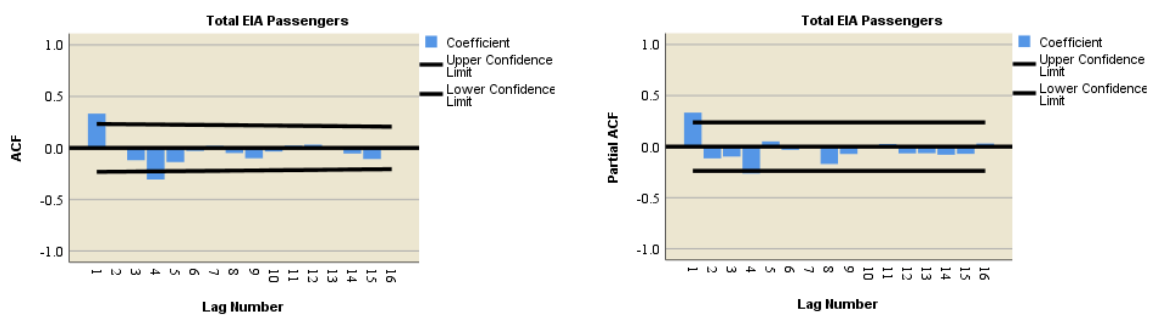


Fig. 4: Graphic representation of ACF and Partial ACF of the transformed time series data

The procedure of fitting is summarized by the following steps (Box and Jenkins, 1976):

1. Transform data using natural log transformation which was found the most appropriate.
2. Removing trend and fluctuations component by using the first order differencing and natural logarithm.
3. Model identification by plotting ACF and PACF of monthly observations.

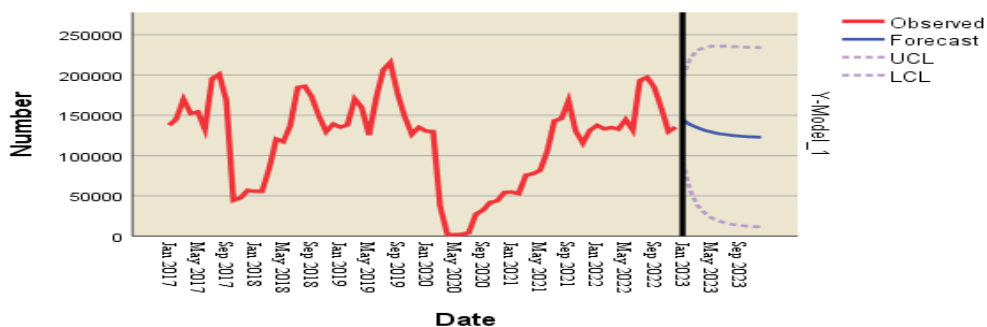


Fig. 5: ARIMA Forecast model of (2,0,2)

Graph above shows the red line represents values of the original time-series data and the blue line shows the time-series forecasting for the twelve months of (2023) with taking the difference and natural log to remove the component. The prediction was constructed for 12 months of year 2023 and confidence level was set to 95% for forecasting future values. The values computed using statistical analysis have to be compared to results of neural network experiments.

The MSE, MAE and AIC metrics for all models in this paper are listed in Table (1). It is obvious from the table that one model overall has the lowest MSE, MAE and AIC for the variable under the study (total Passengers), proving that it has the best performance when predicting the case trend (and also the case number) of total passengers. It predicts almost the exact values to the actual values, meaning that it can play a very important role in predicting the case trend in the future. Results of the analyses of forecasting the data are comparable in terms of prediction accuracy. Some of the expected differences were proofed. The first difference is that both statistical methods computed worse results, when compared to the neural networks results. The cause could be the type of the prediction, focusing on precise point prediction.

Table 1: Comparison of different forecasting statistical models

Models	MES	MAE	AIC
<i>ARIMA (2,0,0)</i>	26977.7	17829.7	20.4889
<i>ARIMA (1,0,1)</i>	27056.4	17788.7	20.4947
<i>ARIMA (2,0,2)</i>	26545.1	17722.2	20.3121
<i>ARIMA (1,0,2)</i>	26993.4	18068.3	20.5178
<i>ARIMA (0.1.1)</i>	28563.7	18806.3	20.5198

In table (1), We can conclude that the better result is the smallest values of these criterion of all *ARIMA* models suggestions. Obtained forecast result of the *ARIMA (2,0,2)* copying the real data more precisely that in the others *ARIMA* models. Future work of total passengers will focus on this model is much better than the others forecasting futures value. here, the method identifies an *ARIMA (2,0,2)* with drift term as the best fitting model and produces a forecast that is approximately linearly decreasing. Nevertheless, in practice, where we do not have intimate knowledge about the data generating process, careful modelling with *ARIMA* (and potentially adding drift terms) is important for producing successful forecasts and figure (6) below is the ACF and PACF for the residuals of the model *ARIMA (2,0,2)*.

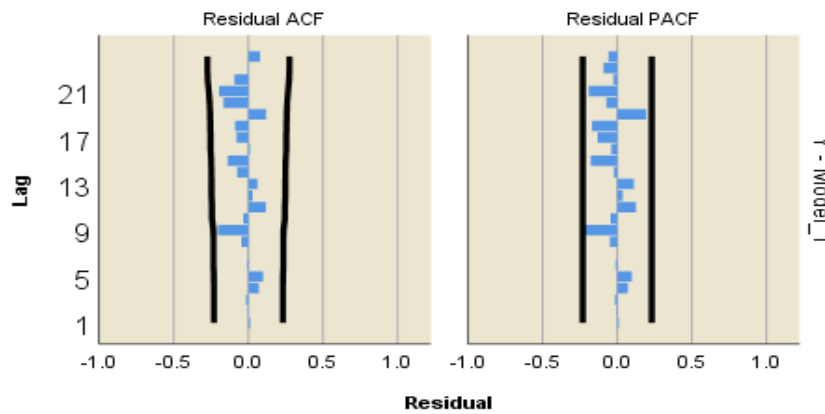


Fig. 6: ACF and PACF of the Residual Forecast of ARIMA (2,0,2)

Figure (6) shows the plot of ACF and PACF diagrams residual for Forecast values of ARIMA (2,0,2) model. The ACF and PACF should be considered together for the whole estimation period. The mean of the residuals is close to zero and there is no significant correlation in the residual's series.

5.3 Apply Adaline Neural Network

The structure of the Adaline network is initializing weight between 0.5, -0.5, learning rate (α) is equal to 0.1, 0.01 and 0.005 input is 72, the number of hidden layer is 4 nodes and the output there are 72 months of data sets; 50 data sets are selected as the training set, 11 for validation set and 11 data sets are used for the testing set. After normalizing by using Activation Function and depending on the single hidden layer and output.

Table 2: The Measurement of Adaline Network

Measurement Learning Rate	MSE	MAD	AIC
$\alpha=0.1$	0.353	0.054	-6.916
$\alpha=0.01$	0.0521	0.321	-12.93
$\alpha=0.005$	0.0034	0.041	-16.631

in Table (2), we can see that the minimum values of MSE, MAD, and AIC with the difference in learning rate of training the network show that learning rate 0.005 is best than others depending on these minimum values of measurement.

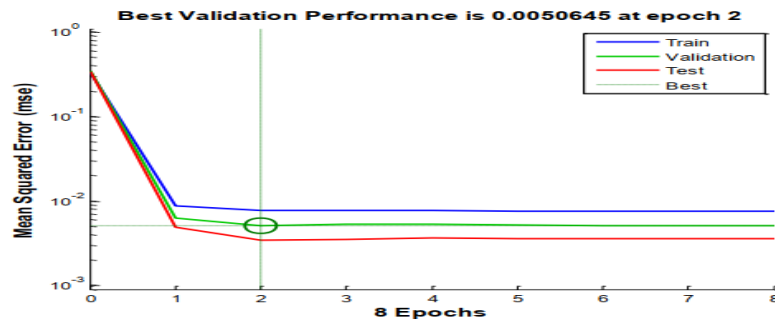


Fig. 7: The Performance of Adaline Network

Figure (7) shows the best performance of the Adeline network. The mean square error is divided by three sets: the training set, the validation set, and the testing line. The data used in this research consists of the best possible result. Consisted of 72 months: 70% for the training set (50 observations), 15% for the validation set (11) and 15% for validation. The validation set is equal to the best performance, the training set and test set are near, with the best stopping at iteration 2 of epochs 8, and the minimum value of the mean square error is equal to 0.0050645 at the time of training data, which is 0.00:04.

5. Conclusion

1. The line has different behavior look at the (2017 and 2020) in the original time series sequence, these due to a new epicenter of COVID-19 emerged in several countries, leading to a re-imposition of travel restrictions in (2020). The struggle against ISIS, which led to stopped travelling on Erbil airport during period of time. as we saw in line of 2017.
2. The empirical of this study revealed the best ARIMA validated model to forecast future values of the total passengers of time series for the next year (2023).
3. Five ARIMA models validated for the same time series of total passengers, where the MES, MAE and AIC of ARIMA (2,0,2) is the best one. Because it has the lowest MES, MAE and AIC values.
4. The diagnostic checking models show that ANN model is more adequate than Time series models.
5. linear regression and Convolutional Neural Network (CNN) [24]. In the future work, such models can be included to broaden the comparison.
6. It can be concluded that the minimum value of the Adaline Network's learning rate is 0.005 of the measurement to select the best model.
7. The best performance of the Adaline network depending on a single hidden layer and six nodes with the training, validation, and testing set at the time is 0.00:04.

6. Recommendations

1. In this paper, only five time-series analysis methods are used to predict the total passengers as a case study and compare with each other. There are actually many more models that can be used in this time-series.
2. Only univariate data is considered in this research. Many researchers have proven that more sources of data can help increase the accuracy of prediction.
3. In recent years, usually combine both the statistical models (ARIMA) and machine learning approaches (ANN) to produce better results.
4. Using the Adaline network and comparing it with Box and Jenkins.
5. Depending on the model 1-6-1, it has less time to forecast the future.
6. The Adaline network is a highly effective forecast for this research.

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7. Appendixes

ACF for time Series: Total EIA Passengers (Autocorrelations)						ACF for time Series: after transformation Total EIA Passengers (Autocorrelations)					
Lag	Autocorrelation	Std. Error ^a	Box-Ljung Statistic			Lag	Autocorrelation	Std. Error ^a	Box-Ljung Statistic		
			Value	df	Sig. ^b				Value	df	Sig. ^b
1	.866	.115	56.274	1	.000	1	.333	.116	8.220	1	.004
2	.683	.115	91.785	2	.000	2	.009	.115	8.226	2	.016
3	.525	.114	113.029	3	.000	3	-.120	.115	9.328	3	.025
4	.422	.113	126.957	4	.000	4	-.306	.114	16.572	4	.052
5	.299	.112	134.044	5	.000	5	-.137	.113	18.041	5	.073
6	.180	.111	136.666	6	.000	6	-.030	.112	18.110	6	.066
7	.060	.110	136.963	7	.000	7	.020	.111	18.142	7	.011
8	-.037	.110	137.075	8	.000	8	-.050	.110	18.350	8	.019
9	-.103	.109	137.972	9	.000	9	-.100	.109	19.190	9	.084
10	-.093	.108	138.709	10	.000	10	-.035	.108	19.293	10	.037
11	-.072	.107	139.160	11	.000	11	.023	.108	19.339	11	.055
12	-.088	.106	139.855	12	.000	12	.032	.107	19.427	12	.079
13	-.147	.105	141.811	13	.000	13	.011	.106	19.437	13	.110
14	-.225	.104	146.454	14	.000	14	-.055	.105	19.712	14	.139
15	-.286	.103	154.110	15	.000	15	-.107	.104	20.777	15	.144
16	-.321	.103	163.897	16	.000	16	-.016	.103	20.800	16	.186

1. ARIMA (2,0,0)

Model Statistics										
Model	Number of Predictors	Model Fit statistics					Ljung-Box Q(18)			Number of Outliers
		Stationary R-squared	RMSE	MAPE	MAE	Normalized BIC	Statistics	DF	Sig.	
Total EIA Passengers-Model_1	0	.769	27047.690	65.017	18033.689	20.589	14.658	16	.550	0

2. ARIMA (1,0,1)

Model Statistics										
Model	Number of Predictors	Model Fit statistics					Ljung-Box Q(18)			Number of Outliers
		Stationary R-squared	RMSE	MAPE	MAE	Normalized BIC	Statistics	DF	Sig.	
Total EIA Passengers-Model_1	0	.767	27122.810	68.752	18015.874	20.594	15.410	16	.495	0

3. ARIMA (2,0,2)

Model Statistics										
Model	Number of Predictors	Model Fit statistics					Ljung-Box Q(18)			Number of Outliers
		Stationary R-squared	RMSE	MAPE	MAE	Normalized BIC	Statistics	DF	Sig.	
Total EIA Passengers-Model_1	0	.781	26687.820	64.210	17913.235	20.681	10.328	14	.738	0

4. ARIMA (1,0,2)

Model Statistics										
Model	Number of Predictors	Model Fit statistics					Ljung-Box Q(18)			Number of Outliers
		Stationary R-squared	RMSE	MAPE	MAE	Normalized BIC	Statistics	DF	Sig.	
Total EIA Passengers-Model_1	0	.772	27059.964	64.983	18105.851	20.649	13.295	15	.580	0

5. ARIMA (0,1,1)

Model Statistics										
Model	Number of Predictors	Model Fit statistics					Ljung-Box Q(18)			Number of Outliers
		Stationary R-squared	RMSE	MAPE	MAE	Normalized BIC	Statistics	DF	Sig.	
Total EIA Passengers-Model_1	0	5.551E-16	28766.988	45.378	18811.468	20.594	20.756	18	.292	0

Political and Economic Implications of the Russia-Ukraine War for Nigeria

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Abstract:

The Russia-Ukraine war, which began on the 24th of February 2022, following Russia's invasion of Ukraine has upset the relative balance and stability of the world, with implications. It is against this background that the paper examined the extent to which Nigeria has been affected on the economic, political, and social fronts. The paper utilized document analysis for data collection and content analysis for data analysis and discussion of findings. The findings include increase in prices of commodities, resulting in faster inflation and slower economic growth, disruption to industrial activities and agricultural production, foreign exchange crisis and low purchasing power of the Naira (₦), disruption to the foreign education of Nigerians, heightened insecurity and reduced political leverage of Nigeria in national and international politics. The paper recommends that urgent and effective measures should be taken to address the identified challenges and a policy should be formulated and implemented to diversify the Nigerian economy.

Keywords: Russia-Ukraine War, Russia, Ukraine, Nigeria, International System, International Political Economy

1. Introduction

The Russian invasion of Ukraine, which began on 24th February 2022 has shaken the entire world, with implications for the global economy. This, therefore, means that it has upset the political, economic, and social balance of the world. It currently threatens global food security, as both Russia and Ukraine are agricultural powers. Russia is also an energy power; it has been using this energy leverage to respond to the thousands of sanctions that the United States and Europe had imposed on it. The sanctions appear to be double-edged sword, as they threaten the entire global economy (Bangura, 2022).

There were both remote and immediate causes of the ongoing war between Russia and Ukraine, the most immediate being Ukraine's intention to join NATO, which Russia considers provocative and capable of undermining and threatening its national security (Kirby, 2022). Africa, being a continent with many states that have been categorized as 'failed states,' as many of them suffer from fragility and serious threats to their corporate existence due to bad governance, which has resulted in unemployment, poverty, inequality, terrorism or collectively, serious socio-economic crisis. This,

therefore, means that the war would exacerbate or worsen the precarious condition of Africa in the international political economy.

The paper examines the implications of the Russia-Ukraine war for Nigeria, being the most populous state in Africa and a strategic trading partner for both Russia and Ukraine.

2. Literature Review

The extant literature shows that the security regime that characterizes the post-Cold war era has come to an end, with the Russian invasion of Ukraine (Bangura, 2022). This is because the invasion endangers the political and economic stability of the globe, particularly that of minor powers or small states in the international system, and it also poses a threat to the ‘body of rights and democratic norms, which has been in place since the 1990s, with the dissolution of the Soviet Union.

One of the remote causes of the war had to do with Putin’s hunger for restoring the lost territories, following the collapse of the Soviet Union, and recreating boundaries of the Soviet Union as Russia Territory (Mbah & Wasum, 2022). Putin made it clear in 2005, when he said it to the world that the fall of the Soviet Union “was the greatest geopolitical catastrophe of the century” and a “genuine tragedy” for the Russian people as “tens of millions of Russians found themselves outside of Russia (BBC, 2005).

As for the immediate cause, it had to do more with the continuous existence and expansion of NATO, which ought to have been dismantled, as the Warsaw Pact. The failure to dismantle NATO, its expansion and inclusion of former Soviet republics was a fatal error on the part of the United States and its Western allies (Rankins, 2021).

Lacina et al (2022) argued that the Russian invasion of Ukraine undermines and destroys global supplies because of reduced or low production, exports and rising costs. This, therefore, has repercussions on the food security of Africa, particularly Nigeria, which imports a lot from Russia and Ukraine. However, enhancing local production of crops, especially cereal in Africa would help in reducing the severity of the impact of global supply risks.

Anthony Blinken, the US Secretary of State opined that the 2022 Russia-Ukraine War “it’s bigger than a conflict between two countries. It’s bigger than Russia and NATO. It’s a crisis with global consequences, and it requires global attention and action” (US Department of State, 2022). This is further stressed; when President Biden asserted that “Russia’s aggression is costing us all, and it is no time for profiteering or price gouging” (The White House, 2022). Evidence from the available literature indicates that even though the implications of the war are having a serious impact on the

Russian economy, the global economy has been seriously impacted by it too, with even greater uncertainty (Wasum & Mbah, 2022).

According to Hassan and El Bilali (2022), food security is attained; when “all people at all times have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Food security consists of four (4) dimensions: availability (having a sufficient quantity of food available regularly); access (having enough resources to acquire suitable and healthy food); utilization (having a reasonable food use based on knowledge of essential nutrition and care); and stability of availability, access and utilization of food (Ericksen, 2008; UNSHLTFGFS, 2011). However, the war between Russia and Ukraine threatens global food security, as the world is yet to recover from global economic shocks due to COVID-19 pandemic in 2020, as many businesses and economies had to shut down, with serious consequences. The war also worsens global food prices, resulting in global stagflation, as Russia and Ukraine are regarded as ‘global breadbaskets,’ and vitally important producers and exporters of needed agricultural products, minerals, fertilizers, oil and gas (OECD, 2022).

3. Methodology

This paper employed document analysis as a tool for data collection from relevant academic works, such as books, journal articles, magazines, newspapers, policy briefs and the Internet. It then utilized qualitative content analysis as a method of data analysis. Content analysis refers to a research method for interpreting the content of text data through the systematic classification process of coding and identifying themes or patterns (Hsieh & Shannon, 2005).

The identified and named themes include inflation and poor economic growth, disruption to industrial activities and agricultural production, foreign exchange crisis and low purchasing power of the Naira (₦), disruption to the foreign education of Nigerians, and reduced political leverage of Nigeria in national and international politics. The justification for the adoption and utilization of the above identified methodological tools lies mainly in their relevance, flexibility and connection.

4. Findings and Discussion

The findings are discussed as follows:

4.1 Inflation and Poor Economic Growth

The Russia-Ukraine has worsened the inflationary rate in Nigeria, which has weakened the purchasing power of Nigerians to afford the human essentials for survival, especially food, water, health care and protection from violence (Seybolt, 2007; Duho, Abankwah, Agbozo, Yonmearu, Aryee, & Akomanin, 2022). Nigeria’s inflation rate stood at 18.6% as of June, 2022, as it increased

further, if compared to 17.71% that was recorded in May, 2022 (National Bureau of Statistics, 2022). This shows that Nigeria's has jumped up to its highest level in over five (5) years. This is caused largely due to the inability of Nigerian manufacturers to import vital industrial and agricultural inputs from Russia and Ukraine. Inflation has also worsened the plight of Nigerian workers, being the hardest hit and whose salaries have remained the same despite the hyper inflation or rising prices of commodities, especially foodstuffs. Food inflation also affects Nigerians, as they spend 60% of their income on food, as food inflation had reached an alarming 20.6% in June, 2022 from the 19.5% recorded in May, 2022 (National Bureau of Statistics, 2022). It is worth noting here that Nigeria's food inflation crisis is also caused by insecurity due to terrorism and banditry, although the Nigerian government has been trying to address it. However, the security situation still leaves much to be desired (Balma, Heidland, Jävervall, Mahlkow, Mukasa & Woldemichael, 2022).

4.2 Disruption to Industrial Activities and Agricultural Production

The ongoing war between Russia and Ukraine has caused massive industrial dislocation and disruption of agricultural production because Nigeria imports about 50% of its wheat from Russia and Ukraine. The invasion has equally raised prices of many products such as oil, even though Nigeria is a net exporter of crude oil, but it imports a significant percent of refined petroleum products, such as petrol, kerosene. Nigeria has no option than to import these for the time being because of its inability to refine locally, as its refineries are currently not working (Ali, Azaroual, Bourhriba & Dadush, 2022).

4.3 Foreign Exchange Crisis and Low Purchasing Power of the Naira (₦)

Nigeria suffers from a severe foreign exchange crisis due to a combination of factors, as the Naira has been depreciating massively in both the official and unofficial foreign exchange markets, with serious implications for the purchasing power of the Naira. The official foreign exchange rate is ₦419.89 to \$1 (CBN, 2022) as of 15th August, 2022, while the unofficial or the black market or parallel market rate, as it is called is ₦675 to \$1 as of 10th August, 2022 (Oyekanmi, 2022). This has resulted in arbitrage and rent-seeking behaviour, which had plunged Nigeria into a serious socio-economic crisis. Some of the factors that are responsible for this include Nigeria's unsustainable debts, and the debt servicing it has to render to its creditors out of its budget. Nigeria's total debts hover around ₦41.5 trillion, that is well over \$100 billion; payment of fuel subsidy in dollars, depletion of its foreign reserves, the hike in interest rate by the Federal Reserve of the United States, unrealistic foreign exchange regime, and low oil production due to oil theft and vandalism, among other factors (Debt Management Office, 2022).

With the above gloomy picture, Nigeria is heading towards an economic disaster; if urgent and realistic economic decisions are not made to manage the situation, however, the situation is also

externally caused. In this context, the Russian invasion, which made the US and the West to impose severe economic sanctions on Russia, which have global repercussions, especially on Nigeria.

4.4 Disruption to the Foreign Education of Nigerians

Many Nigerian students had their education in Ukraine disrupted, following the Russian invasion of Ukraine. This has rendered the students hopeless, with attendant impact on their intellectual and social development. This ugly development also threatens Nigeria's national development, as it relates to its human capital development necessary for socio-economic development. However, Nigerian government tried its best in evacuating the students from the invaded Ukraine, and it now remains to be seen how they would be absorbed or accommodated in Nigeria or elsewhere, as deemed necessary for them to continue with their studies.

4.6 Reduced Political Leverage of Nigeria in National and International politics

The leverage, Nigeria, as a sovereign state in the international system used to have decades ago has reduced abysmally, as it suffers from a myriad of challenges that even threaten its corporate existence, following its inability to withstand the shocks and changing dynamics of international politics and economics, especially the impact of the Russia-Ukraine war.

5. Conclusion

The economic and political impact of the Russia-Ukraine war on Nigeria has shaken and destroyed the relative socio-economic and political stability it had, even though it is still recovering from the impact of COVID-19, and the economic recession it had suffered on two occasions, with serious implications for its national development. Some of the implications that Nigeria suffers from as a result of the the ongoing Russia-Ukraine war include hyperinflation and poor economic growth, disruption to industrial activities and agricultural production, foreign exchange crisis and low purchasing power of the Naira, disruption to the foreign education of Nigerians, especially those that were caught in the crossfire in Ukraine and reduced political leverage of Nigeria in domestic and international politics. Consequently, these have worsened Nigeria's security situation, and plunged it into chaos or a severe socio-economic crisis.

6. Recommendations

The following recommendations are given:

- 6.1** The Nigerian government needs to do more to enhance its domestic capacity, as it relates to industrial activities, so that its industries can still work even in the face of geopolitical shock, arising from invasion, war and so on.

- 6.2 The Nigerian state should have more realistic and actionable policies that would enhance the resilience of its economy to global shocks and changing dynamics of international politics, geopolitics and economics.
- 6.3 The international community needs to come together to find a more diplomatic and win-win solution to the ongoing war between Russia and Ukraine beyond imposition of sanctions, which have implications for the entire global economy.

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The Role of Medical Representatives in Marketing in the Kurdistan Region: An Evaluation

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Abstract:

The medical representative is responsible for increasing product awareness, addressing any inquiries, providing expert advice, and introducing new products to the market. This job requires a high level of knowledge and expertise in the medical field. The purpose of this research is to examine the significance of medical representatives in marketing endeavors within the Kurdistan Region. The study conducted by using an online questionnaire form which consisted of four sections. A group of medical representatives from Kurdistan completed the questionnaire. The questionnaire has four parts. The first component collected participant sociodemographic data. Second, multiple-choice questions covered "The Vital Role of Medical Representatives in Enhancing Pharmaceutical Marketing and Healthcare Professional Engagement." Third, medical representative marketing effectiveness multiple-choice questions were asked. The fourth portion included open-ended questions concerning medical representatives' Kurdistan marketing strengths. The participants include 163 people who participated in the study was 76.7 % male and 23.3% female. The correlations between gender and the various aspects of medical representatives' role and effectiveness are weak, and age group exhibits mostly insignificant correlations. Education level shows mixed correlations with knowledge about the product portfolio and relevant therapeutic areas, but negative correlations with providing valuable feedback. The results show limited correlation with the role of medical representatives, especially in terms of building relationships with healthcare professionals. Assessing communication skills, knowledge of the product portfolio and relevant therapeutic areas, and effectiveness in promoting products among healthcare professionals, the results suggest that higher education might indeed contribute to improved communication skills, knowledge, and effectiveness. The purpose of this research is to examine the significance of medical representatives in marketing endeavors within the Kurdistan Region.

Keywords: Medical representative, Marketing endeavors, Strategies, Significance, Expert advice, Performance

1. Introduction

Medical representatives provide invaluable services as communication between pharmaceutical companies and medical experts. building good professional relationships, promoting new products, and informing healthcare practitioners of the latest developments are all part of their job description. medical representatives who have received adequate training and education have been found to have a substantial impact on prescribing behavior, which in turn increases product acceptance and sales (calopietro et al., 2017).

Medical representatives for drug companies have been around since the beginning of the pharmaceutical industry in the late 19th and early 20th centuries. The demand for experts to market and educate healthcare practitioners about pharmaceutical companies' products occurred in response to the industry's rapid growth and diversification. These medical professionals, often called drug detailers or medical representatives were crucial in liaising with doctors and disseminating information about new medications. Evidence-based medical promotion became part of their remit throughout time, although ethical questions about marketing methods also surfaced at this time. As the use of computers and other digital devices continues to spread, medical representatives are adjusting their methods to take use of these new methods (Murshid and Mohaidin , 2017).

Medical representatives' communications with doctors and other medical professionals are important for the success of drug marketing operations. trust, credibility, and the provision of timely, relevant information have all been highlighted as particularly important in studies (jamshed et al., 2018).

It is imperative for medical representatives. to have adequate product knowledge to successfully handle the questions and concerns raised by physicians. according to the findings of recent studies, continuous development and training programs benefit both the performance of revenue-generating people and the overall success of advertising efforts (duvall et al., 2019).

The regulatory environment in the kurdistan region can impact how drug manufacturers and their agents go about promoting their products. trust among medical practitioners and avoidance of legal trouble require knowledge of and adherence to local legislation (sagban et al., 2016).

A major obstacle for medical representatives in the Kurdistan region due to their increasingly hectic schedules, doctors are becoming difficult to meet with by medical representatives, their inability to build meaningful connections and market products effectively may result from this lack of admission (aziz et al., 2017). Medical sales representatives in culturally and linguistically diverse areas like Kurdistan region may face difficulties communicating with local medical staff due to language and cultural barriers. For effective communication, awareness of and sensitivity to local standards and practices is essential (karim et al., 2018).

As the pharmaceutical industry in the Kurdistan region has expanded, competition among pharmaceutical businesses has heated up, and the market has become saturated. It can be difficult for medical sales representatives to set themselves apart and explain what makes their products special (abdullah et al., 2019).

This research study aims to investigate the role of medical representatives in the Kurdistan Region's pharmaceutical market. Assessing how well medical representatives in this area advertise and marketplace pharmaceutical items to healthcare professionals as well as organizations is a primary goal of this study. The study's primary goal is to help pharmaceutical companies in the region of Kurdistan improve the effectiveness and efficiency of their medical representatives by analyzing the factors that affect their performance and identifying the challenges they face. To better serve patients and enhance healthcare outcomes in the Kurdistan Region, we hope to contribute to developing pharmaceutical marketing practices there and optimize the relationship between medical representatives and healthcare professionals.

1. Materials and Methods

1.1. Study Design:

The research employed a cross-sectional survey design to collect data from 163 medical representatives in the Kurdistan Region. This design allows for a one-time assessment of the current situation without intervention or manipulation of variables.

1.2. Sampling:

A convenience sampling technique was utilized to select a representative sample of medical representatives working in various pharmaceutical companies across the Kurdistan Region. Convenience sampling is a non-probability selection technique in which study participants are chosen because of their availability and convenience to the researcher. However, there is a risk that the results may not be accurate because the sample was not drawn at random from the target population (Stratton, 2021).

1.3. Participants:

Medical representatives from different pharmaceutical companies operating in the Kurdistan Region participated in the study. Participation in pharmaceutical marketing activities was required as an inclusion criterion.

1.4. Data Collection:

A structured questionnaire was developed and validated through a pilot study with professional doctors and professors. There were four sections in the questionnaire. The first section collected sociodemographic information about the participants. Second, the section consisted of multiple-choice questions on "The Vital Role of Medical Representatives in Enhancing Pharmaceutical Marketing and Healthcare Professional Engagement." Third, there were multiple-choice questions regarding the effectiveness of medical representatives in marketing. In the fourth section, open-ended questions were asked about the key strengths of medical representatives in Kurdistan marketing.

The study also explored areas where they may be able to improve their marketing effectiveness as a result of the potential improvements. Furthermore, it inquired about the methods used to ensure medical representatives' compliance with ethical guidelines and regulations during their marketing activities as part of the questionnaire. It was also examined whether gender influences pharmaceutical marketing as part of the survey. A final objective of the questionnaire was to identify which products were most influenced by marketing strategies, based on the experiences of the participants in Kurdistan region.

1.5. Data Collection Procedure:

A structured questionnaire was administered to the medical representatives face-to-face during the data collection process. Questions and uncertainties were clarified during these meetings in order to ensure accurate responses. Medical representatives were approached in person during regional pharmaceutical conferences and at their respective workplaces, while healthcare professionals were contacted through medical institutions and pharmacies. The purpose and significance of the study were explained to potential participants, and voluntary participation was emphasized.

1.6. Data Analysis:

In this study, the collected data was coded and analyzed using IBM SPSS version 22 to facilitate the coding and analysis of the data. This analysis was conducted using descriptive methods, which allowed the examination and summary of key characteristics and patterns present within the data based on the use of descriptive methods. An overview of a dataset is summarized and described

using descriptive statistics. By providing a clear and concise overview, researchers and readers can understand the variables' central tendencies, variability, and distribution (Mishra et al., 2019).

As part of the analysis, correlation analysis was also applied in order to examine the relationships and associations between different variables within the dataset. By combining these analytical approaches, the researchers have gained valuable insights and a better understanding of the data's patterns and connections, which contributed to the conclusions of the study based on the findings. An analysis of correlation is a statistical technique that is used to determine whether there is a relationship between two or more variables in a dataset. As a measure of the degree and direction of the association between variables, it can illustrate how changes in one variable might be related to changes in another variable. A correlation coefficient ranges from -1 to +1, which represents the result of a correlation analysis. Positive correlation coefficients indicate a direct relationship, which means that as one variable increases, so does the other. An inverse relationship is signified by a negative correlation coefficient, indicating that as one variable increases, the other tends to decrease. Correlation coefficients close to zero indicate no or weak relationships between variables (Gaili, W., 2022).

2. Results:

3.1. Sociodemographic data

The table 1 represents descriptive data on sociodemographic variables, including gender, age groups, highest educational level, provinces, and specialized companies, based on the responses of 163 participants. In terms of gender distribution, 76.7% of the participants identified as male, while 23.3% identified as female, resulting in a male-to-female ratio of approximately 3.3:1.

Regarding age groups, the majority of participants (55.2%) fell within the 18 to 25 age range, followed by 36.2% in the 26 to 30 age range. The mean age in the 31 to 35 age group was 1.58, with a standard deviation of 0.85, indicating a relatively low dispersion of ages in this group. The other age groups (31-35, 36-40, 41-45, and >46) had smaller percentages, collectively comprising around 8.1% of the participants. Moving on to the highest educational level, the most common educational background among the participants was a bachelor's in pharmacy, accounting for 58.9% of the sample. Other prevalent educational levels included bachelor's in medicine and surgery (14.1%) and bachelor's in microbiology (5.5%). The mean and standard deviation of educational level in the bachelor's in microbiology group were 2.63 and 2.48, respectively, indicating a relatively wide dispersion in the scores of this subgroup.

Additionally, the provinces of Erbil and Sulaymaniyah had higher representation in the sample, with 74.8% and 14.1% of participants from each province, respectively. Duhok accounted for the

remaining 11.0%. Finally, the specialized company distribution showed that most participants (55.2%) were associated with "Most Lines," while "Cosmetics" and "Dermatological" companies had the lowest representation, each with 5.5% and 7.4% of the sample, respectively.

Table 1: Descriptive data of sociodemographic data

	Variables	No.	%	Mean	Std. Deviation
Gender	Female	38	23.3		
	Male	125	76.7	1.76	0.42
	Total	163	100		
Age Groups	18 – 25	90	55.2		
	26-30	59	36.2		
	31-35	10	6.1	1.58	0.85
	36-40	1	.6		
	41-45	1	.6		
	>46	2	1.2		
	Total	163	100		
Highest Educational level	Bachelor's in pharmacy	96	58.9		
	Pharmacy Student	5	3.1		
	Bachelor's in medicine and surgery	23	14.1		
	Bachelor's in microbiology	9	5.5	2.63	2.48
	Bachelor's in biology	6	3.7		
	Bachelor's in chemistry	5	3.1		
	Dentistry	4	2.5		
	College of Nursing	5	3.1		
	Others	10	6.1		
	Total	163	100.0		
Provinces	Erbil	122	74.8		
	Sulaymaniyah	23	14.1	1.36	0.67
	Duhok	18	11.0		
	Total	163	100		
Specialized Company	Cosmetics	9	5.5		

Dermatological	12	7.4		
Cardiovascular medications	25	15.3		
Dental Products	4	2.5	5.37	2.08
Gynecological	17	10.4		
Supplements	6	3.7		
Most Lines	90	55.2		
Total	163	100.0		

3.2. The Vital Role of Medical Representatives in Enhancing Pharmaceutical Marketing and Healthcare Professional Engagement

The data presented in (table 2) based on responses from 163 healthcare professionals regarding the importance of medical representatives in pharmaceutical marketing. 39.3% of respondents agree, and another 40.5% strongly agree that medical representatives play an important role in promoting products to healthcare professionals. This indicates a significant consensus among the participants regarding the importance of medical representatives in the pharmaceutical industry. Most respondents acknowledge the value medical representatives play, with only 1.8 % percent disagreeing.

Results shows 39.3% of respondents agree and 32.5% strongly agree that medical representatives are good at communicating product features, benefits, and indications to healthcare professionals. These two categories make up a large percentage (71.8%) of participants who think medical representatives are good at communicating. On the other hand, only 4.9% disagree. 19% of respondents remain neutral, suggesting that communication effectiveness could be improved.

A successful relationship between medical representatives and healthcare professionals is evident in the data. Almost half of respondents (47.2%) agree, while 30.7% strongly agree. The data indicates that medical representatives are effective relationship builders. There is only a small proportion of participants (3.7%) who disagree. 12.9% of respondents remain neutral, possibly indicating that these relationships can be strengthened.

The pharmaceutical company provides valuable feedback to marketing strategies, and 48.5% of respondents agree, with 27.6% strongly agreeing. Medical representatives have a key role to play in gathering valuable insights from healthcare professionals, as evidenced by a large proportion of participants. Despite 17.8% of respondents remaining neutral, a minimal percentage (1.8%) disagrees, which underscores the importance of medical representatives.

Medical representatives are trained in marketing strategies and techniques. According to the results, 49.7% of respondents agree, and 25.2% strongly agree that medical representatives should receive training. The pharmaceutical industry is doing a good job of equipping medical representatives with the necessary skills and knowledge. However, 14.7% remain neutral, suggesting that the training programs might need some improvement.

Table 2: The Vital Role of Medical Representatives in Enhancing Pharmaceutical Marketing and Healthcare Professional Engagement

	Variables	No.	%	Mean	Std. Deviation
Medical representatives play a crucial role in promoting their products to healthcare professionals.	Agree	64	39.3		
	Disagree	3	1.8		
	Neutral	19	11.7	2.73	1.48
	Strongly Agree	66	40.5	.	
	Strongly Disagree	11	6.7		
	Total		163	100	
Medical representatives effectively communicate product features, benefits, and indications to healthcare professionals.	Agree	64	39.3		
	Disagree	8	4.9		
	Neutral	31	19.0	2.57	1.39
	Strongly Agree	53	32.5		
	Strongly Disagree	7	4.3		
	Total		163	100	
Medical representatives build and maintain relationships with healthcare professionals to increase product awareness and usage.	Agree	77	47.2		
	Disagree	6	3.7		
	Neutral	21	12.9	2.43	1.47
	Strongly Agree	50	30.7		
	Strongly Disagree	9	5.5		
	Total		163	100	
Medical representatives provide valuable feedback from healthcare professionals, which helps in shaping marketing strategies	Agree	79	48.5		
	Disagree	3	1.8		

	Neutral	29	17.8	2.37	1.42
	Strongly Agree	45	27.6		
	Strongly Disagree	7	4.3		
	Total	163	100		
Medical representatives are trained on marketing techniques and strategies to enhance their promotional activities.	Agree	81	49.7		
	Disagree	8	4.9		
	Neutral	24	14.7	2.32	1.43
	Strongly Agree	41	25.2		
	Strongly Disagree	9	5.5		
	Total	163	100		

3.3. Effectiveness of Medical Representatives in Marketing

According to the (table 3) the results shows that the 26.4% of the respondents rated medical representatives' communication skills as excellent, while 36.8% rated them as good for delivering product information. The results indicate that a significant majority of respondents are satisfied with the representatives' ability to communicate product information. Nevertheless, a significant fraction (4.3%) rated their communication skills as below average. The mean score of 2.94 with a standard deviation of 1.31 indicates moderate variation in responses. This suggests that while many respondents find medical representatives' communication skills effective, improvements can still be made to address those who find them below average or poor. The representatives' knowledge of the product portfolio and relevant therapeutic areas was rated excellent by 23.3% of respondents, while good by 44.2%. According to this, the representatives' understanding of their products and therapeutic areas is generally viewed positively. However, 5.5% of respondents rated their knowledge as below average. Based on the mean score of 3.03 and the standard deviation of 1.25, it appears that respondents have a moderate level of agreement about the representatives' knowledge. Medical representatives' effectiveness in promoting and increasing product usage among healthcare professionals was rated excellent by 27.0% of respondents and good by 45.4%. The results suggest a predominantly positive view of the effectiveness of medical representatives in promoting product usage. In addition, a small percentage (3.7%) rated their effectiveness as poor. With a mean score of 3.07 and a standard deviation of 1.23, the variance in responses suggests differing opinions about the effectiveness of the representatives.

Table 3: Effectiveness of Medical Representatives in Marketing

	Variables	No.	%	Mean	Std. Deviation
Communication skills in delivering product information	Average	42	25.8		1.31
	Below Average	7	4.3		
	Excellent	43	26.4	2.94	
	Good	60	36.8	.	
	Poor	11	6.7		
	Total	163	100		
Knowledge about the product portfolio and relevant therapeutic areas	Average	37	22.7		1.25
	Below Average	9	5.5		
	Excellent	38	23.3	3.03	
	Good	72	44.2		
	Poor	7	4.3		
	Total	163	100		
Effectiveness in promoting and increasing product usage among healthcare professionals	Average	36	22.1		1.23
	Below Average	3	1.8		
	Excellent	44	27.0	3.07	
	Good	74	45.4		
	Poor	6	3.7		
	Total	163	100		

3.4. Correlations between sociodemographic data with role and effectiveness of medical representatives in enhancing pharmaceutical marketing and healthcare professional engagement.

Starting with gender, the correlations show notably weak associations between gender and the various aspects of medical representatives' role and effectiveness. Gender demonstrates very minimal negative correlations, such as -0.079 with the role of crucial promotion, indicating that gender might not be a significant determinant in this context. Similarly, age group exhibits mostly negligible correlations, with the highest being 0.065, suggesting that age might not strongly influence the role and effectiveness of medical representatives.

Education level, however, displays mixed correlations. Education level reveals a slight positive correlation of 0.071 with knowledge about the product portfolio and relevant therapeutic areas, while

showing a negative correlation of -0.204 with providing valuable feedback. This indicates that higher education might lead to a better understanding of product details but could potentially hinder the feedback process. The province of operation shows limited correlation with the role of medical representatives. Notably, there's a negative correlation of -0.114 between province and the crucial aspect of building and maintaining relationships with healthcare professionals. This suggests that the dynamics of engagement might indeed vary significantly across regions, impacting the relationship-building aspect of medical representatives' role. Regarding whether medical representatives work for a specialized company, a significant positive correlation of 0.075 is observed with effectively communicating product features, benefits, and indications. This implies that being associated with a specialized company might confer advantages in conveying elaborate product information.

Assessing communication skills in delivering product information, a negative correlation of -0.133 with province suggests that representatives in certain regions might possess better communication abilities. Interestingly, education level exhibits a positive correlation of 0.086, indicating that higher education might indeed contribute to improved communication skills. The correlation between knowledge about the product portfolio and relevant therapeutic areas and gender shows a negative value of -0.091, implying that females might have a slightly better understanding in these areas. Education level, however, demonstrates a positive correlation of 0.072, reaffirming that education contributes to enhanced product knowledge.

Finally, the effectiveness of medical representatives in promoting products among healthcare professionals displays weak correlations with the examined sociodemographic factors. Education level again stands out with a positive correlation of 0.081, suggesting that better-educated representatives might be more effective in this pivotal aspect.

Table 4: Correlations between sociodemographic data with role and effectiveness of medical representatives in enhancing pharmaceutical marketing and healthcare professional engagement

	Gender	Age Group	Education Level	Province	Specialized Company
Medical representatives play a crucial role in promoting their products to healthcare professionals.	-0.079	0.016	-0.018	-0.114	0.048
Medical representatives effectively communicate product features, benefits, and indications to	-0.011	0.019	-0.051	-0.026	0.075

healthcare professionals.					
Medical representatives build and maintain relationships with healthcare professionals to increase product awareness and usage.	0.015	0.065	-0.071	0.014	0.042
Medical representatives provide valuable feedback from healthcare professionals, which helps in shaping marketing strategies.	0.033	0.065	-0.204 **	0.141	0.018
Medical representatives are trained on marketing techniques and strategies to enhance their promotional activities.	0.093	0.056	0.021	-0.031	0.031
Communication skills in delivering product information	-0.090	-0.087	0.024	0.086	-0.133
Knowledge about the product portfolio and relevant therapeutic areas	-0.091	0.018	0.071	-0.087	0.072
Effectiveness in promoting and increasing product usage among healthcare professionals	-0.053	-0.026	0.081	0.045	0.043

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The (figure 1) depicting the perspectives of participants highlights the primary strengths recognized in medical representatives engaged in pharmaceutical marketing within the Kurdistan region. Notably, effective communication and adept relationship building emerge as the most prominent attributes, garnering 25% of the responses. Following closely is the commendable possession of in-depth product knowledge, constituting 20% of the viewpoint. Furthermore, participants acknowledge the importance of scientific training, accounting for 15% of the sentiments, in aiding the justification of products. Dedication and loyalty in work receive recognition at 10%, signifying their role in shaping positive impressions. The initiative to educate healthcare professionals about new medications holds a modest 5%, while establishing strong professional relationships and leveraging medical backgrounds each secure 15% and 10% respectively. This

comprehensive analysis of participant responses highlights the multifaceted strengths of medical representatives in the Kurdistan region's pharmaceutical marketing landscape.

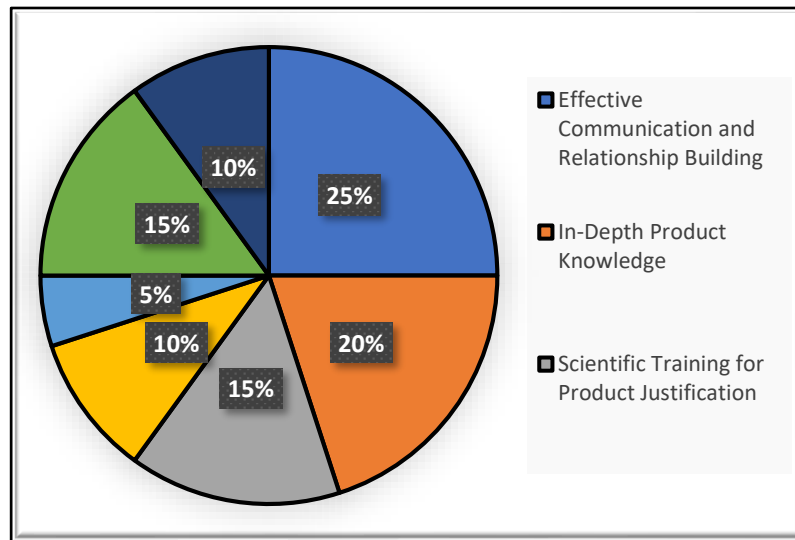


Figure 1: The key strengths of medical representatives view in marketing in Kurdistan region

Figure 2 demonstrates the primary weaknesses perceived in the marketing practices of medical representatives operating in the Kurdistan Region. The chart highlights the distribution of these weaknesses, indicating the percentage weight each aspect carries. The most significant challenges include communication skill issues, accounting for 30% of the identified weaknesses, which may hinder effective interactions between medical representatives and healthcare professionals. Lack of product knowledge follows at 20%, suggesting that representatives might struggle to comprehensively understand the details of the medical products they are promoting. Balancing sales and patient interests also hold a substantial share at 20%, reflecting the delicate task of aligning commercial goals with the well-being of patients. Other significant issues encompass accessing healthcare professionals (10%), scientific training deficiencies (10%), and ethical concerns related to honesty in product promotion (5%). Lastly, dealing with market competition and potential ethical dilemmas completes the list with a combined 5%. These findings collectively shed light on the key areas where medical representatives could benefit from improvement and targeted training to enhance their overall marketing effectiveness.

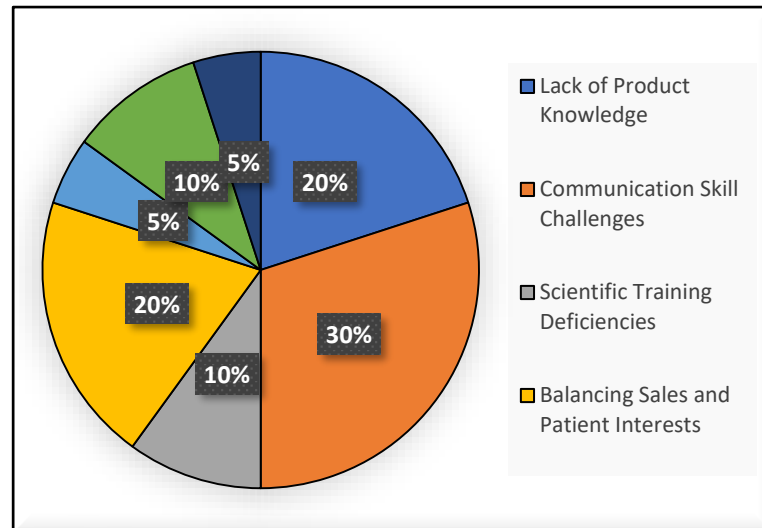


Figure 2: The key weaknesses of medical representatives view in marketing in Kurdistan Region

There are a number of areas in the Kurdistan Region that need to be improved, as shown in Figure 3. The Kurdistan Region Medical Representatives are tasked with improving these areas.

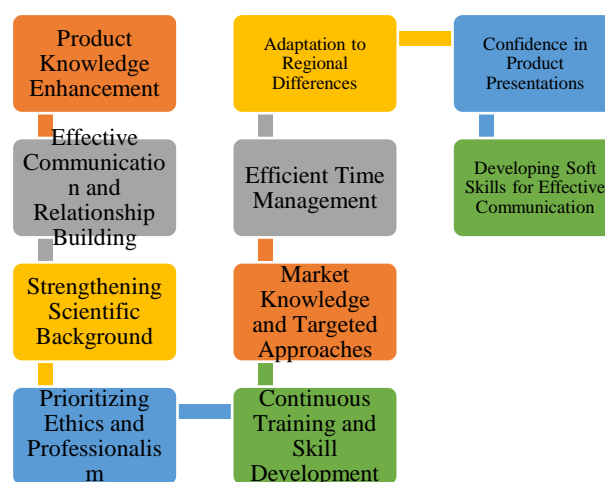


Figure 3 Areas for Improvement for Medical Representatives in Kurdistan Region

Figure 4 offers a comprehensive breakdown of the strategies implemented to ensure the adherence of medical representatives to ethical guidelines and regulations during their marketing activities. The chart delineates the distribution of these strategies, reflecting their relative importance. Notably, a focus on "Up-to-Date Product Knowledge and Research" occupies a prominent 25%, underscoring the pivotal role of staying informed in upholding ethical conduct. Concurrently, the significant influence of "Healthcare Professionals on Ethical Conduct" also commands 25%, highlighting the impact of collaborative peer relationships on ethical decision-making processes.

Moreover, the chart reveals the dual approach of "Self-Discipline and Ethical Commitment" and "Company Policies and Monitoring," each accounting for 20%. This duality underscores the

necessity of both individual moral responsibility and organizational oversight in maintaining ethical behavior. Lastly, "Accountability and Feedback Mechanisms" constitute 10%, indicating the value of structured frameworks for reporting and assessment. Collectively, the figure portrays a holistic strategy that combines the continual pursuit of knowledge, the influence of professional peers, individual commitment, company guidance, and robust accountability measures. This multifaceted approach aligns with industry best practices to ensure that medical representatives uphold ethical standards while conducting their marketing activities.

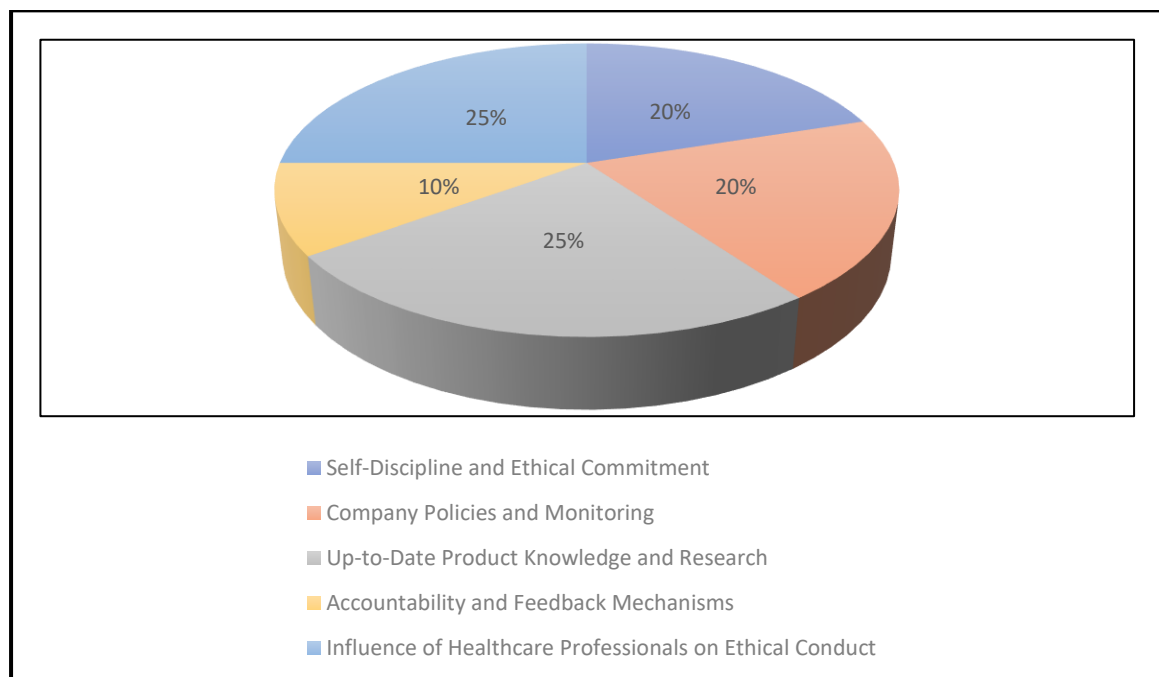


Figure 4 Ensuring Ethical Compliance of Medical Representatives in Marketing in Kurdistan Region

Figure 5 shows the potential impact of gender on pharmaceutical marketing in the Kurdistan region. The data presented shows that a majority, 69.3%, acknowledge that gender does indeed have an effect on pharmaceutical marketing practices. In contrast, 30.7% of respondents believe that gender does not play a significant role in influencing these practices. This split suggests a prevalent awareness among the surveyed individuals that gender dynamics could play a role in shaping how pharmaceutical products are marketed in the Kurdistan region. The figure underscores the importance of considering gender-related factors and their implications for marketing strategies in this situation. Gender's impact on medical representatives' effectiveness is varied in the responses. Some doctors prefer female representatives, especially in certain medical professions, while others think male representatives are more successful. Attractiveness, appearance, and communication skills can help any representative succeed. Some doctors prefer opposite-gender candidates, while others don't care. There is no clear consensus, and medical representatives' performance appears to

be influenced by different individual and contextual circumstances, making gender-based judgements challenging.

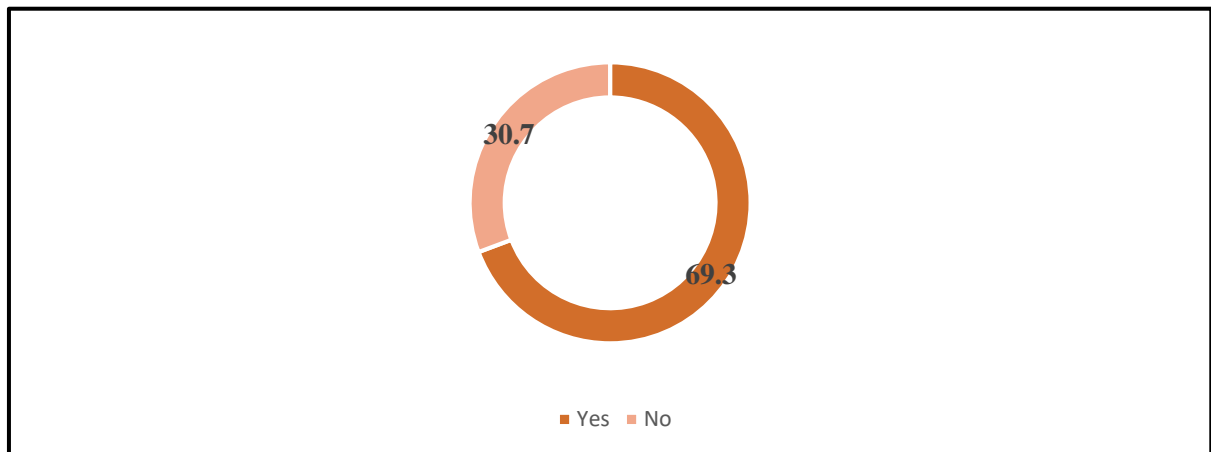


Figure 5 Gender affects marketing pharmaceutical in Kurdistan region?

Medical representatives' suggestions for influencing doctors to advertise their company's drugs. The frequency column shows how often certain factors were mentioned in responses: "High" refers to frequently, "Moderate" means somewhat, and "Low" means rarely. Gifts and incentives, scientific excursions with financial support, positive relationships and trust, promotional deals and support, and product quality and efficacy influence physicians. Achieving these results depends on physician choices and regional market dynamics.

Figure 6 highlights the effect of marketing campaigns on several product groups in the pharmaceutical sector in the Kurdistan Region. Antibiotics (25%) and medications for chronic diseases (30%) stand out as the primary targets of marketing efforts in that setting. This shows that bacterial infection prevention and chronic disease management are high on the list of priorities for medical professionals in the region. A growing focus on preventative care and well-being has also drawn more marketing attention to supplements (14% of total occurrences). Next in popularity are items for the female reproductive system (at 8%) and the cosmetics industry (10%). These figures suggest that marketing efforts are extending to include women's health and personal hygiene products, demonstrating a holistic strategy towards satisfying a wide range of healthcare requirements. Despite making up only 2%-4% of mentions, other categories, including as analgesics, dermatological treatments, and CNS line products, still contribute to the marketing landscape as a whole. Intriguingly, 8% of the references are to combination products, suggesting a preference for flexible solutions that can tackle numerous health issues at once.

The picture, in essence, illustrates how marketing initiatives and current health concerns in the Kurdistan Region are strategically aligned. The focus on vitamins and cosmetics indicates a

proactive approach to well-being and personal care, while the focus on antibiotics and treatments for chronic diseases emphasizes a dedication to addressing prevalent infections and health issues. The nuanced distribution of marketing resources across product categories is indicative of a well-rounded approach to meet the varied healthcare requirements of the region's population.

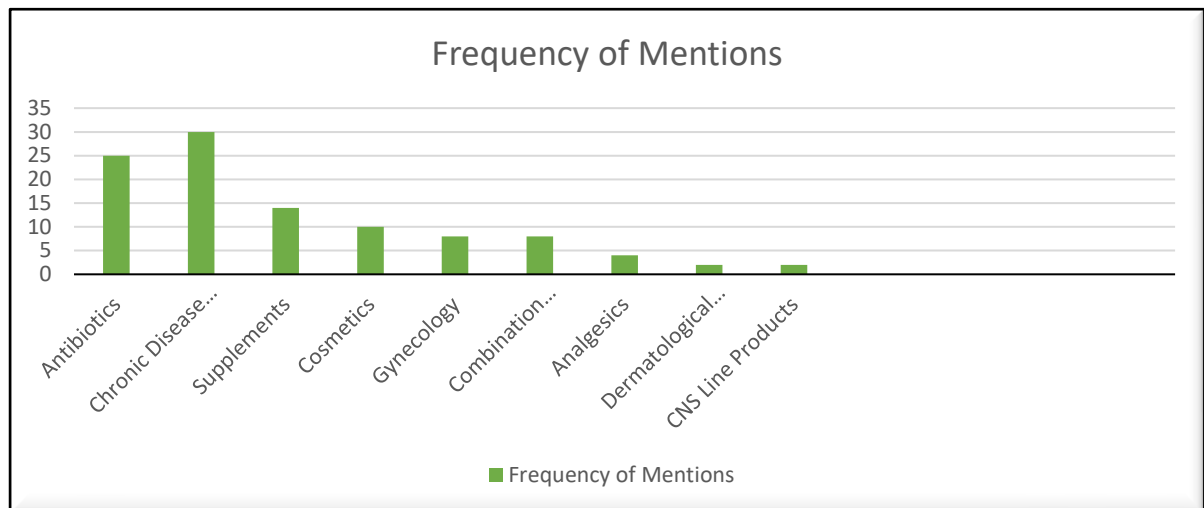


Figure 6: Based on your experience what product mostly enhanced by marketing strategy in Kurdistan Region

3. Discussion:

Based on the available data, the study shows that there is a higher proportion of male participants than female participants. It is believed that this disparity is caused by the fact that men predominantly dominate the medical representative profession in the Kurdistan region. Men in many Asian countries have historically dominated medical representatives or pharmaceutical sales representatives. Culture, gender roles, and societal expectations often assign men to higher-paying, more prestigious careers. In recent years, however, there has been a gradual shift toward increased female representation in the medical profession, including the pharmaceutical industry (WHO, 2022). Among the specialized companies in the Kurdistan region, one has a dominant category of products called "Most Lines," a term used to describe the company's diverse range of products. Conversely, dental products are the category with the lowest market share of all the categories. For a better understanding of the factors contributing to the success of the "Most Lines" category in the region and the challenges that the dental products category faces in the region, it will be necessary to conduct further analysis.

According to respondents, medical representatives play a vital role in pharmaceutical marketing and healthcare professional engagement. Most participants strongly agree that medical representatives play a crucial role in promoting products to healthcare professionals, communicating product

features effectively, and building relationships to increase product awareness. Additionally, respondents strongly agree that medical representatives provide valuable feedback, help shape marketing strategies, and are trained in marketing.

The importance of medical representatives in these fields is also strongly disagreed by a small percentage of participants. Overall, medical representatives' role in the pharmaceutical industry is positively perceived, even though some respondents remain neutral. They represent the industry's efforts in training, product promotion, communication, relationship building, and feedback provision. Medical representatives play a crucial role in pharmaceutical marketing and healthcare professional engagement.

Pharmaceutical marketing and healthcare professional engagement are enhanced by medical representatives in Asia. In addition to promoting and educating healthcare professionals about pharmaceutical products, they have in-depth product knowledge. They foster brand loyalty and trust. Also, they provide continued medical education, gather market intelligence, and navigate various regulatory environments. Pharma companies in the region benefit from their efforts by ensuring widespread product distribution and availability (Pray, 2019).

It is evident that there are still areas that medical representatives need to improve in Kurdistan region, as shown by some respondents' less favorable ratings, despite the fact that these representatives generally receive positive ratings for their communication skills, knowledge, and effectiveness. As part of their role as medical representatives, medical representatives need continuous training and development in order to enhance their communication skills, deepen their product knowledge, and optimize their effectiveness in promoting healthcare products to their clients.

The correlations provide nuanced insights into the relationships between sociodemographic factors and medical representatives' multifaceted role and effectiveness in pharmaceutical marketing and healthcare professional engagement within the Kurdistan region. While some correlations are statistically significant, the generally weak correlations emphasize that numerous other factors beyond the scope of this analysis likely significantly influence medical representatives' success in their roles. These findings underline the intricate nature of pharmaceutical marketing and healthcare professional engagement, influenced by many factors beyond the sociodemographic ones examined in this study.

Medical representatives in the Kurdistan region demonstrate a well-rounded image of pharmaceutical marketing in the region based on their responses across these strengths. It emphasizes the importance of interpersonal skills, expertise, and ethical conduct. Pharmaceutical

companies and professionals can use these insights to tailor their strategies and training programs to ensure that these strengths are harnessed effectively to promote healthcare engagement and products.

Cultural understanding, strong relationships with diverse stakeholders, and adapting to rapidly changing market dynamics make Asian medical representatives excel. They provide tailored marketing strategies based on their proficiency in local languages. On the other hand, European medical representative thrives on their deep scientific knowledge, expertise in navigating stringent regulatory frameworks, and evidence-based communication. In addition, they facilitate market access interactions and provide valuable educational resources. By providing accurate information, building trust, and fostering meaningful collaborations, medical representatives are critical to pharmaceutical marketing success in Asia and Europe (Murshid and Mohaidin, 2017).

The study highlights key weaknesses in medical representatives' marketing efforts in Kurdistan. Communication skills, product knowledge, and balancing sales with patient interests stand out as crucial areas for improvement. Addressing scientific training, ethical concerns, accessing healthcare professionals, and market competition are also vital for enhancing their effectiveness in this role.

In Kurdistan, ethical compliance strategies among medical representatives in marketing are tailored to the local context. The focus on staying updated and peer influence resonates with healthcare needs, while personal dedication and company supervision mirror regional values. This approach is geared towards promoting responsible marketing practices and fostering accountability throughout the region.

Ethical compliance measures for medical representatives in marketing in Europe frequently follow strict regulatory standards. Transparency, evidence-based information, and industry association norms of conduct are prioritized. Due to cultural traditions and changing perspectives, gender affects pharmaceutical marketing methods differently in different nations. Gender-sensitive marketing is important in some European locations but less so in others, requiring a local study.

The role of gender in influencing pharmaceutical marketing strategies within the Kurdistan region is a subject of discussion. There are varying perspectives on whether gender dynamics significantly shape these practices. This highlights the need for a deeper exploration of how gender considerations intersect with marketing approaches in the context of pharmaceuticals (Suriyaprakas and Stephan, 2022).

Based on cultural norms and regulatory settings, Asian medical professionals' marketing ethics can vary. Some Asian countries emphasize hierarchical systems and relationship-building in marketing, while others emphasize formal conformity with regulations. Traditional gender roles and societal

beliefs can affect Asian pharmaceutical marketing methods. Some Asian countries are embracing gender diversity in marketing faster than others. Thus, assessing gender's impact on pharmaceutical marketing in Asia requires understanding each region's dynamics (Rabinowitz et al., 2020).

In the Kurdistan region, medical representatives can enhance their marketing effectiveness by focusing on several key areas. Strengthening product knowledge builds credibility, while effective communication and relationship-building foster trust. Bolstering the scientific background aids in addressing technical queries, and prioritizing ethics ensures transparency. Continuous training maintains industry relevance, and acquiring market insights enables targeted strategies. Efficient time management optimizes productivity, and adapting to regional differences acknowledges diversity.

Furthermore, developing confidence in product presentations and refining soft communication skills are pivotal. These improvements collectively elevate the role of medical representatives, creating a more impactful presence in the healthcare marketing landscape of the Kurdistan region. The impact of marketing strategies on product enhancement in the Kurdistan Region is strikingly evident in the considerable influence wielded by campaigns targeting antibiotics. With a substantial frequency of mention, it's clear that marketing plays a pivotal role in positioning antibiotics as a solution for various health concerns, shaping decisions of both healthcare professionals and patients. Moreover, marketing strategies effectively shape consumer behavior in categories like chronic disease products, supplements, and cosmetics. These categories garner notable percentages, underscoring marketing's role in informing consumers about products catering to ongoing health needs, promoting wellness products, and influencing beauty trends. The interaction of marketing efforts, consumer preferences, and healthcare choices reflects the dynamic interplay that characterizes the region's healthcare and wellness sectors.

Cultural values and personal connections play a significant role in shaping Asian countries' marketing tactics. Trust in one's neighborhood and the reliability of word of mouth have traditionally played significant roles in molding consumer preferences. Rapid economic growth in nations like China and India has resulted in the emergence of new markets and an increase in competition. As a result, businesses now use a wider variety of marketing strategies, such as digital ones aimed at millennials. Asian customers are increasingly interested in convenience and individualization, making e-commerce and social media platforms crucial for reaching and engaging this demographic (Davey et al., 2023).

Countries in Europe Due to the region's cultural richness and stringent regulatory framework, European countries require sophisticated marketing strategies. Although some tactics of advertising

are similar to those used in the West, businesses usually need to modify their approaches to better appeal to local tastes. Especially in highly regulated industries like healthcare and food production, transparency and compliance with rules are essential. As Europeans become more health conscious, the demand for wellness items increases, and businesses are responding by emphasizing the positive effects their wares have on consumers' well-being. Understanding cultural differences and being able to overcome regulatory difficulties while responding to consumers' ever-changing requirements are essential for successful marketing in Europe (Hidayatullah et al.,2020).

4. Conclusion

This research concludes that medical representatives play a crucial part in the pharmaceutical marketing environment across the Kurdistan area, Asia, and Europe, and that this study sheds light on this complex landscape. The gender gap and its effect on marketing tactics highlights the need for sophisticated approaches that adapt to the dynamic nature of gender roles and expectations. Medical representatives' strengths in persuasive communication, product expertise, and ethical behaviour stand out as cornerstones of productive interactions with medical professionals.

However, the research also reveals obvious places where improvements might be made, such as the need to strengthen communication abilities, provide more thorough scientific training, and better match sales aims with patient interests. Because of the importance of cultural factors, marketing plans need to be adjusted to reflect local norms and beliefs. Furthermore, the report highlights the importance of ethical compliance, which is indicative of the sector's dedication to accountable marketing practises.

The research highlights the significance of flexibility and creativity in marketing tactics, as these factors are essential for keeping up with shifting customer preferences, new technologies, and stricter regulations. Companies and individuals working in the pharmaceutical industry can benefit greatly from the study's findings by using them to guide their strategies for product promotion, healthcare provider engagement, and consumer satisfaction.

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The Impacts Of China's Investment On Nigeria's Development

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Abstract:

This conference paper aims to explore the impacts of China's investment on Nigeria's development. The paper employs qualitative research approach with secondary sources. The method of data collection is the document analysis from the scholarly journals, books and even news. The researcher uses the impact analysis reports and scholarly evaluations about the Chinese investment projects all around Nigeria. The data analysis method is content analysis. The paper presents data and findings in a qualitative, positivist and inductive approach. The findings illuminate, especially, the impact of Chinese investment on Nigeria's economic development in different localities and, also on some development items such as skills transfer and human capital development. One of the implications of this research is the aggregate value of the Chinese investments should bring technology and skills transfers from the China's investors/institutions to Nigeria's society.

Key Words: China, Nigeria, Investment, Development, Skills Transfer

1. Introduction

The aim of this conference paper is to elaborate impacts of China's investment on Nigeria's development. The paper will focus on China's real investments in various local government areas of Nigeria. Development refers to economic growth, technology and skills transfer and improvements in human capital.

The study inquires whether the China's investments have brought development for Nigeria. It further analyses the extent to the level of developments in the form of local economic activities leading growth, level of technology transfer and volume of employed and skilled population as a result of China's investment.

This paper employs qualitative approach by using secondary sources. The method of data collection is the document analysis from the scholarly journals, books, reports and even news. The researcher observes the impacts through reports and news available about different local governments all around Nigeria. The data analysis method is content analysis. The paper presents and elaborates data and findings in a qualitative approach.

China's investment projects have been potential elements of economic opportunities, income, employment, and technology/skills transfer. The assessment of the impact of the investment carries importance.

The paper assesses the impact of China's real investment in Nigeria by China's state-owned companies, state-sponsored companies, and other private companies. Since the impacts of these projects appear in a long term, the study uses a large time scope which assumes the projects started after the signing of MoU between Nigeria and China. The ongoing effects of these projects are being studied once it appears in the literature or findings from the local data.

First part of this work reviews the literature in a thematic approach. It shows the empirical findings of research on the area. It also reveals the theories that had been used by several scholars in the area studied. Second part presents the findings of the author with systematic way. The findings are classified according to the items matching the relations between the real impact of the projects and any element of development. Third part critically discusses the realized added value, the level of growth and employment, the level of human skills/technology acquisition versus potential expectations from these projects. The final part concludes the study by indicating some policy recommendations.

2. Literature Review

China has been actively investing in Africa for many decades. However, China's FDI is mostly in oil sector. Only a small proportion of the China's FDI is on other manufacturing sectors such as pharmaceutical, telecommunications and agro-processing (Oyeranti et al., 2011: 189) Nigeria is one of the top countries receives Chinese FDI and investments. China has also been very active in constructing of airport terminals, railways, highways in Nigeria as well as other parts of Africa.

The existing literature presents data about the Chinese firms operating in few states of Nigeria. Most of the studies examined the investment projects and industries in Lagos and Ogun States in the Southwest; Calabar city in Cross Rivers State; and Onitsha and Nnewi cities in Anambra State. However, there are many other Chinese investments in different parts of Nigeria. Chinese companies are investing in various sectors like construction (roads, highways, railways, airports), light industries and manufacturing of furniture, ceramics, paper, and packaging.

a. Local Production and Local Inputs

Some of the Chinese manufacturing companies are supposed to produce the whole product in Nigeria. However, due to supply chain problems of some critical materials, the companies had to import many parts from China. Thus, the benefits of local production cannot reach to Nigerian economy. For instance, a Chinese baggage manufacturing company established a factory in Nigeria. However, due to supply-chain related issues, the company had to import many parts from China to finish the products. (Gu, 2009: 575)

Chinese companies are supposed to use local inputs and local content for manufacturing. However, the data shows that only 29 per cent of inputs were locally sourced. Adunbi and Stein (2019)

presented the results of another survey which researched on fifty-four companies in Nigeria, found minimum level of local inputs of materials and technology (Adunbi and Stein, 2019: 205).

Even if Nigerian government emphasize on local content requirement, the compliance of this condition is met in way that helps Chinese investors rather than Nigerian economy. For example, the local content requirement in furniture sector was 35 percent. The requirement was met low value-added items such as wood which brings small contribution to local economy. Many of the high-value added inputs are imported from China (Adunbi and Stein, 2019: 211).

b. Impact of Construction Projects: Airports, Dams, Roads and Railways

Some of the China's investment projects are in construction industry which is labor intensive. In addition to construction workers, projects create additional job opportunities for construction material vendors, restaurant or food vendors, hotel businesses and other small vendors selling daily needs of the people around the projects (Dalibi and Bello, 2017: 538). On the other hand, negative elements, such as environmental problems of these projects should be considered (Oyeranti et al., 2011: 196).

Roads are essential elements for socio-economic development. Road construction can ease economic activities, improve opportunities for employment, education, and health. There are also countless benefits of road construction for the development such as the improvements of technology, service and material delivery and customer welfare. Railways also greatly contributes to the increased chances of mass-merchandise transfer, public transportation and urbanization thus leads to further socio-economic developments (Dalibi and Bello, 2017: 584).

Beside positive sides of construction projects, there are several negative aspects. These may reduce the economic welfare of the laboring community and also overall public health and safety. Environmental concerns are also high and always occupy the agenda. Gu (2009) claims that Chinese companies cause same level of environmental hazards and damages that Western firms did in different parts of the world (Gu, 2009: 583).

The sector produces welfare issues such as fierce price competition due to short-term labour contracts, seasonal work and wage dumping. The projects also reduce life quality such as bad air quality, disturbing noise and traffic jams. Traffic-related issues cause safety issues, traffic disruption and delays (Dalibi and Bello, 2017: 583).

Some of the investments of China disturb and limit residential development around them. The technical requirements for airports and hydropower dams cause resettlement of local indigenous communities. On the other hand, there are also positive externalities of these projects such as providing urban water, promoting tourism, controlling floods, facilitating agricultural production by irrigation (Dalibi and Bello, 2017: 584).

c. Resettlement of Indigenous Communities

Projects have many negative aspects such as the resettlement of communities, health and safety issues, such as poor air quality, heavy noise and disruption of traffic. Even if jobs provided during the construction phases of the projects, after the completion of the projects were terminated due to their contractual basis. In Lagos, the government promised to provide jobs for those communities who are displaced by the projects initiated by Chinese and Nigerian companies in the industrial zones. According to Adunbi and Stein (2019: 206), after the settlement of indigenous communities, the communities complain that they have not seen jobs.

d. Low level of Sectoral Clustering and Competition

According to investment master plans and intentions of Nigerian government, Chinese investments supposed to increase competition thus led to economic growth and development. However, the level of sectoral clustering and competition is very low according to studies. For example, in the Calabar Free Trade Zone of Bayelsa State in Nigeria, out of 74 companies 24 of them were manufacturing companies. Out of these, only 9 of them were Chinese investments according to data compiled in 2014. The companies were focusing on different sectors such as iron rods and billets, textiles, electronics, appliances, and automobiles. One of the steel firms, Bao Yao Steel, has no other competitor in the same region of Nigeria. Even if there are three electronics and appliance companies active in the same region, they belong to the same investor which is Skyrun International (Chen et al., 2016: 9). The lack of firm clustering reduces the chance of competition and economic efficiency of the production.

In another example, Yuemei Company has intended to create the cluster of textile manufacturing in Calabar FTZ. The plan was to invest \$50 million to build a textile industrial park in the zone. “Once the industry park is completed, it is expected to have an initial complement of 15 Chinese textile firms, and will employ more than 3000 African workers.” (Gu, 2009: 576). Initially 20 firms invested by Zhejiang company, Yuemei. The survey indicated that only two Chinese textile firms (Mawa and Jinmei) accepted the invitation to join textile cluster. These two companies in different areas of textile industry were lasted very short period, about 4 years. The companies experienced shortages of input and the lack of demand for the products. Besides, there are some serious claims about the Yuemei firm. Nigerian observers reportedly argue that “the Yuemei investors were more interested in transshipping products from China without paying appropriate duties than in local production” (Chen et al., 2016: 11). Both companies were legally expelled and sold out to non-Chinese industrialists. The findings show that the initial ambitious plan and employment targets have never been realized.

The intention of creating industrial parks by Chinese investors seemed very ambitious. However, the plans have not been realized or very short-lived before finalizing the whole project. For example, one of the Chinese-state-sponsored companies, Hazan Shoes, had a factory inside Ogun State Free Trade Zone, stopped production before the completion of the industrial park planned initially. As it is explained above, the Yuemei cluster project was full of hopes. However, it turned out to be “only a cluster of empty factories located in Nigeria’s Calabar Free Trade Zone”(Chen et al., 2016: 6).

e. Local Employment

There are mix results about the employment impacts of the projects run by Chinese investors. The findings of Farole (2011) imply that the employment generation effect has not been promising as expected. Only 46 per cent of managers were Nigerian nationals in the surveyed Chinese-led businesses (Adunbi and Stein, 2019: 205). On the other hand, there are positive evaluations of the Chinese projects in terms of their contribution to local employment. There has been heavy criticism over the Chinese labor import by these investors. One of the case studies of Dalibi and Bello (2017: 586) observed that Chinese construction companies always prioritize and insist on bringing Chinese workers to conduct most of the projects. These negatively affect the Nigerian construction experts in terms of reaching out employment opportunities and gaining experience. Another survey data shows that the industries generate substantial local employment. For example, Skyrun company have a clear policy of the localization of its labor force. The study also indicates that bringing Chinese labor is not feasible due its costs (more costly than hiring locally). Although Nigerian government had initiated policies to allow only skilled expat workforce, Chinese investors demanded higher quotas of Chinese labor. However, Chen et al. (2016) found that “on average, the Chinese firms we sampled employ over 80 percent of their workforce locally”. Besides, Chinese expats work at managerial positions whereas Nigerians mostly work at the factory floor (Chen et al., 2016: 12).

Although there have been promising developments of the Chinese investments in terms of the expanding of Nigeria’s workforce, the outcome of employment has been problematic and has caused criticisms. Some of the criticisms are as in the following: Chinese investments hardly allow Nigerians in managerial positions which hinders skills transfer. Chinese companies barely employ local experts. Chinese companies’ behaviour to Nigerian workers are very problematic. According to reports, Chinese firms maltreat their workers and force them to work in unhuman conditions such as 12 hours working. There are deadly accidents caused by the Chinese managers in the factories in Nigeria. For example, in 2002, 37 Nigerians were caught in fire as the doors locked in a Chinese-owned factory (Oyeranti et al., 2011: 194; Igbokwe, 2020: 146). There are also recent critics of dehumanizing behaviors by Chinese employers in Nigeria (Osimen and Micah, 2022: 51).

f. Skills Training and Technology Transfer

Chen et al. (2016) reported scientific investigations how Nigerian businesspeople developed their skills in manufacturing after visiting factories in Asia. Later they shifted personnel to obtain skills from other workers trained by a new investor (Chen et al., 2016: 7). On the other hand, there are some signs of technology transfer during the servicing and maintenance of the imported machines from China (Adunbi and Stein, 2019: 199). The Nigerian Chinese joint ventures provide training for local labor thus upgrade industries with Chinese assistance (Chen et al., 2016: 13).

Chinese manufacturing firms are providing basic health and safety training and machine operation training (Chen, 2021: 10). This training is mostly in informal character. In the meantime, Nigerians learn how to operate machines and they also transfer these skills to other fellow Nigerians.

In terms of formal education, China's Confucius Institutes are active in Nigeria. A few Nigerian universities co-operating with the Confucius Institutes to teach Mandarin (Chinese) language to Nigerians. Later, these trained Nigerians are hired by Chinese companies in Nigeria (Chen, 2021: 11).

Cehn et al., (2016) observes that Chinese investments have low level of formal skills training. They mostly give on-the-job training which is not satisfactory. Only a few Chinese companies heavily invested on the training of their workers. In Calabar, for example, the Baoyao steel mill trained personnel as welders, and they have become highly skilled in welding. Even the Nigerian Maritime College reportedly sent their trainees to Baoyao to get welding training. Although many trained workers leave job after obtaining sufficient training, the companies consider this 'giving back to society' as part of their corporate social responsibility (Chen et al., 2016: 13-14).

g. Farming

Although Nigeria has large and fertile arable land, China's investments in agricultural sector of Nigeria has the lowest among other investments. Thus, China's investments in this sector contributes little to employment generation in Nigeria. Because China's investment is capital intensive, though Nigeria has abundant labor (Daniel and Maiwada, 2015: 283).

Few Chinese companies are active in agricultural sector investments. One of them is Ofada Vee Tee Rice Limited operating in Ogun State. The company collects paddy rice from Nigerian farmers and process the rice to produce high quality rice. The company contributes domestic production of high-quality rice which reduces the need for rice import. Thus, it helps self-sufficiency of Nigeria and revenue generation via import saving for Nigerian economy. As of 2011, 30 thousand farmers were supposed to supply paddy rice to the company (Oyeranti et al., 2011: 191).

Another Chinese investment in agricultural sector of Nigeria is The Green Agricultural West Africa Ltd (GAWA). The GAWA reached 500 hectares of yearly rice production in Nigeria. Later the GAWA made partnership with another Chinese company and expanded its investments in other

areas of agricultural sectors, agricultural equipment, breeding, seeds, and agricultural research. The GAWA also trained local farmers (Nyiayaana and Jack, 2021: 17-18).

3. Findings and Discussion

In general, Chinese investments have attracted huge Chinese labor from China to Africa. The numbers have dramatically increased from 100, 000 in 1990s to over 1 million Chinese manpower as of 2011 (Nyiayaana and Jack, 2021: 13). Recently, there are also serious claims of increasing Chinese importation of labor into Nigeria. This number reached to 12199 as of 2019, according to the estimation of Nyiayaana and Jack (2021: 20).

The industrial zones have been disappointing, attracting a small number of Chinese firms, while generating little employment, and few of the other desired effects. Nigerian manufacturing exports have not expanded (Adunbi and Stein, 2019: 212).

Chen (2021) found out that Chinese companies mostly contribute local employment. The findings falsify the claims that Chinese firms bring their own employment from China. The research based on interviews in Lekki Free Zone found out that 83% of staff is local (Chen, 2021: 10). Nyiayaana and Jack (2021) estimate that about 4000 Nigerians are employed in Lekki Free Zone (Nyiayaana and Jack, 2021: 17).

The figures clearly show that Chinese investment projects increased employment rates. Adunbi and Stein (2019) calculated by using surveys' data that the workforce have increased more than twofold (from 551 to above 1000) from 2015 to 2018. Only about eighty-six of the employees were non-Nigerian (Adunbi and Stein, 2019: 209). On the other hand, Gu (2009) found out that Chinese investments mostly use local workforce in production, whereas they employ Chinese in managerial positions (Gu, 2009: 576).

The number of Chinese workers and managers is not high as criticized by some. Chinese are working as managers whereas Nigerians as workers. Chen et al. (2016) interviewed 12 Nigerian companies (joint ventures with Chinese). They observed that there are only 54 Chinese or foreign staff working whereas the number of Nigerian workers in 14063. One of the companies CEO reportedly told them the Nigerian workers 'can do the work without any input' from Chinese partners. The number of Chinese staff is decreasing as the local staff are trained. Chen et al. (2016) concludes that Chinese staff transfer technological skills to local staff and leave their positions to local ones (Chen et al., 2016: 15). However, some authors opine that Chinese investments hardly transfer technical and managerial skills to Nigerians (Nyiayaana and Jack, 2021: 24).

Once Nigerian Federal Government insist on the issue of training of local force, it has given some results. One of the Chinese investments in Nigeria, Huwaei, has created a training center in Nigeria to train 2,000 engineers annually (Oyeranti et al., 2011: 190). However, the insistence of local

authorities is inconsistent or less durable. Thus, many Chinese investments bring little skills transfer. The findings of Adunbi and Stein (2019: 209) show that there were no training facilities around the projects and projects were not cooperating with vocational training schools anywhere. On the other hand, language barrier between the Chinese and Nigerians are very high. Investment projects need translators who have also experience in building industrial zones (Adunbi and Stein, 2019: 209). Chen (2021) finds that Confucius Institutes have initiated some language course to fill this gap. They are somehow successful in this regard. Technology transfer is another important expectation from the Chinese investments by Nigerians. Chen et al. (2016) investigated that there are some evidence of positive, albeit limited, technology transfer by the Chinese investments in Nigeria (Chen et al., 2016: 2). Chen et al. (2016) found that there has been more significant practice of technology transfer in automotive and construction sectors (Chen et al., 2016: 13).

The free trade zones in Nigeria which are incentivized by the Nigerian Federal Government supposed to bring long term investments which can produce skills transfers and technology transfer. However, the findings of Adunbi and Stein (2019) and Chen et al. (2016) show that they are short-lived, and they do not provide sufficient level of technology transfer. Nyiayaana and Jack (2021) argue that Chinese investments obviously neglected technology transfer in their investments in Nigeria (Nyiayaana and Jack, 2021: 24). Due to the shortage of skilled labor in Nigerian job market, those trained staff do not contribute to the development of further human capital due to their volatility in the same company for long time.

Although many Nigerian industrialists import machinery from China due to their low-cost, they end up with regret because of poor technical qualities of Chinese-made machinery. Chen et al. (2016) found out that some of those Nigerian manufacturers who imported machines from China faced several problems such as missing parts, easily broken down in less than one year (Chen et al., 2016: 13). On the other hand, Chinese investments in Nigeria brings old and sub-standard technology to Nigeria (Osimen and Micah, 2022: 50). Because they cannot use them in China anymore due to regulations. However, they want to use these sub-standard poor-quality machines in Nigeria. Although Nigeria has regulations to check these, corrupt officials undermine the efforts of Nigeria in this regard. For instance, most of the of machinery from Baoyao Steel in Calabar FTZ were brought from China due to Chinese regulations and they were being shipped to Nigeria (Chen et al. 2016: 13).

4. Conclusion

The research finds that the Chinese investments in manufacturing sectors in Nigeria have brought some positive and some negative impacts. The study focuses on two broad topics, impacts of employment and the transfer of skills which is linked to human capital development.

On the issue of employment, there are mixed results. It is evident that Chinese investments in manufacturing sector has contributed to the employment of local workforce. The data show increasing numbers of Nigerians employed in the free zones and all other projects realized by the Chinese initiatives and capital. However, the findings also indicate that the number of local managerial level staff is still low. Local staff mostly employed at the level of ordinary workers. Unfortunately, there are many serious claims and evidence that Chinese investments use dehumanizing behaviors towards Nigerians.

As the second part of the findings indicate, Chinese companies have brought some initiatives for skills and technology transfer. The data show that skill transfer is minimal and limited. As an analysis, if one compares the number and size of Chinese investments in Nigeria with the level of skills transfer activities, the comparison rate will be clearly very low. Similarly, technology transfer is also very limited and problematic. There are scientific claims that Chinese initiatives clearly ignores the aspect of technology transfer in the projects. This is not acceptable for a developing country like Nigeria. Since skills and technology transfer are very limited in these investments, the level of human capital development stays very low. In sum, these are not helping the overall development of Nigeria. This kind of investments bring little benefits but more harms in terms of their side effects such as losing of Nigeria's national interest due to the incentives (tax evasion, free land etc.), human suffering due to health and safety issues, problems in labor welfare issues and serious environmental degradation.

As recommendations, Chinese investment projects should be incentivized, observed, regulated and implemented more wisely by the Nigerian Government. Project incentives should be designed realistically in a way that they should prioritize Nigerian national interests as well as local development. Projects should be monitored strictly. The Nigerian authorities should also use their regulatory powers to implement projects properly so that they give expected developmental impacts. They should not allow any sufferings of local labor and industrialists.

Secondly, skill transfer policies should also be strictly followed, regulated and also incentivized by the Nigerian Federal Government as well as by the state and local governments where applicable. It should be a pre-condition for Chinese projects. This precondition should not be removed by any local authority for any reason. The developmental impacts should be given the status of priority National interests.

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Navigating Chinese Hegemony: Assessing its Impact on International Order, State Sovereignty, and Territorial Integrity

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Abstract:

The international order has been always relying on the fundamentals of states sovereignty and territorial integrity to have a stable and peaceful arena for all the different actors to engage each other, the paper focuses on the period of the post second world war American led order and how they established a system based on liberalism, in terms of human rights and the right of self-determination, with an emphasis on territorial integrity. The United States has sought to navigate these norms by outlining the circumstances in which one principle should be prioritized over the other, creating some sort of fogginess about the destiny of a lot of stateless nations. In addition, the paper seeks to examine through qualitative research framework, the alternative hegemonic system if China once becomes the hegemon and leads the international system, whether it is going to provide better opportunities for a lot of stateless nations, such as the Kurds, for example, to seek independence or it would prioritize territorial integrity over self-determination.

Keywords: International order, China, Self-determination, Territorial Integrity, United States

1. Introduction

1.1 Background of the study

Since the end of the First World War particularly since the end of the Second World War, the world has been governed by an international system based on the notion of states whose borders, regardless of how they were established, are regarded as inviolable. Although only a few, if any at all, nation-states have clear international boundaries that include one nation or people, or even multiple nations who decided to become part of one state. Many distinct and recognizable peoples lack their own nation-states, and they find themselves as a separated minority within a state. In some instances, they are distributed across multiple states. The matter of balancing the rights of sovereign countries to maintain territorial integrity and the rights of minority groups to determine their own political future is a multifaceted and controversial matter that has received significant consideration in the fields of global politics and human rights. The inherent clash between the concepts of state sovereignty and the right of individuals to self-determination essentially causes this conflict.

The right to self-determination has emerged as one of the most difficult issues confronting US foreign policymakers and the wider international community as a whole. Since the United States For several decades played a crucial role in establishing a system based on institutions that firmly defended the system of states and at the same time, they have also supported peoples' right to self-determination, as stated in the UN Charter. This combination of sovereignty of states and liberalism as allowing people to choose their own destiny that was designed for the international order that strives, but inevitably fails, to strike an equilibrium between the tensions among sovereignty and liberalism, as well as between state and nation. Specially in the aftermath of the world's rapid political, cultural, and technological shifts, various national entities have raised demands for their own states to the top of their political priorities,

These national entities have fortified the defense of their right to self-determination, whereby the right to independence is seen as an implicit, essential part, The international community has often decided to avoid the matter because it is so complicated and possibly destructive. Nevertheless, as the inconsistencies in the current system become more apparent, this failure to respond is becoming increasingly untenable. As more national groups seek some level of recognition, the international community is at a loss for solid regulations for dealing with this.

1.2 Problem Statement

In the view of the above, the paper seeks to find out the space of uncertainty that created by two custom standards sovereignty and liberalism and despite all the efforts being made by the sole power country in last seven decade to sustain both, it failed and whether if a different superpower hegemon, such as the Chinese hegemon reshape the international institutions and establish an order that reduces conflicts and give a better alternative for various stateless nations, In a comparable way the purpose of this paper is to address and achieve the following question and objective:

- How will China's ascendance affect succession and independent movements?
- To examine the impact of China's ascendance on succession and independent movements

1.3 Research Methodology

For this study, we adopted a qualitative approach, delving into a wide range of secondary sources. These included scholarly articles from well-established journals and news articles obtained from different government agencies, by analyzing this diverse pool of information, we aimed to gain a comprehensive understanding of the topic under investigation. In this study, our main aim was to pinpoint essential themes and patterns related to the Chinese policies and their impact on international system in terms of state sovereignty and territorial integrity. We took great care in

selecting data sources that were not only pertinent but also trustworthy, ensuring a comprehensive overview of the assessment and analysis.

2.Literature Review

2.1 the concept of self determination

The persuasive argument for the principle of self-determination is straightforward: it is unquestionably preferable for nations to determine their own destinies rather than have someone else do so for them. The idea of national self-determination seems to reflect the principles of democracy, which uphold the belief that people are most suited to govern themselves. as Hurst Hannum of the Fletcher School of Law and Diplomacy provided a better description “that every people should freely determine its own political status and freely pursue its economic, social, and cultural development has long been one of which poets have sung and for which patriots have been ready to lay down their lives.” (Hannum, 1990), On the other hand, the logic of human rights and the logic of democracy are diametrically opposed. Human rights are intended to protect certain fundamental interests of people from the actions of governments, The principle of democracy legitimizes a specific type of government authority. Human rights are not always respected by democratic governments. In which democratic governments are influenced by strong nationalist beliefs, they are more likely to violate the human rights of their own dissident residents as well as foreigners (Freeman, 2007)

In the late 1700s, during the American and French Revolutions, this fundamental principle made its historical debut on the global stage, up through the first global war, the principle conveys the idea that the power of a government originates from the people and, as a result, should reflect and represent the interests and aspirations of its citizens. in 1863, US President Abraham Lincoln would remark, "and that government of the people, by the people, for the people, shall not perish from the earth" (Lincoln, 1863). The historical development with time took another path, after the end of the first world war, World leaders attempted to apply the principle, but unfortunately, its true meaning and effectiveness were eroded when it came to establishing national boundaries in post-war Europe. In the Balkans, for instance, the South Slavic people were grouped together without considering the deep-rooted ethnic tensions that had persisted for hundreds of years. This oversimplification undermined the principle's intent and led to significant challenges in maintaining peace and harmony in the region. After 1919, a nation's entitlement to self-determination found its limits in the imperial powers' reluctance to extend these same principles to their seized colonies. It was challenging for France and Great Britain to grant the same liberties to people living under their colonial authority (Jessica C. Lawrence, 2012) and not until 1945 when the united nation which was newly established and considered one of the fundamental pillars of the new international order,

United Nations Charter officially recognizes the right to self-determination as a principle of international law, marking a significant turning point in the development of the right to self-determination.

The United Nations Organization mainly has to do with the security and stability of the current state system, Due to the rise of fascism and the need to address imperialistic aggression and atrocities, it was founded to ensure the protection of human rights and the right of nations to determine their own destiny, As a result, it included both the conventional rule of international law that states were the main actors of international affairs, as well as the principle that international peace must be founded on the principle of national self-determination. but one of the major shortcomings of the United Nations was that some of its prominent member states were also imperialistic powers, therefore those superpowers redraw the postcolonial world in their own way which also had significant flaws, the doctrine of *uti possidetis juris*, which stated that postcolonial states' territorial boundaries ought to remain the same as those of the territories occupied by the colonies they replaced. The argument behind this doctrine was that it would reduce conflict over land among postcolonial states, thereby increasing their chances of peace (SHAW, 1997). As a result, the United Nations was able to soak up the anticolonial revolution while remaining a privileged group of states. It was widely agreed upon that the right to self-determination applied to those who fought against European colonialism, but there was less consensus when it came to people who felt they were being treated unfairly in postcolonial states.

2.2 Territorial Integrity

The birth of the new international system with its international institution and organization after the end of the second world war reshaped the global affairs and mainly emphasis on sovereignty and liberalism which they are the main principle of the American led order, trying to stabilize and influence most of the states to be committed to such rules and regulations, usually through history of international relations, Powerful states, especially hegemonic ones, have more influence than weaker nations in determining the nature of the global order and creating its rules (KEOHANE, 1984). Territorial integrity is one of the norms of the US led order which maintains that nations ought to have the freedom to protect their borders, and it gained strong support, becoming one of the UN's guiding principles (Fazal, 2007) as per chapter one, article two of the UN charter:” All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations” (Nation, 2023).

The widespread acceptance of the principle of respecting borders has played a significant role in promoting stability in international relations by undermining the legitimacy of territorial conquest.

Also, the cold war era had its own significance in reducing and eliminating territorial disputes, The superpowers became involved in these conflicts while strategically positioning themselves. However, in a political landscape dominated by the threat of nuclear weapons, they shared a common interest in keeping such conflicts under control. as global affairs seemed to be centered around the clash between the capitalist West and the communist East, and therefore national conflicts were framed in Cold War terms alongside the clash between U.N. statism and its own concept of national self-determination was largely hidden by the Cold War. Until the collapse of the Soviet Union and the disintegration of its states triggered a crisis in this consensus. Many minority nations found them self's within a larger nation group and squeezed inside the same territory, in which the larger group symbolizes and controls the country's affairs, such as the case with the former Yugoslavia and the disintegration of new independent countries into several smaller countries such as Croatia, Serbia, Slovenia, Bosnia-Herzegovina and Macedonia were recognized, However, the principle of *uti possidetis Juris* was utilized for the first time not to post-colonial territories, but to Titoist Yugoslavia's inner republics.

This resulted in an enormous Serb minority in Croatia and a variety of ethnic groups in Bosnia. Western powers tried to maintain equilibrium and justify this new reality by tying recognition of new states to respect for human and minority rights (Freeman, 2007). The issue lies in a paradoxical relationship between the principles of self-determination and territorial integrity, although the idea of self-determination has its roots in the thinkers of the Enlightenment era, but it gained prominence in its modern form through the contributions of Woodrow Wilson. Wilson's perspective emphasized that "all well-defined national aspirations shall be accorded the utmost satisfaction that can be accorded them." (WEITZ, 2015)The "Wilsonian Moment" fueled nationalist aspirations all over the world. Furthermore, the resurgence of the United States after the second world war as a superpower and especially the subsequent formation of the United Nations played a significant role in strengthening the principle, However, as a consequence of the self-determination norm, a remarkable surge of independence movements emerged during that time (Griffiths, 2014).And as a result, the norm of self-determination gained further strength, leading to an extraordinary increase in the formation of new states. In the post-1945 era, the number of sovereign states more than tripled, soaring from 64 to over 192 (Griffiths, 2017) the argument is whether the state should be privileged to protect its own borders and to keep its sovereignty or the nation determine their path of independence and de attach themselves from the bigger nation that they are incorporate it in. Typically, when it comes to applying the principles of self-determination and territorial integrity, the decision on which one to prioritize is determined by selecting the most suitable solution for a particular situation. Some nations they were awarded with independence while others had no chance like the Kurds for example, a diaspora nation, within multiple countries, although they have all the

local factors. when trying to understand why a group seeks sovereign independence, it is logical to start by examining the specific conditions of that group and its relationship with the larger state. Explanations of this kind often emphasize economic grievances and ethno-national disparities as key factors; Secessionist movements tend to gain traction when groups perceive economic deprivation or exploitation. Elites can capitalize on identity-related concerns to advance their political and economic objectives. Additionally, linguistic, and cultural distinctions from the majority population of the state further contribute to the likelihood of secessionism (Blattman, 2014).

Other cases like the situation in Kosovo brings to the forefront the clash between self-determination and territorial integrity and raises concerns about potential accusations of hypocrisy. Many people view Kosovo's ability to gain international support as a triumph for the principle of self-determination, for some, Kosovo's recognition represents the closest we have come to acknowledging a justifiable right to secession when faced with human rights violations perpetrated by the controlling state. According to the former secretary of the state Condoleezza Rice: The unique blend of circumstances presents in Kosovo, such as the dissolution of Yugoslavia, a history of ethnic cleansing and atrocities against civilians, and the prolonged period of UN administration, sets it apart as a distinctive case (Rice, 2008). in 2008, Kosovo proclaimed its independence despite Serbia's objections, and to date, 108 nations, including the United States, have acknowledged its status as an independent and sovereign state (Meester, 2012) The United States made a deliberate decision to consider Kosovo as a unique case, rather than setting a general precedent.

They emphasized certain conditions under which the principle of self-determination could take precedence over territorial integrity. On the other hand, the situation of Crimea and Ukraine was not settled for so many year until eventually the war broke out. Vladimir Putin referred to the example of Kosovo and highlighted what he saw as Western double standards when he backed the self-determination of Crimea, even if it meant undermining Ukrainian sovereignty (Ker-Lindsay, 2012). This tension between norms has shaped the international order, leading to a situation where we see a controlled yet ongoing increase in the number of states. In response, the international legal community has sought to strike a balance by outlining specific conditions under which minority nations can assert their right to independence. Lastly, as observed in the case of Kosovo, the right to independence can be acknowledged under vaguely defined circumstances when influential states determine that there are valid reasons to recognize the seceding region. The outcome is a dynamic and ambiguous set of standards for joining the community of independent nations. The entrance is not broad enough to accommodate all contenders, nor is it precisely defined enough to effectively differentiate between those who meet the criteria and those who do not (Österud, 1997)

2.3 The Chinese hegemony and the birth of states

The rise of China as a global force has significantly shaped the course of contemporary international affairs. Over the past thirty years, China has transitioned from being a developing nation on the fringes of the global stage to a formidable competitor, nearly on par with the United States. There has been a lot of work in the research and scholarly field about the role of China and how it will use its own power to influence the globe, but in this article, I will try to analyze the Chinese role by taking a closer look at China's current inclinations concerning self-determination and territorial integrity and in my view, it is reasonable to expect that these preferences will continue to be upheld throughout the duration of Chinese hegemony. Since the People's Republic of China was established in 1949, Chinese policy has demonstrated a more cautious approach towards supporting minority nations. China tends to acknowledge secession only when it is based on mutual agreement and consent. and Beijing appears to be firmly against separatist movements elsewhere to gain support for its own opposition to separatist movements within China. Officially, Beijing regards separatism as one of the "three evil forces," along with terrorism and extremism. This reflects its unwavering commitment to preserving territorial integrity at all costs, China has recognized the existence of five autonomous regions: Ningxia, Tibet, Guangxi, Xinjiang, and Inner Mongolia. However, when it comes to complete independence, the Chinese government maintains a firm line (Aris, 2009). China asserts that self-determination does not necessarily imply seeking national independence, and it does not believe that stateless nations must necessarily establish or be granted their own states. China's more cautious understanding of self-determination is influenced, in part, by its internal worries regarding potential fragmentation. Embracing self-determination fully poses challenges for countries with diverse populations and multiple nationalities., therefore China acknowledges the rights of stateless nations in a restricted manner, emphasizing the importance of granting them increased autonomy. During the early 2000s, the unrestricted activities of Uighur groups and sympathizers in the Central Asian Republics raised significant concerns in Beijing, particularly regarding the situation in Xinjiang, and is a major motivator for China's promotion of the Shanghai Cooperation Organization mechanism and its focus on the "three evils within the central Asian countries. In the past few years, China and its Central Asian neighbors have worked together, both bilaterally and through the SCO, to target Uighur activists within their borders, with 'Kazakhstan, Tajikistan, and Kyrgyzstan agreeing to assist China in any way in its battle against separatists from Xinjiang, and have on multiple occasions struck against Chinese rebels in direct military operations (SWANSTRÖM, 2005).

Therefore the Chinese position on the international arena opposed any independent movement without the central state consent, China expressed its criticism towards the United States for its

recognition of Kosovo, highlighting the potential risks associated with setting a precedent in such matters. Moreover, China adopted a comparable stance regarding the recent secession of South Sudan, emphasizing that recognition should only be granted if there is a formal and mutually agreed separation from the larger Sudan. From China's perspective, there are genuine concerns about setting precedents by recognizing regions seeking independence without the consent of their respective governments. These concerns are evident in the political discourse and public sentiments surrounding both domestic and international secessionist movements. One of the reasons put forth for rejecting Taiwanese independence is to prevent a ripple effect, as the achievement of independence in Taiwan could potentially strengthen the resolve of separatist movements in Tibet, Xinjiang, and Inner Mongolia (Stockman, 2007).

4. Findings

4.1 the impact of China's ascendance on succession and independent movements

China once they have the chance to become the preeminent power or a hegemon, they will reshape the international order, but in terms of the borders territorial integrity they will be very cautious and restricted and the acknowledgment of new states would be contingent upon the consent of existing states, making it less frequent in occurrence. China has often found itself at odds with the United States and other Western nations when it comes to situations like Kosovo, South Sudan and even Kurdistan Region of Iraq where differing perspectives on the matter of self-determination emerge. China's stance on the Kurdish issue is interconnected with its broader approach to Iraq, which is further shaped by its overall strategy in the Middle East and ultimately aligned with its global foreign policy. Therefore, China is concerned that the establishment of an independent Kurdish state will cause instability in the region, jeopardizing its economic and strategic interests, and also could act as a catalyst for other separatist movements, particularly among Uyghurs and Tibetans who may be inspired to pursue their own aspirations for self-determination. China is also concerned that the Kurdish independence movement's success will encourage other ethnic groups within its borders to intensify their struggles for autonomy, posing significant threats to China's stability and territorial integrity.

The Chinese foreign policy is always linked to its internal affairs; therefore, the territorial integrity norm is primary application is aimed at internal regions. to maintain hegemony and dominance on the globe for China's best interest is to keep the birth of new states at its minimum and sustain the current borders and territorial stability of the states in order to keep its model and the China one policy longevity and legitimacy. Although the birth of new nation states is possible only by the consent of the sovereign. Historically China when it was imperial the Chinese centered international order that emerged from 14th to 19th century in east Asia was distinguished by the notion of stable

borders and relatively rare instances of conquest wars, therefore a predicted Chinese hegemon system will maintain the same old confusion norms that emphasizing on strong and stable states with little tolerance to succession movements and the rights for independence.

5. Conclusion

the international system is an association of states that needs some set of rules to regulate the relations between them therefore throughout the history of international relations there has been always a dominant power or a hegemon state that create and establish the norms for that international system to keep it functioning and durable that fosters harmony among all of its international actors and participants, thereby the international order is important because it influences diplomatic conduct and behavior. It establishes the game's rules. we have examined the post second world war American led order over the last seven decades which emphases on the international norms of sovereignty and liberalism as in term self-determination an essential part of human rights that system supported by international organizations such as the United Nations. And it turned out to be a failed to ask that was not implemented clearly and transparently these norms were applied unjustly which separates the fortunate states who were offered a chance of independence from those who are unfortunate. Given the complexities of politics and the conflicting principles in international affairs, as well as the ever-changing nature of normative arguments, it is inevitable that inconsistencies, ambiguities, and accusations of hypocrisy will arise.

The resulting political landscape introduces uncertainty for both states and nationalist movements regarding the circumstances in which self-determination applies and when it should be prioritized over territorial integrity. Cases such as Kosovo's independence, to separatist Luhansk and Donetsk region of Ukraine that ended up in a drastic war, to the case of Kurdistan region of Iraq, it raised doubt about the double standards of the American policy, the Kurdish people has all the requirements to become an independent state yet they were unlucky and the international community did not support, Washington had punished Russia for annexing Crimea However, they turned a blind eye to Armenia's similar conduct in Karabakh. Uncertainty like this can make states feel vulnerable. As per the second alternative if China once become a hegemony their polices might look more transparent in term of showing solid determination about the territorial stability rather than support any separatist movement only in rare cases where the sovereign is accepting and recognizing the right of in depend of its own minor nation within its border. For the international order it might be better when the territorial integrity is reserved this will lead to less conquest wars more stable environment, It is crucial to note, however, that this increase in territorial protection would come at the cost of liberal rights. Stateless nation would have a law chance of getting their independent.

Overall, whoever superpower or hegemon taking control over the international system will consider its own interest over the international norms, The core of today's national self-determination problem is that the political system is still structured around the belief that its main actors are states, and its main objective is peace. The concept is dangerous because the majority of the world's states are multinational, and some nations demand new states. This demand jeopardizes the current members of the states club's integrity, status, power, and wealth.

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The Influence Of Working Environment On Employees Performance: The Case of Koya Technical Institute In City Erbil/Iraq

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Abstract:

To explore innovative approaches to work, organizations must venture beyond their customary roles and comfort zones. They should strive to establish a work environment that fosters enjoyment, a sense of purpose, pride, and realization of potential for their employees. The objective of the study conducted at the Koya Technical Institute in Erbil, Iraq was to evaluate how the working environment influences employee performance. The study employed a descriptive research design and a simple random sampling technique, resulting in a sample size of 60 respondents. The data were collected using structured questionnaires. The study findings indicate that the working environment of the organization has an impact on its members, according to the respondents. Additionally, the study identified several issues that, if addressed by the management, could enhance employee performance. These issues include the need for a more flexible working environment, mitigation of work-related noise distractions, improvement of supervisor-subordinate interpersonal relationships, provision of job aid, implementation of performance feedback mechanisms, and enhancement of work incentives to motivate employees in their job performance.

Keywords: Work Environment, Employees' performance, Organizations, Koya Technical Institute, Erbil/Iraq

1. Introduction

Workforce efforts and performance are vital to an organization, serving as its core and driving force. Employee performance plays a significant role in an organization's success, with even slight changes having noticeable effects. Exceptional employee performance leads to exceptional organizational performance. Therefore, it is essential to implement crucial measures to achieve an organization's goals. The work environment influences employee behavior, reflecting the effectiveness and efficiency of the workplace (Al-Omari & Okasheh, 2017).

Surroundings, whether physical or non-physical, have an impact on individuals and are considered a part of the environment. The term 'work environment' refers to the surroundings in which people work to achieve organizational goals. This includes tools, systems, structures, and procedures that affect employee performance, potentially positively or negatively impacting it (Satyvendra, 2019). According to Al-Omari and Okasheh (2017), work environment refers to the environment in which a group of people collaborates to complete tasks. The physical aspects of the workplace environment include the location and surrounding area, encompassing tangible assets such as ventilation, noise levels, air quality, parking lots, and tangible perks such as meals, tea, and coffee. It also encompasses office buildings and their setups (Mathew 2015).

The evolution of technology has introduced new competitive challenges for meeting the organizational requirements of the work environment. While incentives and physical infrastructure are important aspects of the workplace, intangible factors also play a crucial role in an organization's success. These factors cannot be seen but can be assessed through the achievements and outcomes generated. Examples of intangible factors include policies, incentives, rules, work culture, interpersonal relationships, supervisor support, and compatibility with colleagues (Genzorová, 2017). Administrators can evaluate employee performance based on various indicators, including work commitments (Schaufeli et al., 2006), work-related family conflicts (Greenhaus and Beutell, 1995), depression (Radloff, 1987), work identity, job fit (Kristof-Brown et al., 2006), job satisfaction (Hackman and Oldham, 1976), and numerous other aspects. These aspects provide insights into the performance of employees within an organization. The working environment has the potential to enhance job effectiveness as it significantly influences employees' achievements and performance. The relationship between job satisfaction and employee performance has been observed among different individuals and its impact on work (Atmaja & Puspitawati, 2018). A higher level of job satisfaction indicates a greater level of employee achievement, even in challenging and long-term jobs (Mathew 2015).

Furthermore, when an employee feels like a misfit in their job, it does not necessarily mean that they are unsuited to the role or lack the necessary skills. There may be various other work-related factors in the environment that cause stress and lead employees to believe that they are not a suitable match for their job, ultimately affecting their work performance, as noted in a study by Sturman and Walsh (2014). For example, if they are assigned tasks beyond their capacity and do not receive adequate support or time to complete them, even if they are rewarded for achieving their targets, they may still feel unsatisfied. This lack of job satisfaction, combined with a lack of support from supervisors, can result in job stress, low productivity, and diminished performance (Leblebici, 2012). The working environment and job dissatisfaction not only result in poor employee performance, but can

also have psychological effects, leaving employees feeling demotivated and restless at work, ultimately impacting the success of an organization (Abowd et al., 1999). As a result, employees currently focus on the current situation and working environment to assess their performance under different conditions and identify the conditions that enable them to perform at their best (Satyvendra, 2019).

While individuals are grateful for their financial stability, they no longer view the workplace as a second home, despite spending most of their days there. They often feel compelled to adapt to uncomfortable environmental conditions in the office, which can gradually lead to depression, stress, and long-term health issues (Jena 2016). The working environment plays a vital role in determining work quality and employee performance levels (Genzorová, 2017). The way the working environment engages employees influences their desire to learn new skills and abilities as well as their motivation levels, performance, and productivity, as observed by Bushiri (2017). With increasing competition among computing firms and countries, effective and efficient employee performance has become essential for any organization (Awan, 2015).

According to the literature by Minarsih, Gagah, and Suwati (2016), the primary objective of work for individuals is not just to earn a paycheck but also to experience self-satisfaction and comfort in the working conditions they face every day. Employee performance is influenced by various factors, such as working conditions, motivation levels, support, and leadership, as demonstrated by Satyvendra (2019). To achieve ambitious goals, organizations must pay attention to even the smallest factors that can impact their objectives. Employees are essential assets of any organization, and their performance greatly influences an organization's goals. Poor environmental conditions and ineffective management by supervisors can have significant repercussions for achieving these goals, making it difficult or even impossible to meet objectives under unfavorable conditions (Okasheh, 2017).

According to Lelebici (2012), well-managed organizations consider their employees as foundational resources for productivity, performance, and quality. These organizations view employees not only as capital investments but also as a fundamental source of improvement and success. To achieve improvement and ultimately succeed, it is crucial to satisfy employees in the workplace by enhancing their working environment and fostering loyalty and commitment to their work (Lelebici, 2012). The workplace environment plays a pivotal role in maintaining employees' calm and content in their work. Therefore, organizations should carefully consider factors such as office location, design, policies, and procedures to ensure that they enhance employee motivation and determination to achieve target objectives. This in turn leads to increased productivity and

optimized employee performance (Awan, 2015). Jena (2016) emphasizes that efficiency, effectiveness, and core competencies are key factors in evaluating employee performance, attracting potential customers, and retaining them through the delivery of high-quality services, ultimately contributing to organizational success. The importance of the working environment on employee performance and its subsequent impact on organizational success have been highlighted in the studies mentioned above. This study delves into a detailed examination of workplace environmental factors and their effects on employee performance.

2. Literature Review

2.1 Working environment

Noah & Steve (2021) defined the working environment as an encompassing concept that includes all the forces, actions, and influential factors that currently or potentially affect an employee's activities and performance. This represents the interrelationship between employees and the environment in which they work.

According to Alkaabi et al (2022), the effectiveness of knowledge sharing within organizations relies on how the work environment is designed to harness it as an asset. By creating a work environment that promotes employee satisfaction and facilitates the exchange of ideas, organizations can enhance their effectiveness and enable employees to benefit from collective knowledge. In turn, this serves as a motivating factor for higher productivity.

Taiwo (2010) presented a threefold categorization of the working environment. The technical environment encompasses tools, equipment, technological infrastructure, and other physical or technical elements that enable employees to fulfill their responsibilities. Human environment pertains to interactions with peers, colleagues, teams, leadership, and management. It is designed to encourage informal interactions and facilitate knowledge sharing and idea exchange, ultimately aiming to maximize productivity. The organizational environment includes systems, procedures, practices, values, and philosophies that are under management control. Issues within the organizational environment, such as measurement systems that prioritize quantity over quality, can influence employee productivity.

2.2 Employee Performance

According to Naharuddin & Sadegi (2013), employee performance is influenced by their willingness and openness to perform their jobs. Employees possessing this willingness and openness can enhance their productivity, ultimately leading to improved performance.

Lankeshwara (2016) further explains that, to achieve a standard level of performance, employers need to ensure that employees stay on track to accomplish organizational goals and targets. By keeping employees focused and providing the necessary support, employers can monitor their performance and help them improve.

Additionally, implementing a reward system based on employee performance is crucial for motivating employees and encouraging them to excel at their tasks. Stup (2003) identified several factors that contribute to the success of employee performance, including the physical work environment, availability of equipment, engaging and meaningful work, clear performance expectations, feedback on performance, a fair reward system, standard operating procedures, and the knowledge, skills, and attitudes of employees.

Alkaabi et al (2022) defined performance as reliant on internal motivation, but the presence of internal factors such as necessary skills, intellectual capacity, and resources also have an impact. Therefore, employers should provide appropriate working conditions to ensure that employees meet required performance standards.

2.3 Working Environment Factors that Affect Employees Performance

A favorable and encouraging work environment creates circumstances that empower employees to perform at their best, utilizing their knowledge, skills, and competencies along with available resources to deliver high-quality services for the organization. The following factors were identified based on this study:

2.3.1 Supervisor Support

A supervisor, also known as an experienced leader, possesses problem-solving skills and serves as a role model within the first level of organizational management (Gibson, 2004). As experienced leaders, supervisors are actively involved in training programmes. These programs involve establishing objectives, selecting trainers, developing lesson plans, choosing appropriate methods and techniques, preparing materials, scheduling programs, and conducting training needs analysis (Gibson, 2004; Elangovan & Karakowsky 1999). Naharuddin & Sadegi, (2013) suggests that supervisors can also act as trainers for employees, guiding them through operational processes, particularly when new procedures are introduced. Supervisor support is crucial in influencing employee performance, although there are instances in which supervisors may fail to provide adequate support. One example is miscommunication between employees and supervisors regarding the delivery of information or job processes (Naharuddin & Sadegi, 2013).

To achieve optimal employee performance, employees and supervisors must be fully committed to the relationship. When both parties are fully committed, they lead to positive employee performance outcomes (Blau, 1964).

2.3.2 Job Aid

According to Alkaabi et al (2022), job aids serve to direct and guide employees to enhance their performance. They also provide support to employees in their performance. An example of the military's reliance on job aid between 1958 and 1972 was examined by Rossett & Schafer (2012), who demonstrated a significant and positive contribution to military performance. The results of the military analysis indicated that job aids saved money while maintaining employees' work performance. There are three ways to improve performance through job aid (Harvey, 2008). The first is external support, where employees take leave from work to seek external sources for job reference. The second way is through extrinsic support, where job aid is provided within the system itself. The third method, known as intrinsic support, involves using insider knowledge or software to enhance workflow efficiency.

2.3.3 Physical Work Environment

The physical working environment can be either a good or poor fit for individuals in the workplace. This is also referred to as an ergonomic workplace, emphasizing the importance of research on creating an ergonomic environment for employees. An ergonomic physical workplace can help prevent nerve injuries in employees ((Brandstätter et al, 2016). Raziq & Maulabakhsh (2015) emphasized the need for proper elements in the working environment to prevent employee stress during job performance. They also highlighted the significant role of physical elements in fostering networking and relationships within the workplace. Improving the design of the physical workplace can lead to a performance increase of five to ten percent for employees (Leblebici, 2012).

Jawaad et al (2019) further discusses elements related to the working environment, particularly focusing on the office layout plan and office comfort. According to Amir (2010), the physical workplace refers to the area in an organization that is arranged in a way that aligns with the organization's goals.

2.3.4 Performance Feedback

Performance feedback involves the exchange of information and resolution of conflicts between employees and their supervisors. It encompasses providing positive feedback on employees'

strengths and acknowledging areas that require improvement. Managers and supervisors should be proficient in addressing the various workplace factors that affect employee performance. While supervisors offer feedback and express their requirements, employees are encouraged to provide feedback on their needs. While this process is typically formal, it can also be informally managed by fostering closer relationships between the two parties (Chandrasekar, 2011).

2.3.5 Workplace Incentives

The organization plays a crucial role in identifying what motivates employees and establishing formal and informal structures to reward desired behaviors. These rewards can take the form of both internal rewards, such as challenging assignments, and external rewards, such as higher compensation and recognition from peers (Chandrasekar 2011). The poor performance of professional employees can be attributed not only to factors within the working environment, but also to deficiencies in human resource management practices, such as a lack of recognition for high-performing employees, subpar working conditions, the absence of a performance appraisal system, and inadequate feedback on performance outcomes. Therefore, implementing significant changes in areas such as promotions, compensation, and benefits is crucial for ensuring employee satisfaction, and consequently, increasing productivity.

2.4 Conceptual Framework

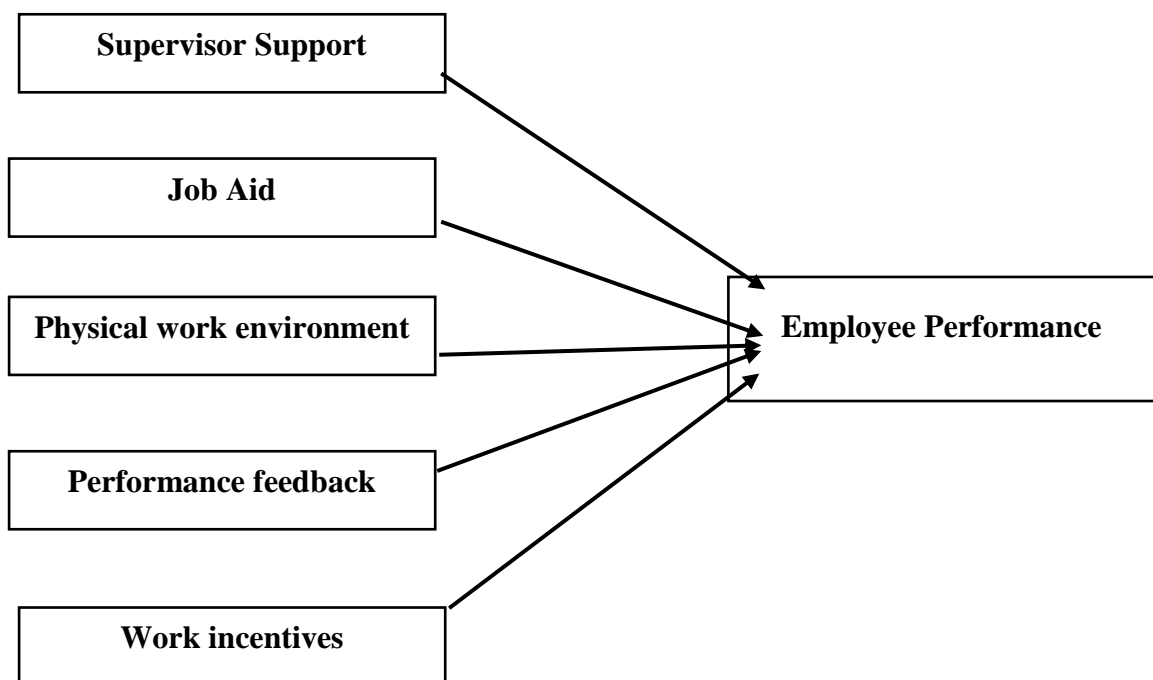


Figure 1: Conceptual Framework

2.5 Theoretical Framework

The theoretical framework aimed to provide an understanding of the variables discussed in the conceptual framework. It establishes a connection in which a group of factors influences a person, ultimately shaping their performance by either enhancing or diminishing it.

2.5.1 Supervisor Support and Employee Performance

Supervisors who oversee employees play crucial roles as supporters. They collect and distribute the resources required for employees to perform their tasks effectively while also offering positive reinforcement for their accomplishments. The interpersonal role of supervisors within the work environment is significant, as it fosters positive relationships and boosts employees' self-assurance. Consequently, this leads to enhanced employee performance (Blau 1964).

2.5.2 Job Aid and Employee Performance

Job aid is an external tool used by individuals to assist them in their work. Its purpose is to provide support for job-related activities (Florez-Arango et al., 2011). As one of the factors within the working environment that influence employee performance, job aids are employed to provide real-time guidance for job execution. By utilizing job aid, employees receive support in performing their tasks and planning for their development, ultimately leading to optimal performance. Job aids streamline work processes, make them more efficient, and reduce the occurrence of errors. Examples of job aids include templates, guides, models, and checklists.

2.5.3 Physical Work Environment and Employee Performance

The workplace environment can significantly impact employee performance and safety. Physical factors, such as inadequate layout or excessive crowding, can increase the likelihood of accidents, such as tripping or colliding with objects. In addition, factors such as noise can cause discomfort to employees, resulting in reduced productivity. Employee performance can be influenced by both the nature of their tasks and the conditions of their work environments. Creating a favorable environment enables employees to channel their energy and focus on their work effectively (Hamidi et al., 2020).

2.5.4 Performance Feedback and Employee Performance

Performance feedback is a consistent provision of information to employees regarding their job performance. It should include both positive reinforcement of what employees are doing well and

constructive feedback on areas that need improvement. Feedback should strive to be impartial and deliver the necessary interpersonal and conflict resolution skills. It can take the form of informal feedback or can be incorporated into a formal performance management process (Chandrasekar, 2011).

2.5.5 Work Incentives and Employee Performance

The common belief is that salary and promotions are the primary factors influencing work incentives and employee performance. However, it is equally important to create a motivational work environment in which employees are treated fairly. Regardless of the level of involvement in the overall business processes, managers should ensure that each employee feels valued and plays a significant role in larger endeavors. Fostering loyalty among workers is crucial for motivating them and ultimately boosting productivity and performance. Thus, organizations must identify what motivates their employees and establish formal and informal systems to reward them, as this working environment factor enhances performance.

2.6 Research hypotheses:

H1: Supervisor Support influences Employee Performance.

H2: Job Aid influences Employee Performance.

H3: Physical Work Environment influences Employee Performance.

H4: Performance Feedback influences Employee Performance.

H5: Work Incentives influence Employee Performance.

3. Research Methods

This study employed primary data collection methods that specifically utilized a descriptive research design. The selection of the descriptive research design was based on its ability to gather a substantial number of responses from a diverse group of individuals. This research was conducted at the Koya Technical Institute in the city of Erbil, Iraq. This study aimed to target human resource management officers responsible for employee performance management as well as the employees themselves. The total population at the Institute of Finance Management was 265 employees, including both teaching and non-teaching staff. The study used a sample of 60 respondents, consisting of both teaching and non-teaching employees, who completed questionnaires to obtain the study's findings. A random sampling technique was employed to collect data, as defined by Creswell (2005), as the random selection of individuals from a population subset. Data were collected using structured questionnaires based on a 5-point Likert Scale, and the Statistical Package for Social Sciences (SPSS) software was used to analyze the findings.

4. Findings and Data Analysis

4.1 Profile of Respondents

The identification of respondent characteristics was carried out to provide a description of the study sample. These characteristics include age, gender, and job type, which will be further elaborated on below:

Table 1. Profile of Respondents

Demographic	Characteristic	Frequency	Percentage
Gender	Male	36	60%
	Female	24	40%
Age	20-30 years	15	25%
	31-40 years	29	48%
	41-50 years	10	17%
	50 and above	6	10%
Type of job	Academic	18	30%
	Academic/ Administrator	30	50%
	Administrator	12	20%

The study aimed to examine the gender distribution of respondents in order to gather insights from the questionnaires. The table above illustrates that 60% of respondents were male, while 40% were female. Age was considered an important factor in assessing the impact of the working environment on employees' performance at the Institute of Finance Management. The largest group of respondents, accounting for 48%, fell within the 31-40 age range, followed by 25% in the 20-30 age group, and 17% in the 41-50 age group. The smallest proportion of respondents, making up 10% of employees, was in the 50 and above age category. Table 1 shows that 50% of the respondents were academic/administrative staff, while 30% were academic staff, and the remaining 20% were administrators.

4.2 Supervisor Support

A supervisor's competence in providing support in the workplace is essential. Table 2 presents the responses regarding how employees rated the level of support they received from their supervisors at their respective work locations.

Table 2: Supervisor Support

Responses	Frequency	Percent	% Cumulative percent
Strongly agreed	21	35%	35%
Agreed	17	28%	63%
Neutral	7	12%	75%
Disagree	9	15%	90%
Strongly disagree	6	10%	100%
Total	60	100%	

Source: Researcher

According to the data presented in table 2, 35% of employees strongly agreed that their supervisor provided support in enhancing their workplace performance. On the other hand, 28% of respondents agreed that their supervisor was effective in planning and organizing tasks to improve performance. Conversely, 15% of employees disagreed with their supervisor's contribution to their job performance, while 12% had a neutral opinion on the matter. Finally, 10% of respondents strongly disagreed with their supervisor's support. A supervisor's proficiency in providing support is crucial for guiding employees through operational processes and ensuring tasks are completed efficiently.

4.3 Job Aid

The response provided sheds light on the existence of job aids within the organization, which positively impact employees' job performance.

Table 3: Job Aid

Responses	Frequency	Percent	% Cumulative percent
Strongly agreed	16	27%	27%
Agreed	18	30%	57%
Neutral	10	17%	73%
Disagree	8	13%	87%
Strongly disagree	8	13%	100%
Total	60	100%	

Source: Researcher

According to the data presented in table 3, it can be observed that 30% of employees agree that the existence of job aids within the organization significantly contributes to their job performance. Additionally, 27% of employees strongly agree that the presence of job aids positively impacts their performance. On the other hand, 17% of employees hold a neutral stance regarding the use of job aids to enhance performance. Conversely, 13% of employees disagree with the notion that job aids play a role in their performance. Similarly, 13% of employees strongly disagree with the presence of job aids being beneficial to their job performance. The presence of job aids at the organization supports employees in performing their tasks, planning for development, and ultimately simplifying their work processes while reducing error rates.

4.4 Physical Working Environment

In this study, the physical working environment has been recognized as a factor influencing employees' performance, as indicated by the responses obtained through the distribution of questionnaires.

Table 4: Physical Working Environment

Responses	Frequency	Percent	% Cumulative percent
Very bad	15	25%	25%
Bad	12	20%	45%
Moderate	23	38%	83%
Good	4	7%	90%
Very good	6	10%	100%
Total	60	100%	

Source: Researcher

Based on the data presented in table 4, the majority of employees, comprising 30%, described their physical working environment's impact on their performance as moderate. They reported that it influenced their willingness to stay in the office and work comfortably. On the other hand, 23% of employees expressed that the physical working environment was unfavorable for them to stay in the office and work comfortably. Approximately 22% of employees described the physical working environment as good, enabling them to stay in the office and work comfortably. Moreover, 18% of employees rated their physical working environment as very good, while the remaining 7% found it to be very bad in terms of comfort and workability. The majority of employees agreed that there is a strong connection between the physical working environment and their motivation to perform well. This emphasizes the organization's responsibility to provide a friendly working environment that enables employees to work comfortably and excel in their roles.

4.5 Employee Performance Feedback

The responses provided shed light on how supervisors utilize performance feedback to improve employees' performance.

Table 5: Employee Performance Feedback

Responses	Frequency	Percent	% Cumulative percent
Always	15	25%	25%
Usually	12	20%	45%
Sometimes	23	38%	83%
Rarely	4	7%	90%
Never	6	10%	100%
Total	60	100%	

Source: Researcher

According to the data presented in table 5, it is evident that 38% of employees reported occasionally receiving performance feedback from their supervisor. Following this, 25% stated that they always receive performance feedback, while 20% mentioned that they usually receive feedback. In contrast, 10% of employees stated that they never receive performance feedback, and 7% stated that they rarely receive it. It is important to note that employee performance feedback plays a significant role in enhancing performance as it includes both positive reinforcement for what employees are doing well and constructive feedback on areas that require improvement.

4.6 Work Incentives

In this study, work incentives were recognized as an important factor influencing employees' performance. The following responses from employees shed light on how incentives contribute to their job performance.

Table 6: Work incentives

Responses	Frequency	Percent	% Cumulative percent
Strongly agreed	31	52%	52%
Agreed	13	22%	73%
Neutral	8	13%	87%
Disagree	3	5%	92%
Strongly disagree	5	8%	100%
Total	60	100%	

Source: Researcher

As depicted in table 6, the majority of employees (52%) strongly agreed that work incentives within the organization serve as a motivating factor, positively impacting employee performance. Additionally, 22% of employees agreed that work incentives contribute to their motivation to perform well. On the other hand, 13% of employees expressed a neutral stance regarding the role of work incentives in driving performance, while 8% strongly disagreed with work incentives being a motivating factor. The remaining 5% of employees disagreed with the notion that work incentives impact employee performance. Work incentives play a significant role in enhancing employee performance as they allow employers to monitor progress and support employees in improving their performance. Implementing a reward system based on employee performance further motivates employees to excel in their tasks.

5. Discussion

The studies findings indicate that gender parity exists within organizations, with a nearly equal distribution of males (60%) and females (40%). This suggests that organizations do not discriminate based on gender in their hiring practices. A significant proportion of employees fall within the 31-40 age range, where performance becomes a priority, as individuals aim to develop their careers and plan for retirement. The majority of respondents possess a degree, indicating that the Koya Technical Institute hires qualified employees who possess the necessary skills and knowledge to perform their duties effectively. This hiring practice contributes to better overall workplace performance. This study also revealed that several work environment factors influence employee performance. Employees expressed satisfaction with their physical work environments. Factors such as supervisor support, job aid, physical work environment, performance feedback, and work incentives were found to enhance employee performance. Employees believe that an improved physical work environment would encourage better performance. Promotion opportunities based on high performance are perceived as motivating factors. Most respondents felt fairly compensated for their work, but it is important to note that pay alone serves as an extrinsic motivator. A comprehensive compensation package that encompasses various aspects enhances employee performance. Regarding management and leadership styles, the results indicated that management was a role model for high performance. However, employees are not involved in decision-making processes within the organization. Involving employees in decision making would foster a sense of responsibility and appreciation, thereby increasing their commitment to their work. Koya Technical Institute recognized the importance of training and development, as evidenced by providing opportunities for employee growth. This enables employees to acquire the skills and knowledge necessary to excel in their roles. The findings also highlighted that employees were able to maintain a balance between work and personal life, although the organizations were not flexible enough to fully enhance their work-life

balance. Overall, the analysis indicates that a conducive work environment significantly enhances employee performance.

6. Conclusion

The working environment plays a crucial role in motivating employees to perform their assigned tasks effectively. In today's competitive business landscape, monetary rewards alone are not sufficient to inspire the required level of performance. The ability to attract, retain, and motivate high-performing employees has become increasingly important in modern organizational settings. The study also highlighted that employee performance can be enhanced if management addresses the issues identified during research. Ultimately, this research revealed that the working environment significantly impacts employee productivity. Consequently, organizations are responsible for creating a favorable working environment that promotes employee comfort and facilitates optimal job performance.

7. Recommendations

Conducting regular meetings with employees to address their concerns can serve as a motivating factor. Managers should receive counseling to foster positive relationships with their subordinates. Organizations should prioritize the implementation of effective work-life balance programs for their employees, as this can significantly motivate and retain them. Management should make concerted efforts to establish a work environment that attracts, retains, and motivates employees, ultimately leading to increased organizational productivity. Providing adjustable and flexible furniture for all employees promotes comfort and long-term well-being. Employers should ensure favorable working conditions to enhance employee morale and efficiency. Customizing benefit programs to suit employees' needs is an example. Additionally, management should effectively communicate organizational goals and strategies to employees in order to align their efforts with the organization's mission and vision.

8. Limitations of the Study

This research focused on employees at the Koya Technical Institute in the city of Erbil, Iraq, to investigate the influence of the working environment on their job performance. However, the limitations of this study can be seen as potential areas for future research to explore the impact of work environment on employee performance across various units. Future research could encompass both public and private sectors to gain a more comprehensive understanding of the topic.

9. Suggested area for Further Study

This study exclusively investigated the influence of the working environment on employee performance at the Koya Technical Institute. Hence, it is recommended that future researchers extend their research to include other companies or institutions, including those located in different regions or rural areas. Furthermore, additional research should focus on examining the benefits that organizations can gain from enhancing their working environment.

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The Middle East's Predominant Issue

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Abstract:

The Middle East is one of the global regions most embroiled in turmoil. Yet, the production of oil has made it one of the most lucrative. The region, too, has already witnessed a series of wars at different levels. This paper tries to determine the overarching issue that has triggered much of this turbulence in the Middle East. This will be established by looking at a series of interconnected events and their economic consequences. Document analysis will be employed for this study. Highlighting major events such as the eight-year Iraq-Iran war and tracing subsequent connected episodes such as the invasion of Kuwait by the former Iraqi regime in 1990, economic sanctions on Iraq, the presence of foreign troops in the Arab Gulf states and liberating Kuwait will be covered in this project. Also, this paper claims that relevant events that led to the Arab Spring and its aftermath were brought about for the same reason. All the themes covered will be supported by data-driven evidence, which supports and explains the claim that this paper argues.

Keywords: Middle East, Iraq, Iran, Kuwait, Kurds, Arab Gulf States, Israel, Arab Spring

Introduction

Whenever there is an ongoing dilemma with no objective remedy, this leads to a series of problematic issues, which aggravates the situation. The more time passes, the worse the scenario will become, unless we go back to square one and try to unpack the fundamental issue so that the whole picture can be revised. Throughout history there have been many protracted conflicts linked to a single concern that escalated into related disputes. This paper tries to shed light on the source issue that has led to the overwhelming problems in the Middle East. Though, when we talk about conflict in the Middle East, the overarching problem that comes to mind is the Arab Israeli conflict. However, this is not true, especially when we consider the current multi-dimensional problems and their consequences affecting the entire Middle East region. This argument is particularly valid when looking at the current normalisation process of the major Arab Gulf states with Israel: this has had no impact on the many ongoing issues that the region is witnessing.

Methodology

Document analysis was an appropriate method to use for this project due to the various resources that were necessary to carry out this research. Many documents covering the last fifty years were studied by the researcher in considering this work. “*Document analysis is important because it allows researchers to make sense of their resources and select the appropriate pieces for their studies*”¹. Among the different tones of the available resources, the researcher selected the ones most relevant to fit the framework of this research and served to provide explanations that led to drawing the conclusion.

Another reason for adopting this method in particular was the suitability of document analysis in relation to other methods that could have been used. “*When used to analyze pre-existing texts, this method allows researchers to conduct studies they might otherwise not be able to complete*”². The nature of this study and its long historical background made a large quantity of reliable documents, treaties and other evidence available to the researcher. In this instance, accessibility and unavailability of relevant people to interview made document analysis more valuable, feasible and appropriate to the argument in question.

The Straw that Broke the Camel’s Back

Going back to the end of World War I, particularly with regard to the creation of Iraq, the resentment of the Kurds led them not to integrate happily into the new state fashioned by the British mandate from the three provinces of Baghdad, Basra, and Mosul, of which the Kurds comprised the majority of Mosul province: so, we can see that this was the spark for the later instability in Iraq. Also, all subsequent Iraqi governments, instead of trying to appease the Kurds in Iraq and credibly integrate them into the state, to the contrary were ready to do anything with the superpowers and regional states to make the Kurds bow to their political desire. For instance, while the Iraqi government wanted to quash the Kurdish revolution, it was ready to state to the Iranians in the introduction of the Allegris treaty “*...considering the ties of geographical proximity, history, religion, culture and*

¹ Editorial Team, Indeed. 2022. "Document Analysis Guide: Definition and How To Perform It", *Indeed* <<https://www.indeed.com/career-advice/career-development/document-analysis>> [accessed 22 August 2022]

² Morgan, Hani. 2022. "Conducting a Qualitative Document Analysis", *The Qualitative Report*, 27: 64-77 <http://dx.doi.org/10.46743/2160-3715/2022.5044>

*civilization which bind the peoples of Iran and Iraq*³: as if none of those ties existed with the Kurds whom they wanted just to accept being Iraqis.

This kind of policy by the Iraqi government reached its peak when Saddam Hussain was ready to settle the dispute over territories and waterways with the Shah of Iran, at the cost of the Kurdish issue.

This is referred to in the Allegris treaty of 6 March 1975. Article 3, of the signed treaty, states that:

“The High Contracting Parties undertake to exercise strict and effective permanent control over the frontier in order to put an end to any infiltration of a subversive nature from any source, on the basis of and in accordance with the provisions of the Protocol concerning frontier security, and the annex thereto, attached to this Treaty”⁴.

Later events well explain that the intention of the Iraqi government was mainly to end the Kurdish revolution, not to settle its disputes with Iran. Therefore, after the Iranian revolution of 1978-79, Iraq found a pretext to unilaterally withdraw from the treaty, which was the main reason for the Iraq-Iran war of 1980-1988. Thus, instead of genuinely agreeing to the Kurdish demands that both parties had agreed on 11 March 1970, because the Ba’ath party after their coup d’état of July 1968 wanted time to develop a strong hold on Iraqi affairs and start negotiation with the Kurdish rebels, when it came to the moment, the Iraqi government found it was the right time to withdraw from its agreement with the Kurds and started plotting against the Kurdish revolution and its leadership.

Furthermore, “on 11 March 1974, the fourth anniversary of its Autonomy Agreement with the Kurdish leadership, the Iraqi government unilaterally announce[d] a new autonomy law”⁵. Instead, it agreed to Iranian conditions regarding their border and waterways disputes, to bring the Kurdish revolution to an end. Hence, the Allegris treaty has become a recipe for disaster in the Middle East which continues at the time of writing.

³ Iran and Iraq, "TREATY1 CONCERNING THE STATE FRONTIER AND NEIGHBOURLY RELATIONS BETWEEN IRAN AND IRAQ", *Treaties.Un.Org*, 1976 <<https://treaties.un.org/doc/Publication/UNTS/Volume%201017/volume-1017-I-14903-English.pdf>> [Accessed 25 August 2022]

⁴ *ibid*

⁵ Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

Iraq-Iran War

Disregarding the arguments of both Iraq and Iran for the reasons that led to the war⁶, the obvious one, as stated above, was the withdrawal of Iraq from the Allegris treaty of 1975. For Iraq, the impetus for agreeing to settle all the long-lasting disputes with Iran was to end the Kurdish revolution. However, after the Iranian revolution, Iraq thought that while the Kurdish revolution was continuing, and while Iran was in a mess, it was an opportune moment for it to unilaterally withdraw from the treaty.

However, other independent analyses give many other reasons, such as “*in Iraq, Saddam Hussein used war and emergency rules as pretext to establish an unprecedented totalitarian dictatorship*”⁷.

other independent analyses give many other reasons, such as “*in Iraq, Saddam Hussein used war and emergency rules as pretext to establish an unprecedented totalitarian dictatorship*”⁸.

All in all, this led to the start of the eight-year war from September 1980 to August 1988. The conflict adversely affected both countries. For instance, on Iraq’s economy before the war as stated “*the rising Iraqi economy of the 1970’s, benefitting from the nationalization of oil in 1972 and reaching a record oil production of 3.3 million BPD (barrels per day) by early 1980, plummeted within a year to 0.8 million BPD as a direct result of the war*”⁹. Funding the war was unaffordable for both countries, and despite all the aid that Iraq was getting,

“*at the end of the war, Iraq accumulated an external debt of over 100 billion dollars*”¹⁰.

Iran’s economy was in an even more critical situation. Even though it had just witnessed a regime change and was suffering from instability and a multi-dimensional economic crisis, the war worsened its situation. Iran before the war, since 1979, had already been under US sanctions¹¹.

⁶ For further details about the reasons that led to the war, see: Encyclopaedia Britannica, "Iran-Iraq War", *Encyclopedia Britannica* <<https://www.britannica.com/event/Iran-Iraq-War>> [Accessed 25 August 2022]

⁷ Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

⁸ Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

⁹ *ibid*

¹⁰ *ibid*

¹¹ For further information and to overview the US sanctions since 1979, see: Clawson, Patrick, "U. S. Sanctions", *United States Institute Of Peace*, 2010

Furthermore, “its oil sector, mostly located in the war areas of Southwestern Iran, was constantly hit by the Iraqis. Unlike the Iraqis, who transferred oil export from the war torn Gulf to other directions, the Iranians continued to rely on exports through the Gulf region”¹². This led to the total cost for Iran at the end of the war reaching “\$350 billion”¹³.

In terms of the casualties, the “war strained Iraq’s manpower: in addition to the estimated 180,000 casualties, 340,000 wounded and 50,000 POWs”¹⁴. On the other hand, it was estimated that Iranian casualties numbered “500,000 to 1,000,000 Iranians were dead”¹⁵.

Generally, for the Arab states, and regionally, the war changed the focus of the of the Middle East from the Arab-Israeli conflict to the Arab-Iranian struggle. Zeidel remarks in this regard:

“The war shifted the world’s attention in the Middle East from the Arab-Israeli conflict to the Gulf region. It took Iraq out of any possible organization of an “Eastern Front” in a war against Israel. In fact, with the signing of peace between Egypt and Israel, the planning of an “Eastern Front” against Israel became practically impossible. Thus, the Iran-Iraq war contributed indirectly to Israel’s security”¹⁶.

Furthermore, this shift of conflict did not stop at the end of the war, but continued as an ongoing threat from the Iranian side, as well as Saddam’s regime too, to the Arab Gulf states that resulted in the invasion of Kuwait by Iraq. Even after the invasion, the threat continued and put the Gulf states in a parlous situation. Again, (Zeidel, 2013) states in this regard that:

“In the Gulf region, war reiterated the extreme vulnerability of all the Arab Gulf countries. Therefore, the war hastened a process of increasing interstate cooperation, mostly within the Gulf Cooperation Council. Under the direct threat from Iran and the potential future

<https://iranprimer.usip.org/sites/default/files/PDF%20Sanctions_Clawson_US.pdf> [Accessed 25 August 2022]

¹² Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

¹³ Encyclopedia, New World. "Iran-Iraq War", *Newworldencyclopedia.org* <https://www.newworldencyclopedia.org/entry/Iran-Iraq_War> [accessed 22 August 2022]

¹⁴ Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

¹⁵ Szczepanski, Kallie. 2019. "The Iran-Iraq War, 1980 to 1988", *ThoughtCo.* <<https://www.thoughtco.com/the-iran-iraq-war-1980-1988-195531>> [accessed 23 August 2022]

¹⁶ Zeide, Ronen. 2013. "Implications of the Iran-Iraq War", *E-International Relations* <<https://www.e-ir.info/pdf/43374>> [accessed 22 August 2022]

threat from Saddam's Iraq, the Gulf countries relied more heavily on American military might, which consequently increased dramatically toward the war's end"¹⁷.

Reliance on the Americans as the only saviour of the GCC states necessarily led to the later compromise with Israel and ended up with the current settlement. In addition, during and after the war, Turkey gained a much better position in the Middle East, mainly at the cost of the Arabs and other Middle Eastern nations. "*Further north, the war helped Turkey attain regional supremacy*"¹⁸.

The Aftermaths of the War

Both countries came out of the war fatigued, and apart from the huge number of casualties on both sides, referred to above, and despite being members of the organisation of Petroleum Exporting Countries (OPEC)¹⁹, economically they became among the weaker countries of the region. Iraq after the war was expecting the Gulf countries, especially Kuwait and the United Arab Emirates, to cancel their debts which were estimated to be \$37 billion. "*At the same time, Iraqi leader Saddam Hussein accused Kuwait of over-producing crude oil for export and depressing prices, depriving Iraq of critical oil revenues, and of slant drilling into the Rumayla field on the shared border*"²⁰. Furthermore, Saddam accused the rulers of Saudi Arabia of dropping the price of oil while Iraq was busy with the war and needed further support. Saddam stated that in 1986 the Saudis reduced the price of crude oil to an extent that a barrel reached only \$7, which according to him led to the fall of the strategic port of Al-Faw²¹. This series of provocations to the Iraqi regime resulted in its invasion of Kuwait on 2 August 1990.

The madness of the Iraqi dictator cost the Iraqis, instead of paying back the \$37 billion to compensate Kuwait for their invasion, it cost \$52.4 billion, of which Iraq made the last payment in February 2022²². In addition, the US air raids during Operation Desert Storm, as Saleh states "*...which took place over forty-three days, caused an estimated \$232 billion in damage*"²³.

¹⁷ *ibid*

¹⁸ *ibid*

¹⁹ Organization of the Petroleum Exporting Countries. "OPEC : Member Countries", *Opec.org* <https://www.opec.org/opec_web/en/about_us/25.htm> [accessed 23 August 2022]

²⁰ Association for Diplomatic Studies and Training. 2016. "Igniting Iraq's Invasion of Kuwait – Loans, Land, Oil and Access – Association for Diplomatic Studies & Training", *Adst.org* <<https://adst.org/2016/09/sparking-iraqs-invasion-kuwait-loans-land-oil-access/>> [accessed 23 August 2022]

²¹ Hussain, Saddam. "Saddam Hussain Talks About Lowering the Oil Price", *Youtube.com* <<https://www.youtube.com/shorts/q5AEzI9DJL4>> [accessed 23 August 2022]

²² United Nations. 2022. "Iraq makes final reparation payment to Kuwait for 1990 invasion", *UN News* <<https://news.un.org/en/story/2022/02/1111632>> [accessed 23 August 2022]

²³ Saleh, Zainad. 2022. "1 The Human Cost of U.S. Interventions in Iraq: A History From the 1960s Through the Post-9/11 Wars", *Watson.brown.edu*

This is apart from the burden and the cost of international sanctions that were imposed on Iraq as a result of the invasion. “Estimates of the total amount of oil revenue denied the Iraqi government range as high as \$250 billion²⁴” (George A. Lopez and David Cortright, 2004). As for the human cost, the sanctions resulted in the deaths of Iraq children, which alone, according to the Food and Agricultural Organization (FAO), were estimated to be “as many as 576,000”²⁵. Thus, Iraq, apart from most of its infrastructure being destroyed, has gone back to square one of its development strategies, in such a way that it cannot provide its own electricity. The total amount that was lost during the abovementioned conflagration is estimated to be more than \$571 billion.

The Middle East and Iraq

Iraq’s ventures not only cost the directly involved courtiers of Iraq, Iran, and Kuwait but also affected the whole of the Middle East. Apart from the Gulf Cooperation Council (GCC), which for much of the Iraq-Iran war supported Iraq, after the war another Middle Eastern Arab council came into existence in Baghdad on 16 February 1989, called Arab Cooperation Council (ACC), which comprised Iraq, Egypt, Jordan, and Yemen. The main objective of the ACC was to “be a more efficient forum for economic cooperation and integration among Arab countries; promote coordination and harmonization of major financial, customs and trade, industrial and agricultural economic policies among member states; form an Arab common market”²⁶. It was mainly Iraq funding and leading this forum. However, with the Iraqi invasion of Kuwait, the members of ACC, with the exception Yemen, turned against Iraq.



Fanack²⁷

<https://watson.brown.edu/costsofwar/files/cow/imce/papers/2020/History%20of%20U.S.%20Interventions%20in%20Iraq_Saleh_Costs%20of%20War_Oct%2013%202020.pdf> [accessed 23 August 2022]

²⁴ Lopez, George A., and David Cortright. 2004. "Containing Iraq: Sanctions Worked", *Foreign Affairs*, 83: 90-103 <<http://dx.doi.org/10.2307/20034049>>

²⁵ Hayes, Christopher. 2022. "Chris Hayes on the Cost of Sanctions on Iraq", *In These Times* <<https://inthesetimes.com/article/the-potential-devastating-blow-of-sanctions>> [accessed 23 August 2022]

²⁶ Global Civil Society Database, "Arab Cooperation Council", *Uia.Org* <<https://uia.org/s/or/en/1100024544>> [Accessed 25 August 2022]

²⁷ Fanack.com, "Role Of The GCC", *Fanack.Com*, 2014 <<https://fanack.com/kuwait/politics-of-kuwait/role-of-the-gcc/>> [Accessed 25 August 2022]

Furthermore, the Iraqi invasion opened a new chapter in the Middle East. Among the Arab states, it divided the countries into two camps. "Among those Arab states sympathetic to Iraq were Jordan, Yemen, Sudan, Tunisia, and Algeria as well as the Palestine Liberation Organization (PLO)"²⁸. On the opposing side those who supported Kuwait "apart from Saudi Arabia and the Arab Gulf states, were Egypt and Syria"²⁹. In addition, were the foreign troops deployed around the Middle East; mainly in the Arab Gulf states. Of course, without the pretext of the Iraqi invasion of Kuwait, there would have been no need for such foreign troops to be deployed. Many of those countries are still hosting US troops, such as Kuwait, Jordan, Saudi Arabia, Bahrain, Oman, United Arab Emirates, Qatar, and Turkey, in addition to troops involved in the invasion of Iraq and their existence in Syria³⁰. The cost of those troops also falls under the *raison d'être* of the aftermath of Iraq invading Kuwait in 1990.

Regime Change in Iraq

The regime changes in Iraq in 2003, orchestrated by the US, was not the end of the chain of catastrophes in the Middle East, yet it was an outcome of the previous incidents that started much earlier with the creation of Iraq by the British mandate, and concentrated by the 1975 treaty of Allegris. All other hot spots, starting from the eight-year Iraq-Iran war and the subsequent events, could have been avoided by simply navigating through a different channel. The Iraq-Iran war led to the strong armament of Iraq and its possession of Weapons of Mass Destruction (WMD). The war also burdened Iraq to an extent that it was unable to pay back its debts. Thus, the armament capability and pressure resulted in the kind of provocation that gave rise to the invasion of Kuwait, which brought about the ensuing economic sanctions, liberation of Kuwait, disarmament of the Iraqi WMD programme and the tensions that followed³¹.

All the above led to the invasion of Iraq by the US in 2003 and the regime change that, instead of ending the ongoing troubles, with hope for a new free, democratic Iraq, opened a new chapter with the worst problematic upheaval ever witnessed in the entire Middle East region. Among the pages of this new chapter, one can highlight the following major disastrous incidents: defragmentation of

²⁸ Britannica, "Persian Gulf War 1990-1991", *Encyclopedia Britannica*, 2022

<<https://www.britannica.com/event/Persian-Gulf-War>> [Accessed 25 August 2022]

²⁹ *ibid*

³⁰ Berger, Miriam, 2020, "Where U.S. Troops Are in The Middle East and Afghanistan, Visualized", *The Washington Post*, 2020 <https://www.washingtonpost.com/world/where-us-troops-are-in-the-middle-east-and-could-now-be-a-target-visualized/2020/01/04/1a6233ee-2f3c-11ea-9b60-817cc18cf173_story.html> [Accessed 7 September 2023].

³¹ Encyclopedia.com, "Iraq Disarmament Crisis (1991–2003)", *Encyclopedia.Com* <<https://www.encyclopedia.com/history/encyclopedias-almanacs-transcripts-and-maps/iraq-disarmament-crisis-1991-2003>> [Accessed 08 September 2023].

Iraqi society on the basis of a new classification of Shiites, Sunnis and Kurds; the growth of sectarianism; tribalism; nepotism; corruption and the growth of terrorism. Thus, as the result, Iraq became a living hell for millions of Iraqis. "According to the U.N., approximately 1.2 million [internally displaced person] IDPs are in the country, and nearly 4 million returnees are in dire need of rehabilitation measures in their home areas"³². And generally, "Iraq was ranked 123 in the 2019 Human Development Index with a score of 0.674"³³.

As for the wider Iraqi scene, currently none of the citizens are happy, or have peace of mind about their future in Iraq. Each of them has their own reasons for their apprehension. The President of the Kurdistan Region of Iraq once stated that "there is an Iraqi component [Shiites] who constantly worry about the past, there is an Iraqi component [Sunnis] who constantly worry about the future and there is an Iraqi component [Kurds] who constantly worry about the past, present and the future"³⁴. The problem for the Iraqis is that, instead of looking for the root cause of all their past problems, and trying to find a fundamental solution for it, which is the Kurdish issue, they are still dealing with the same issue with the same kind of mentality, disregarding what has happened, or might happen and continue in the future. However, Iraq is not alone; the majority of the issues of the Middle East are due to not solving the Kurdish issue in Iraq by integrating the Kurds into the state. With the same kind of political approach, the situation will remain, but also might get worse. As (Leonard, 2012) remarked "There will not be peace in the Middle East till there is Kurdistan"³⁵.

The Path to the Arab Spring

Up until the invasion of Kuwait, the Arab states were closed with no non-state media or satellite TV. The local government-controlled television channels were "mostly localized to their country of origin, and covering official inaugurations, ceremonial events and reporting on the whereabouts of heads of states"³⁶. This was the case with all Arab state media. Accordingly, citizens were firstly not aware of what was going on around them and worldwide, and secondly accepted what they were told by the state media. As a consequence, the people, by and large, remained fettered with no

³² BTI Transformation Index, "Iraq Country Report 2022", BTI, 2022 <<https://bti-project.org/en/reports/country-report/IRQ>> [Accessed 08 September 2023].

³³ ibid

³⁴ Barzani, Nechirvan, "Bilthalatha: Nechirvan Barzani", *Youtube.Com*, 2021 <<https://www.youtube.com/watch?v=N-oETR7ITvM&t=2118s>> [Accessed 08 September 2023].

³⁵ Leonard, Graham, "Middle East Problems - Origins Part 4 Of 5", *Youtube.Com*, 2012 <<https://www.youtube.com/watch?v=WCL0qTCYIW0&list=PLC7740161CBF67841&index=5>> [Accessed 08 September 2023].

³⁶ PBS, "Dishing Democracy ~ Handbook: Satellite Television In The Arab World | Wide Angle | PBS", *Wide Angle*, 2007 <<https://www.pbs.org/wnet/wideangle/uncategorized/dishing-democracy-handbook-satellite-television-in-the-arab-world/1843/>> [Accessed 25 August 2022]

progress in terms of their political, economic and social ambitions. However, with the liberation of Kuwait from the Iraqi troops in 1991, as stated below:

“the strongest catalyst for radical change in the Arab media landscape was CNN’s live coverage of the Gulf War in 1991. Until then, Arab audiences had virtually no access to international news coverage. Watching live reports from the fields, often broadcast in real time, jolted the viewers across the Middle East, exposing them to the modern face of TV journalism and leaving them longing for more. Regional states, as well as private entrepreneurs, quickly recognized the strategic power of shaping public opinion through images. The Arab satellite media revolution was on the verge of re-shaping the Arab TV forever”³⁷.

The possibility of transforming the Arab landscape, by opening up the public sphere through receiving live satellite channels and keeping up with what was going on elsewhere, was not something the Arab regimes and their intelligence apparatus would tolerate. To those regimes, this would eventually lead to what they would refer to as the joke of democracy. *“In a region characterized by repressive, authoritarian regimes, satellite television’s ability to transcend national borders and government control makes it an important catalyst for democracy”*³⁸. Though the states were trying to keep the status quo, some satellite channels started broadcasting. Aljazeera, especially its live political debates and harsh criticism of Arab regimes from late 1996 onwards, pushed many of the Arab states to launch their own satellite TV stations. The purpose of this was mainly to defend themselves and show a better image. Nonetheless, that led to the public sphere of the Arab World opening up.

Another factor that boosted the situation came after the terrorist attacks of September 11, when the Americans concluded that one of the reasons that led to growth of terrorism mentality was the dictatorship of the Arab states. *“The victim role as well as longstanding historical injustices and grievances may be constructed to serve as justifications for terrorism”* (Borum). In that regard, the American government post-September 11, was assessing the Arab World, and the necessity of free media in the following manner:

“The power and popularity of Arab satellite television programming has not gone unnoticed by the U.S. government. After 9/11, U.S. officials became more actively involved in the region’s growing satellite TV market, creating a station of its own, and producing

³⁷ ibid

³⁸ ibid

entertaining Arabic-language programming for licensing to satellite and cable television networks throughout the Middle East”³⁹.

Not only this, but also the United States started to have a direct influence on the Arab World after the invasion of Iraq in 2003. PBS highlighted that:

“The United States has also taken steps to ensure its message reaches the Arab world. In May 2007, the National Security Archive released a report obtained through the Freedom of Information Act that uncovered the Defense Department’s recommendation to create a Rapid Reaction Media Team in Iraq in 2003. This team was intended to help a liberated Iraqi media transition from state-controlled media outlets to a free press. The RRMT vision included a cadre of U.S.-trained Iraqi journalists who would broadcast programming based on “U.S. government policy guidance and oversight”⁴⁰.

This step came after the Americans launched Al-Hurra Satellite TV, which was an attempt to improve their image in the eyes of Arabs, especially in defence of what Aljazeera was saying about their invasion in Iraq. Directly after the invasion, as PBS recalls:

“In 2004, the U.S. government created its own Arab television station, Al Hurra, or The Free One, as part of the Bush administration strategy of promoting freedom in the Middle East. The station aims to portray a positive image of America in the region, countering what conservatives deem a negative portrayal of America by Arab broadcasters. With an annual budget of more than 70 million dollars, the station reports on regional and international events to 22 countries in the Arab region”⁴¹.

Hence, regional enterprises, states such as Qatar and its Aljazeera channel, and the Americans pushed hard towards opening the closed media sphere of the Arab World. As a result, the rest of the Arab states had to follow suit, first to defend themselves, then to try to improve their image, and to show that they are no longer dictatorships as they were allowing free media. In this context, the revolution of social media, mainly Facebook, spread across the Arab World. All this triggered political resentment that had fermented for decades, and resulted in sparking the Arab spring in Tunisia, in weeks reaching Egypt, Libya, Syria, Yemen and Bahrain. Later on, the spring stretched to Sudan too, and partially to Lebanon and Iraq.

³⁹ *ibid*

⁴⁰ *ibid*

⁴¹ *ibid*

The aftermath of the Arab spring was too costly for the regimes in the abovementioned Arab states, the people, and other regional and international states. The series of the events were linked together as a chain that started with the Kurdish issue mainly in Iraq, that had not been satisfied, then all the events followed one after another until they ended with the Arab spring.

Conclusion

This research has studied the Middle East's predominant issue, carefully going through the root causes of all the major turning points over a century, from the creation of Iraq under the British mandate until the time of writing. Recalling all the events demonstrates that depriving the Kurds of the equal rights enjoyed by other nations of the Middle East after the collapse of the Ottoman empire and the founding of nation states, became a recipe for disaster. Looking solely at the Kurdish issue in Iraq well elaborates the argument of this study. Document analysis was utilized for this qualitative research.

This project notes that the resentment of the Kurds, right from the outset of the creation of Iraq by the British mandate in a way that disregarded their ambitions, led to all the subsequent events that transpired. Also, it highlighted that the events that happened throughout the twentieth century between the Kurds and the Iraqi regimes were not as disastrous as the 1975 treaty of Algeiras, when Iraq gave away its long-disputed territories and waterways to Iran. The cost of the treaty to Iraq, with the collaboration of Iran, saw an absolute end to the Kurdish liberation movement. However, after the regime change in Iran in 1979, Iraq unilaterally withdrew from the treaty, because the Kurdish revolution was not obliterated, as Iraq had expected. Despite other emerging differences between Iraq and Iran, the Iraqi withdrawal from the treaty became the straw that broke the camel's back. Thus, many dramatic events followed. The Iraqi regime could have avoided all subsequent conflicts by simply agreeing with the Kurds and trying credibly to integrate them into Iraq.

The study then turned to the eight-year war between Iraq and Iran that broke out after the Iraqi withdrawal from the 1975 treaty. The aftermath of the war produced another series of disasters, this time not only for Iraq alone, but also the entire Middle East region, in particular to the Arab Gulf states. Simply by reversing the chain of events, we can envisage a totally different current and future image of Iraq and the Middle East. If the Kurds had been embraced by the Iraqi regimes, and willingly and convincingly integrated into Iraq, the Iraqi regime would not have needed to sign the 1975 treaty with Iran in that fashion. Then, after the 1979 revolution in Iran, there would have been no need for Iraq to renege on the treaty, thereby precluding the 1980-1988 war between the two countries. Avoiding the conflict would have prevented the attrition suffered by both countries which led to millions of casualties and the diminution of their economic power.

Not least, Iraq would not have been burdened with the heavy debts that led to the regime's reaction and provocation towards Kuwait, which resulted in the invasion of 1990. There would then have been no necessity for the presence of foreign troops in the Arab Gulf states to protect them from the Iraqi regime and to liberate Kuwait. Within this context, and just a few days' later, economic sanctions would not be imposed on Iraq. Also, the inspection of Iraqi military arms and subsequent disarmament would have been avoided that resulted in the invasion of Iraq. Without the invasion, the resulting chaos would have been averted, such as the fragmentation of Iraqi society and the growth of sectarianism, tribalism, nepotism, corruption, and terrorism. Without, the action taken by Iraq and the knock-on effects experienced by the entire Middle East, all subsequent events would not have happened, the consequences of which resulted in bloody civil wars during and after the Arab spring. The upshot is that the Middle East will not witness stability until its overarching problem, which is the issue of the Kurds, is solved peacefully and convincingly with the Kurds.

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Sustainable Accounting: A Conceptual Analysis and Its Relevance

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Abstract:

The protection of the environment has always been a major concern. Environment destruction is still a result of human activity. Observing how the environment is being destroyed, especially as a result of several types of pollution, such as water, air, soil erosion, and deforestation, etc. Developing industries for economic growth would be another factor in these forms of degradation. The requirement for economic development and human health quality is equally crucial, and environmental degradation not only reduces economic production but also disrupts the environment. In order to achieve a balance between economic production and environmental conservation, environmental accounting is therefore crucial. A new accounting method known as "sustainable accounting" tracks costs and is provided to business concerns by the environment. Accounting for the environment is another name for sustainable or green accounting. A tool for expressing the harm caused by commercial activity and the advantage of the natural environment is green accounting. In light of this, the present research would like to discuss the idea of sustainable accounting and its significance in the current environment. Additionally, in order to raise awareness of sustainable accounting and environmental accounting and to place more focus on environmental conservation and protection, the study will also attempt to examine ever-more-unknown aspects of these topics. Several publications on the sustainable accounting system were evaluated in the current. The study also tries to demonstrate the value of financial accounting, corporate social responsibility, and green accounting in achieving the twin goals of environmental protection and economic growth.

Keywords: Sustainability accounting, Green Accounting, reporting, sustainable development; society; environment

Introduction

A style of accounting known as "sustainable accounting" or "environment accounting" aims to include environmental costs and benefits into traditional accounting for better financial reporting and the welfare of the society. The term "sustainable or green accounting," also referred to as "environmental accounting," describes the disclosure of environmental-related issues in a company's

financial accounts. It informs stakeholders, such as the government, banks, and financial statements, of any actions done by the company for environmental protection.

The term "sustainable accounting" refers to a developing area of accounting that deals with the collection, classification, measurement, computation, estimation, recording, and subsequent disclosure of environmental data within the framework of accounting. For the purpose of assisting in the making of economic decisions, environmental accounting identifies, quantifies, and conveys environmental-related information. In a nutshell, it quantifies and documents the monetary worth of environmental products and services.

Objectives

1. To comprehend the Sustainable Accounting concept
2. To investigate the origins and advancement of Sustainable accounting
3. To examine the significance of the Sustainable Accounting System
4. To analyze the Sustainable Accounting system's shortcomings

Need and Scope of the Study

For the sake of preserving and advancing the environment, sustainable accounting is essential. The purpose of the current study is to familiarize people with the idea of sustainable accounting and raise awareness of it. Reviewing its development, history, and significance requires the current study as well. The study will be beneficial to both the researchers who are working on it and aspiring sustainable accountants.

The notion of sustainable accounting and its significance are the main topics of the current study and the legislative foundation for Indian corporate sector's use of sustainable accounting.

Historical Background of Sustainability Accounting

The history of sustainability Accounting and reporting dates back to the 1960s and 1970s in Europe and a little later in the United States, when businesses began to understand that social responsibility went beyond profit maximization. Norway was the first country to use green accounting. It was produced accounts for accounting natural resources in accordance with one of the peer members of the nation. However, the Netherlands also led the way in the creation and acceptance of environmental accounting. In the 1980s, France was the third early user of green accounting. In the late 1980s; a different early accounting effort adopted a totally different methodology.

Literature Review

The challenges of conceptualizing sustainability accounting have been addressed by a large number of researchers, including: Adams et al., 2019 Dumay et al., 2019 Gray et al., 2010 Gulluscio, 2020 Hörischa, 2020 Hyk, 2021 Kaur et al., 2018 Lambertson, 2005 Larrinaga, Gonzalez et al., 2008 Lodhia, 2019 Passetti, 2014 Schaltegger, 2010 Siryk, 2021 Vysochan, 2022 Young, 2011 Zyznarska, Dworzak, 2020 and many more.

As **Schaltegger et al.** (2010) correctly observe, the use of 'Sustainability accounting' and related terms in academia and in corporate practice raises questions regarding the relationship and function of accounting in the management of enterprise sustainability.

According to **Learn N.D** Sustainability is split into three dimensions, Environmental aspects related to renewable resources, such as air, energy, and greenhouse emissions. Social considerations, such as social safety, public policies, and anti-corruption, Economic variables that emphasize accounting for stakeholders' value, as well as economic and financial sustainability has become a more crucial factor for the firm in recent years, according to **Gulluscio et al.** (2020). The adoption of reporting and sustainability practices is something that many stakeholders expect from businesses. So, in addition to focusing on financial, social, and environmental performance, corporate responsibility, corporate accounting, and reporting should also pay attention to sustainability issues.

Many different accounting and reporting solutions are referred to as having "sustainability accounting" in their names. The usage of eight strategies for accounting for sustainability in management decisions was examined by **Passetti et al.** (2014) in their research. The findings of surveys and interviews suggest that while some businesses are more conservative, only a small percentage of them employ the tools.

Zyznarska-Dworczak (2020) introduced sustainability accounting in her article in the context of the positive and normative theory of accounting and suggested its conceptual foundation as a normative solution.

Aggrawal P (2013) put a number of theories establishing the relationship between corporate sustainability and financial performance. The three main ideas are Legitimacy Theory, Stakeholder Theory, and Agency Theory, and they all contend that businesses should include sustainability in their primary strategic objectives and report on their sustainability performance in an appropriate sustainability report.

BhallaRajni (2014) analyzed that economic indicators are not exclusively expressed in monetary terms and have examined the economic side of sustainability reporting. The studies on economic

sustainability produced by a few Indian businesses, including Reliance Industries, TCS, Wipro, etc. Additionally, it shows how firms use their financial resources to accomplish their social commitments and how doing so benefits both the organization and society at large.

Godha A. and Jain P. (2015) looked at the evolution of the Indian regulatory environment for sustainability reporting and the state of Indian enterprises' practices for sustainability reporting according to the GRI reporting framework. According to a claim, compared to small and medium-sized businesses and Indian multinational corporations, a greater number of large scale companies have submitted GRI reports over time.

The purpose of this paper is to explore the state of sustainability accounting science, define critical and management paradigms, and evaluate the future of sustainable accounting and reporting. The researcher is also exploring the concept of sustainable accounting and the meaning behind it.

Research Methodology

This study is based on secondary data that was gathered from publications and websites that are linked to the issue under study.

Conceptual Framework of Sustainable Accounting

The economic, financial, and environmental accounting methods are all integrated in sustainable accounting. It aids organizations in determining how natural resources are used and the associated costs. Its introduction in developing nations like India helps the economy more because it raises awareness about environmental pollution, its protection, and the development of the environment for a sustainable future. Sustainable accounting takes into account and records the cost and benefit of the ecosystem for a company that arises through environmental protection. Its objective is to increase public and corporate knowledge of the value of the environment in the growth of the economy.

Every individual is now held accountable for their actions, and businesses are now required to spend money on the use of resources and products that may or may not have an adverse impact on the environment. As part of their CSR, they should budget money to prevent environmental contamination and maintain the health of the ecosystem. Thus, after adopting sustainable accounting practices, business entities must create separate environmental policies, take the required precautions to reduce pollution, abide by all applicable laws, and finally include environmental analysis in yearly statements and reports. The ultimate result of sustainable accounting is an increase in productivity, decreased production waste, an increase in technological advancements, the creation of programmes to reduce pollution, and the design of environmentally friendly products. There is

little doubt that the adoption of green accounting as a commonly accepted accounting standard promotes sustainable economic growth for future generations.

Benefits of Sustainable Accounting

The following is a list of the advantages of sustainable accounting:

- Sustainable accounting makes it possible to determine whether or not a company organization has been fulfilling its environmental responsibilities.
- Enhancing brand loyalty and company reputation. It aids in the company's upkeep of its existing reputation. Additionally, it aids a business in overcoming any unfavorable press that may have been received.
- The management's preventative actions made to lower environmental expenses are disclosed to investors and other stakeholders.
- Increasing awareness of risks and possibilities, enabling the organization to take advantage of chances to enhance operations and reduce risks they have discovered in regard to sustainability.
- It assists in maintaining an organized record of environmental data.
- Sustainable accounting facilitates obtaining environmental licenses from regulatory bodies.
- It can make sure the organization is operating in a way that prevents environmental damage.
- A company's public reputation increases if it uses sustainable accounting techniques or performs better environmentally.
- Operational and material efficiency improvements are under the company's control.
- Sustainable accounting and reporting result in sustainable GDP growth from a macro perspective.
- If sustainable accounting is adopted, the nation and businesses will invest more in environmentally friendly procedures and technologies.
- The collection of waste and the reduction of pollution may result in financial benefits for commercial entities.
- Assisting a business to align its sustainability vision and plan with its overarching objectives and guaranteeing their observance.
- Giving it the ability to boost efficiency, cut expenses, and streamlines its operations.

Challenges Faced by Sustainable Accounting in India

There are several obstacles to accounting on sustainability in India, including:

- The absence of appropriate accounting standards and a framework.

- The small businesses find it challenging to afford the amount of money, effort, and experience required.
- Lack of understanding among corporate organizations of its importance and benefits. Fear of losing reputation and credibility. Fear of being misunderstood.
- The management and staff members in charge of creating the report were not properly trained or educated.
- It's challenging to obtain trustworthy and accurate statistics.
- Investors and stakeholders are believed to not read sustainability reports.
- The Institute of Chartered Accountants of India (ICAI) has not established any accounting standards for the environmental accounting and reporting processes.
- If the accounting systems used by the two firms are different, it is impossible to compare them.
- It might be challenging to accurately distinguish between company expenses and environmental expenses.
- Social values for environmental products and services are erratic and subject to rapid change.
- It primarily considers the company's internal costs while ignoring the social costs to society.
- It is unable to operate on its own. It needs to be connected with financial accounting, but that is difficult.

Regulatory Framework for Sustainability Accounting

Currently, India does not have any laws requiring sustainability reporting. However, provisions have been added to numerous laws that make it mandatory for business organizations to report on environmental issues stated therein.

According to Section 217 of the Companies Act of 1956, the Board of Directors Report must include information on energy conservation.

The Institute of Chartered Accountants of India (ICAI) has established the ICAI- Accounting Research Foundation (ICAI-ARF), which has taken on a specific initiative to recommend an appropriate framework for sustainability reporting for Indian companies. Companies are required to report on their social, environmental, and economic efforts. For the purpose of standardizing the disclosures linked to sustainability reporting, a committee is being constituted. For Indian businesses wanting to list abroad, sustainability reporting is now required.

In addition, numerous requirements of The Environment (Protection) Act of 1986 and The Factories Act of 1948 have either made it necessary or desirable to provide reports about the protection of the environment, the labor force, employee safety, etc. In order for corporate organizations to create sustainable value-creating activities, a number of voluntary standards have been developed. Other laws related to sustainable accounting are:

- Water (Prevention and Control of Pollution) Act for Environmental Protection, 1974
- In 1981, the Air (Prevention and Control Pollution) Act was passed.
- Environmental Protection Act of 1986
- Act of 1980 Concerning Forest Conservation
- The 1986 Hazardous Waste (Management and Handling) Rules.

Conclusion

India is currently at a very early stage in terms of sustainability reporting. Except for a small number of large, high-performing corporations, many organizations are still not efficiently utilizing the Global Reporting Initiatives (GRI) framework. A big problem is also the data's accuracy and dependability. Indian businesses should embrace GRI-based practices to compete on a global scale. In conclusion, I would like to say that India is still not at a promising stage of development in terms of sustainable accounting. In the same way that the Companies Act 2013 requires the Indian government to make corporate social responsibility mandatory, a similarly strict legislative framework should be implemented to make the adoption of sustainable accounting mandatory under specific scenarios. The corporate sector may take environmental protection and conservation more seriously as a result of this. They should also run some programs to inform the business community about sustainable accounting and how it is used in organizations. To monitor and investigate regularly regarding green accounting and its use in commercial organizations, a special audit committee should be established.

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Modeling and Analysis of Daily Temperature using Logistic Regression and Markov Chain

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Abstract:

Weather and climate have a great influence on all aspects of life; any changes in weather and climate pose a challenge to all sectors, especially in the field of future planning. Temperature is considered the most important climatic element that has a direct or indirect effect on other climatic elements. The goal of the study is to control the effect of yesterday's daily temperature (x_1) and the day before it (x_2) on the current daily temperature (Y: current value equal to y_i and the yesterday value y_{i-1} = and the day before = y_{i-2})

Using a hybrid Markov-Logistic regression. The data on daily temperature were collected from the https://mesonet.agron.iastate.edu/request/daily.phtml?network=iq_asos# Network for about 4 years and 3 months on the daily temperature of Sulaymaniyah Governorate during the period January 2019 to March 2023. The first outcome illustrates that the daily temperature has a Markov chain with second order, and the logistic regression also expresses that a nice and sunny daily temperature followed by a nice and sunny daily temperature and a high daily temperature followed by a high daily temperature are more likely for the temperature of Sulaymaniyah. The second result shows that the model might achieve sufficient accuracy for many applications of temperature data reasonably, and the last result shows that yesterday's daily temperature and one day before yesterday's daily temperature have an impact on the daily temperature.

Keywords: Logistic regression, Markov chain, transition probability matrix, Maximum likelihood estimation (MLE), temperatures

1 Methodology

1-1 Introduction

The technical linear statistical methods widely used as part of this learning process [2]. Linear regression and many other models are special cases of generalized linear models [5]. In general, regression is an analysis that is regarded as the study of a single variable, known as the response variable, defined by one or more variables, known as the explanatory's variables. The regression analysis used to find the mathematical model. [2] There are many situations and conditions in the world,

such as education, social science, and others, where the response variable is dichotomous (binary) rather than continuous that can expand the linear regression to include explanatory variables that are binary or have more than two levels, but when the dependent variable is binary, the interpretation of the linear regression equation will not be direct, which means that when using a linear regression model, the output is uncorrected. [7]

1-2 Objective of this study

The study's objective is to use a hybrid Markov-Logistic regression to investigate the impact of the daily temperatures from yesterday and the day before on the current daily temperature.

1- 3 Definition of Logistic Regression (LR)

Logistic regression is a regression model where the response variable (DV) is binary; whenever the response variable is categorical, we apply logistic regression with respect to linear regression.

Using various types of data, LR may be used to categorize the observations, and it can also easily identify the best variables to apply for classification. The logistic function is displayed in the figure below[10]:

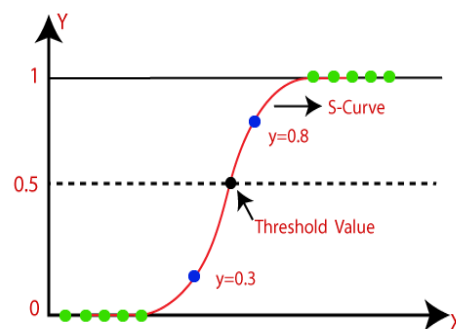


Fig (1): Represent the logistic function.

The sigmoid function used to chart the forecast values to probabilities, any real value into another value within a range of zero and one. The value of the LR must be between zero and one. The S-curve is called the sigmoid function. We use the concept of the threshold value, which defines the probability of either zero or one. Such values above the threshold value close to be one, and values below the threshold value close to be zero.[9]

1-4 The Model

The *logit model* is often used for classification and forecast. Logistic regression estimates the probability of an event occurring. Since the result is a probability, the response variable is bounded between 0 and 1. In LR, a logit transformation is applied to the odds. This is also generally known as the log odds, or the normal logarithm of odds, and this logistic function is represented by the following formulas: [2],[5]

$$\text{logit}(P_i) = \frac{1}{(1 + \text{Exp}(-P_i))} \quad (1)$$

logit(pi) is the response variable and x is the explanatory variable

$$\ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \beta_1 X_1 + \dots + \beta_k X_k \quad (2)$$

1-5 Characteristics of the logistic regression

The properties of the logistic regression equation include [7], [9]

- The response variable is distributed as a Bernoulli distribution
- y_i have different variances: $\text{Var}(y_i) = P_i(1 - P_i)$, $i = 1, 2, 3, \dots$
- Each group $X_{i1}, X_{i2}, X_{i3}, \dots, X_{ik}$ has its own set of explanatory values.
- The coefficient of determination (R^2) in logistic regression is not calculated as it is in linear regression. Instead, a harmony is used to assess the model's fitness.
- Estimation/prediction is based on 'maximum likelihood method.

Also, odds are a way to express the probability that something happens compared to the probability of something else happening, and it is often expressed as a ratio between two numbers. The mathematical formula for the odds gives greater opportunity for a better understanding of the relationship between odds and probability. The description of odds (O_i) is a proportion between the likelihood of an event happening (P_i) and the probability of the event not happening ($1 - P_i$),

$$\text{OddsRatio}(O_i) = \frac{P_i}{1-P_i} \quad 0 \leq P_i \leq 1 \quad (3)$$

Note that, the odds, which has the symbol O_i , may solve the problem of the upper limits of the probability P_i so that the odds take any value from $(0 \rightarrow \infty)$, so the transformation odds have contributed to solving half the problem that is the upper limit of probability. The need for a transformation odds value, is to solve the minimum boundary of the allowable values for the odds.[9]

The general formula of the logistic regression model is:

$$\ln \text{odds} = \alpha + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_k X_{ik} + \varepsilon_i$$

The relationship between the logit (log odds) and explanatory variables is a linear relationship.

$$\log \text{odds} = \text{logit}(P_i) = \beta_0 + \sum_{i=1}^j \beta_i X_i \quad (4)$$

1-6 The Likelihood Ratio Test, χ^2 :

To fit a model, we compare the deviance with just the intercept (-2LLR: Likelihood of reduced model) to the deviance when the new predictor has been added (-2LLF: Likelihood of full model).

The difference between these two deviation values is called chi squared for goodness of fit.

H_0 : The simpler model, 1 parameter vs H_1 : The more general model, 2 parameters

$$\chi^2 = -2 \ln \left(\frac{LLR}{LLF} \right) = -2(LLR - 2LLF) \quad (5)$$

One can look up the significance of this test in a chi-square table using D.F. equal to the number of predictors added to the model.[2],[7],[9]

1-7 Stochastic Processes (SP)

SP is an indexed collection of arbitrary variables defined on a state space, $\{X(t); t \in T\}$, where T is some index set.[4],[3]

1-8 Markov Chains (M.C.) Model

A Markov chain is a discrete time and confidence net with stochastic variables in a sequence, each variable in the chain only having a direct relationship to the current value and not to any previous values. Markov chains are used to depict values in sequences, such the states of a dynamic system. A "stage" is used to describe each position in the sequence.[3],[4]



Fig (2): A confidence net using a Markov chain

Although the net has five stages, it need not conclude at stage 4; it can continue on indefinitely. The freedom premise is communicated by the belief net. :[6]

$$P(S_{t+1} = s_{t+1} | S_t = s_t) = P(S_{t+1} = s_{t+1} | S_0 = s_0, \dots, S_t = s_t) \quad (6)$$

Which is called a Markov property. The Markov property can be seen as "the future state dependent on the current state, not on the past state".

If all of the variables have the same domain and the transition probabilities are the same at each step, the Markov chain is stationary, i.e.,

$$P(S_{t+1} = s_{t+1} | S_t = s_t) = P(S_1 = s_1 | S_0 = s_0) \quad \text{for all } t \geq 0 \quad (7)$$

A transition probability matrix (T.P.M.) is defined as

$$P = [p_{ij}] = \begin{bmatrix} p_{00} & p_{01} & p_{02} & \dots \\ p_{10} & p_{11} & p_{12} & \dots \\ p_{20} & p_{21} & p_{22} & \dots \\ \vdots & \vdots & \vdots & \ddots \end{bmatrix}$$

Where the elements satisfy

$$P_{ij} \geq 0 (\text{positive number}), \quad 0 \leq P_{ij} \leq 1 \quad \forall i, j \in S \quad \text{and} \quad \sum_{j=0}^{\infty} P_{ij} = 1, i = 0, 1, 2, \dots \quad (8)$$

1-9 The Probability Distribution of $\{S_t, t \geq 0\}$:

Let

$$P_i^n = P[S_t = i] = [P_0^n \quad P_1^n \quad P_2^n \quad \dots]$$

Where

$$\sum_{i=1}^{\infty} P_i^n = 1$$

P_i^n is called the state probability vector after n transitions.

$P_i^0 = P(X_0 = i)$ are the initial-state probabilities,

$$\text{initial - state probability vector} = P_i^{(0)} = [P_0^{(0)} \quad P_1^{(0)} \quad P_2^{(0)} \quad \dots] \quad , \quad i = 0,1,2, \dots$$

$$P_i^n = P^0 \times P^n \quad (9)$$

Which indicates that the probability distribution of a homogeneous Markov chain is completely determined by the 1-step transition probability matrix P and the initial-state probability vector $p(0)$. [1],[10]

1-10 Maximum Likelihood (ML) for Parameters Estimation

Let $P_{j \rightarrow k}(t)$, ($j = 1, 2, 3$ and $t = 1, 2, 3 \dots T$, $k = 1, 2, 3$) be the probability of state k at time t , given that the state j at time $(t - 1)$. If $P_{j \rightarrow k}(t)$ is stationary then $P_{j \rightarrow k}(t) = P_{j \rightarrow k}$, for all t .

Let a Markov chain with stationary transition probabilities $P_{j \rightarrow k}$ and finite number of states 1, 2, 3. Let $f_{j \rightarrow k}$ be the no. of observations in transition from state j to the state k . The overall number of observations is [1],[6]

$$\sum_{j=1}^2 \sum_{k=1}^2 f_{j \rightarrow k} \quad (10)$$

$$\sum_{k=1}^2 f_{j \rightarrow k} = f_j \quad \text{and} \quad \sum_{k=1}^2 f_{j \rightarrow k} = f_k$$

The Markov chain model is based on a set of explanatory trails. It reached the exact probability density of the observed $f_{j \rightarrow k}$

$$g(f_{i \rightarrow j}) = T(f_{i \rightarrow j}) \frac{\prod_{j=1}^2 (f_j)!}{\prod_{j=1}^2 \prod_{k=1}^2 (f_{i \rightarrow j})!} \prod_{j=1}^2 \prod_{k=1}^2 P_{j \rightarrow k}^{f_{j \rightarrow k}} \quad (11)$$

The factor $T(f_{j \rightarrow k})$ is the joint probability density of f_j 's and is independent of $P_{j \rightarrow k}$'s. If we consider a Markov chain model with non-stationary transition probabilities $P_{j \rightarrow k}(t)$ then the probability density of $f_j(t)$ is given by

$$g\{f_{j \rightarrow k}(t)\} = T\{f_{j \rightarrow k}(t)\} \frac{\prod_{j=1}^2 \{f_j(t)\}!}{\prod_{j=1}^2 \prod_{k=1}^2 \{f_{j \rightarrow k}(t)\}!} \prod_{j=1}^2 \prod_{k=1}^2 P_{j \rightarrow k}^{f_{j \rightarrow k}}(t) \quad (12)$$

In the case of non-stationary transition probabilities, the set $\sum_{t=1}^T f_{j \rightarrow k} = f_{j \rightarrow k}(t)$

$P_{i \rightarrow j \rightarrow k}(t)$. The set $f_{i \rightarrow j \rightarrow k}(t)$ is a multinomial set of sufficient statistics. The logarithm of the likelihood function for stationary transition probabilities $P_{i \rightarrow j \rightarrow k}$ as,

$$LP_{j \rightarrow k}(t) = C + \sum_{j=1}^2 \sum_{k=1}^2 f_{j \rightarrow k} \log P_{j \rightarrow k}$$

C : is the one that contains all terms that are independent of $P_{i \rightarrow j \rightarrow k}$. The MLE of $P_{i \rightarrow j \rightarrow k}$ are found to be

$$\hat{P}_{j \rightarrow k} = \frac{f_{j \rightarrow k}}{f_j} \quad (13)$$

For non-stationary transition probabilities, the MLE are

$$\hat{P}_{j \rightarrow k}(t') = \frac{f_{j \rightarrow k}(t)}{f_j(t)} = \frac{f_{j \rightarrow k}(t)}{f_j(t-1)} \quad (14)$$

Thus, we may estimate the T.P.M. of the Markov chain model. [4][8][10]

2 Analysis and Discussion

Analysis of the daily temperatures and their dependence by M.C. the explanatory variables are measured on various types of scales, but they are categorized in dichotomous form considering the extended past behavior of these meteorological factors in Sulaimaniyah. Notational, all response and explanatory variables are as follows: The response variable daily temperature (Y_i) is categorized: if the daily temperature is nice and sunny ($< 30^\circ\text{C}$) it takes on the value 0, but if the daily temperature is high ($\geq 30^\circ\text{C}$) it takes on the value 1. The data on daily temperatures was obtained from this site.

https://mesonet.agron.iastate.edu/request/daily.phtml?network=IQ_ASOS# during from (1/1/2019) to (31/3/2023)

x_1 = Yesterday's daily temperature

$$x_1 = \begin{cases} 0 & x_1 < 30 \\ 1 & x_1 \geq 30 \end{cases}$$

x_2 =Day before yesterday's daily temperatures is

$$x_2 = \begin{cases} 0 & x_2 < 30 \\ 1 & x_2 \geq 30 \end{cases}$$

2-11 First order of the transition probability matrix

Table 1, show the (\uparrow %0.973) goes to transition nice and sunny day to nice and sunny day and the (\downarrow %0.027) goes to transition nice and sunny day to the high. It is to be noted that transition to the nice and sunny day is higher than the percentage of transition to the high.

Table (1): First order of transition frequency distribution of daily temperature

Yesterday's state of daily temperature	Today's state of daily temperature		Sum
	Nice and Sunny (0)	High (1)	
Nice and Sunny (0)	1249	34	1283
High (1)	35	229	264
Sum	1284	263	1547

The table gives the MLE of T.P.M. for a 1st-order Markov chain found by using the formulation:

$$P_{i \rightarrow j} = P[X_n = j | X_{n-1} = i] = \frac{f_{i \rightarrow j}}{\sum_j f_{i \rightarrow j}}$$

Table (2): Maximum Likelihood Estimation (MLE) of T.P.M. of the 1st. order model

T.P.M.	P_{00}	P_{01}	P_{10}	P_{11}
M.L.E	0.973	0.027	0.133	0.867

2-12 Goodness-Of-Fit

A Chi-Square test has been used to test the T.P.M. In this study, we obtained the following expected and observed frequencies from the data:

H_0 : The order of the Markov chain is zero. vs. H_1 : The order of the Markov chain Model is one.

Table (3): Expected Frequency

	1	2
1	(1064.9)	(218.1)
2	(219.1)	(44.9)

From the chi-square analysis, we have

Table (4): Goodness of fit of first order of daily temperature.

	Test value	D.F.	P-value
Chi-Square Test	1097.270	1	0.000

From the table, we note that the P-value of the chi-square test (0.000) compares the value with the ($\alpha=0.05$), we accept the alternative hypothesis H_1 , which means that the Markov chain is of the order one.

2-13 Second order of the transition probabilities matrix

In Table 6, we noted that among 1448 days, 0.8483 percent remained in the nice and sunny state for three consecutive days, whereas 7.67% (0.1517) of the days remained in the wet state. The rest of the states have changed the temperature status at least once in the 3-consecutive days. The (\uparrow % 0.9799) belongs to the transition type nice and sunny at all consecutive days, and the (\downarrow % 0.0200) is for the transition of the day before yesterday (nice and sunny) to yesterday (nice and sunny) to today (high). The MLE of the T.P.M. of a 2-order of the M.C. is found directly by using transition counts by the formula:

$$P_{i \rightarrow j \rightarrow k} = P[X_n = k | X_{n-1} = i, X_{n-2} = j] = \frac{f_{i \rightarrow j \rightarrow k}}{\sum_k f_{i \rightarrow j \rightarrow k}}$$

Table (5): Frequency distribution of the second order.

daily temperature states in the direct previous two days	daily temperature states in present day		Sum
	Zero	One	
Zero-Zero	1221	25	1246
Zero-One	12	23	35

One-Zero	25	8	33
One-One	23	111	134
Sum	1281	167	1448

Table (6): Maximum Likelihood Estimation (MLE) of T.P.M of the 2st. order model

T.P.M	M.L.E
P_{000}	0.9799
P_{001}	0.0200
P_{010}	0.3428
P_{011}	0.6571
P_{100}	0.7575
P_{101}	0.2424
P_{110}	0.1716
P_{111}	0.8283

2-14 Goodness-Of-Fit

A Chi-Square test has been used to test the T.P.M. In this study, we obtained the following expected and observed frequencies from the data:

Hypothesis Test:

H_0 : The order of the Markov chain is one. vs. H_1 : The order of the Markov chain is two.

Table (7): Expected Frequency

	1	2
1	(1102.3)	(143.7)
2	(31)	(4)
3	(29.2)	(3.8)
4	(118.5)	(15.5)

From the chi-square analysis, we have

Table (8): Goodness of fit of second order of daily temperature

	Test value	D.F.	P-value
Chi-Square Test	884.471	3	0.000

From the table, we note that the P-value of the chi-square test (0.000) compares the value with the ($\alpha=0.05$), we accept the alternative hypothesis H_1 , which means that the M.C. is of the order 2.

2-15 Logistic Regression Model:

The result of analysis is presented in the tables below. The overall number of cases is 1551. Observation 0 means that the Nice and Sunny ($<30^{\circ}\text{C}$) of daily temperature and observation 1 means the high ($\geq 30^{\circ}\text{C}$) of rainfall. Out of daily temperature cases, 12867(82.9%) cases are the nice and sunny of daily temperature and 265(17.1%) cases are high of daily temperature. The proportion of rainfall is 82.9%.

Table (9): Encoding of response variable

States	Coding value	Total Number of cases
Nice and Sunny	0	1551
High	1	

Table (10): Variables in the logistic Regression Model

Variables	β	S.E.	Wald	D.F.	Sig.
Yesterday's Daily Temperature	4.045	.313	167.277	1	.000

Day Before Yesterday's Daily Temperatures	2.004	.320	39.175	1	.000
Constant	-3.717	.178	435.083	1	.000

With the values of the test statistics (Wald) of 167.277 and 39.175 for yesterday and for the day before yesterday, with one degree of freedom, we get the significance level at ($0.000 < \alpha = 0.05$). Hence, we can say that both coefficients have a significant influence on the temperature. So now it can be interpreted that the probability that today is nice and sunny is approximately 57 times as likely as if yesterday was nice and sunny compared to that day.

The probability that today is nice and sunny is approximately 8 times as likely if the day before yesterday was nice and sunny compared to that day. Moreover, it is $7.69 = [57.115/7.418]$ times more likely that the probability of today being high depends 7.69 times more on yesterday's high daily temperature as compared to the day before yesterday's high daily temperature.

Table (11) Test coefficient using Omnibus Tests

	Chi-Square	D.f.	Sig.
Step	922.145	2	0.000
Block	922.145	2	0.000
Model	922.145	2	0.000

Hypothesis Test:

H_0 : The model is non-significance vs. H_1 : The model is significance.

The results show that the value of chi-square (922.145) at a degree of freedom 2 and a significant level. ($0.000 < \alpha = 0.05$), and this means that the statistical model that has been reconciled has a statistically significant, which indicates that the variables add in the model have an influence and a contribution to the classification.

Table (12): Hosmer and Lemeshaw test for quality of fit

Step	Chi-square	D.f.	Sig.	Step
1	2.351	1	0.125	1

Hypothesis Test:

H_0 : The model is consistent with the data vs. H_1 : The model is not consistent with the data

Accordingly, to the value of chi-square (2.351) at a degree of freedom of 1 and the level of significance ($0.125 > \alpha = 0.05$), we accept the null hypothesis, and we conclude that the model is consistent with the study data, the model represents the data well, and we note that the differences between the observed and expected values are very simple.

Table (13): Coefficient of R square of Cox & Snell and Nagelkerke

Step	-2LL	Cox & Snell R Square	Nagelkerke R Square
1	495.474	0.449	0.748

The variables included in the model showed that they were explained about 0.748 using the coefficient Nagelkerke R Square and 0.449 using the coefficient Cox & Snell R Square of the changes that occur in the effect of the response variable, and this indicates that there is a percentage of changes in the response variable due to other variables not included in the model.

Table (14): Classification Table

			Predicted		
			Nice and Sunny	High	Percentage Correct
Step 1	Daily Temperature	Nice and Sunny	1249	35	97.3
		High	35	230	86.8
Overall Statistics			1117.479	2	95.5

From the previous table, we note that the percentage of correct classification of daily temperatures (nice and sunny) amounted to %97.3, and the percentage of incorrect classification amounted to 2.7%. As for the daily temperatures (high), the percentage of correct classification amounted to 86.8% and the percentage of incorrect classification amounted to 13.2%.

3-16 Conclusion and Recommendations

3-16-1 Conclusions

1. Both the Markov chain model and the logistic regression model are the two main statistical methods that are the subject of the majority of our discussion in this work. We combine them to create a model, which we then employ to study the daily temperature.
2. A logistic regression model defines the dependence of one categorical explanatory variable on another dichotomous response variable.

3. A Markov chain of more than first order and logistic regression are showed to visualize the dependence of the present daily temperature upon the daily temperature of the earlier two-time period. It had been shown that the nice and sunny day of the previous two time periods compared to the high temperature day of the previous two time periods influenced completely the nice and sunny day of the current time period. In a logistic regression case, we consider that the current day's daily temperature is influenced by the daily temperature of the previous two days. But temperature is also influenced by other meteorological factors.

3-16-2 Recommendations

1. Generalizing the results of this study to other atmospheric variables.
2. Expansion of green spaces within the city to reduce the effects of high temperatures.
3. Orientation towards the construction of environmentally friendly buildings through the enactment of special laws.

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The Role of National Oil Company in Kurdistan Region Oil process through International Oil Companies

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Abstract:

This article examines the role and characteristics of the National Oil Company (NOC), as well as the challenges and opportunities inherent in its plans and emerging trends. The Kurdistan Regional Government (KRG) possesses significant oil reserves and has attracted International Oil Companies (IOCs) for exploration and production activities. While the concept of establishing a National Oil Company (NOC) in the region might have seemed advantageous, since it never materialized in reality. This essay explores the reasons behind the absence of an NOC in KRG and proposes potential alternatives to address the challenges faced by the KRG in managing its oil resources more effectively. NOCs can be utilized to advance the government's objectives in the upstream to the downstream supply chain because they play such a significant role in the global oil and gas industry and are often fully or partially controlled by their respective governments. As a result, refortification of NOCs is near the top of many oil-producing countries' policy agendas, although in some cases incrementally and in others fundamentally. This paper thus argues that the national oil company model may have had a number of beneficial effects on the KRG economy if it hadn't been just a piece of paper, and it also supports the establishment of a national oil company in the KRG, which may be thought of as a state rich in petroleum as a result of a significant recent petroleum discovery there. Finally, the study technique employed an evaluation of previously published content. Based on the comparative analysis, the study drew some potential findings regarding the function of NOCs and fiscal regimes and provided some recommendations for NOCs in the Kurdistan region.

Keywords: KRI, NOCs, Oil price volatility, Oil Trade and Diplomacy, Foreign Policy, Gross domestic products, and Economic growth.

Introduction

1.1 Background to the study

In recent years, NOCs have become more competitive with international oil companies, and not only as joint venture partners with the world's largest oil companies (IOCs). Numerous NOCs are boosting their mergers and acquisitions activity, leading to an increase in the number of NOCs

exploring international upstream and downstream acquisition and asset opportunities. (Al-Fattah, S. 2013). The Kurdistan Region, is blessed with abundant oil reserves, making it a significant player in the global oil industry. The KRG has formed a National Oil Company (NOC) to assist in the exploitation of these resources since the enactment of its Oil and Gas Law No. (22) 2007 to administer and supervise the activities of the oil sector.

This essay will explore the essential functions of the NOC in facilitating the oil process through cooperation with IOCs. National oil companies are described as oil companies whose parent government owns the majority portion of its stock and whose purposes are to serve the country's interests. The traditional goal of a NOC has been to give strategic investors access to its home country's hydrocarbon resources as co-owners and service providers. NOCs are required by law to own and operate the whole oil and gas supply chain in their native country, from upstream to downstream (Tordo, S, 2011). Accordingly, National oil companies presently control over 90% of the world's oil reserves and 75% of production (similar figures apply to gas), as well as a large portion of the oil and gas infrastructure. These can be as direct producers or as "gatekeepers" for private oil companies' exploitation (POCs) (Marcel, V. & Titans, O, 2003).

Thus, the supply of access to hydrocarbon resources, knowledge transfer of cutting-edge technology, engineering experience, and managerial and project management abilities are the key drivers of investment between NOCs and International Oil Companies (IOCs), (Marcel, V, & Titans, O, 2003). Without a doubt, because NOCs are involved in the majority of oil and gas processes by IOCs, they support the oil and gas sector in the wealthiest oil and gas countries in the world. In fact, the main oil contracts mention NOCs as the first party with IOCs, to play a reprehensible role of the National Government (Ledesma, D, 2009).

The NOC's role in collaboration with International Oil Companies (IOCs) is crucial in ensuring the sustainable development of the region's oil resources while adhering to international standards and promoting economic growth and stability. Furthermore, as the Kurdistan area has demonstrated, NOCs can be used to endorse both social and political goals as well as economic ambitions. Different objectives may only be regarded significant if they result in distinct characteristics and outcomes, as is the case with national oil companies. Many of these companies have been shown to be inefficient and invest inefficiently. However, if the price of oil falls, the potential supply limitation caused by inefficient national oil companies' operations could become a destabilizing element in the oil market. To reduce the potential threat posed by national oil companies' dominance, a variety of legislative options might be pursued (Jawad al-Khatteeb, L, 2017), Demand management policy can reduce the Kurdistan Region of Iraq (KRI) dependence on imports (Al-Fattah, S, 2013), While NOCs have been frozen in such a variety of things that follow after all the large oil and gas processes

for KRI as a separate area in Iraq, until authoring this research, they have not been given a vital function. Oil and Gas Law of the Kurdistan Region - Iraq Law No. (22) - 2007 is distinctive and gives KRI particular priority. According to Article 111 of the Federal Constitution, ownership of oil and gas is governed by Article 3 of the law. According to this law and Article 112 of the Federal Constitution, the Regional Government is entitled to a share of the revenues obtained from fields producing after 2005 in accordance with the provisions of this law. This share is equal to the share of all Iraqis. This shows that shall, in accordance with the terms of Article 112(1) of the Federal Constitution, jointly manage Petroleum Operations relating to producing fields with the Federal Government. Further evidence that shall jointly manage Petroleum Operations relating to producing fields with the Federal Government in accordance with Article 112(1) of the Federal Constitution. Kurdistan Exploration and Production Company (KEPCO) is hereby established as a public company, being a legal entity with independent management and finance. Members of the Board of KEPCO shall be appointed by the Council of Ministers and approved by an absolute majority of the Parliament. Members must be impartial toward the Ministry and hold technical and managerial degrees in the field of petroleum. All KEPCO Board members are appointed for a fixed five (5) year term that is renewed by the Parliament on an absolute basis. Finally, KEPCO may, subject to the approval of the Regional Council: (1) compete with other companies to obtain Authorisations regarding Future Fields; enter into joint ventures and similar contractual arrangements, whether in the Region, in other parts of Iraq or abroad.

Similarly, Article 11 is hereby created the Kurdistan National Oil Company (KNOC) as a public company being a legal entity with independent finance and management. Article 12 of the same law found the Kurdistan Oil Marketing Organisation (KOMO) in line with the SOMO the entity responsible for oil marketing in Iraq is known locally as a State Oil Marketing Organization. According to the current Iraqi laws, it is the sole governmental body permitted to sign contracts for the purchase and sale of crude oil as well as the import and export of petroleum products. The company's primary focus is on marketing Iraqi crude oils through export ports in Turkey's Ceyhan Port, Khor Al-Amaya Port, and Basra Oil Port, specifically Kirkuk Crude Oil and Basra Light Oil. In addition, the Oil Marketing Company strives to supply gasoline, gasoline, kerosene, and liquid gas in accordance with local requirements and export fuel oil products and certain specialty items that are surplus to those demands (Jumaah, D. 2021).

In theory, the legislation has given a significant role to a number of NOCs, such as Kurdistan Exploration and Production Company (KEPCO) and others, by establishing a separate chapter focusing on their critical function in the oil and gas industry. The issue is that the majority of the articles are still just ink on paper. In reality there is nothing existing as a NOC or any building to be

called NOC, KEPCO or KOMO. In reality, there is no such thing as a NOC or any structure that could be referred to as a NOC. The research will focus on the great role of NOCs and will compare the reality with what had been written in the legislation (Aresti, M. L. 2016).

The history of the participation of the state or one of its national companies in oil operations is divided into two phases: the phase of traditional oil contracts, including: traditional concession contracts and the phase of new oil contracts, including: contracts for participation in oil production, as well as contracts for oil contracts. In the first phase, researchers discovered that oil-rich countries were tied to international oil companies and granted them numerous contract rights, resulting in no prominent role for the state in oil operations, and no national oil companies to participate in oil operations first or later, where oil was excavated and extracted by international oil companies, and oil-owning countries had the right to obtain a few financial or non-financial benefits. For instance, in the 1923 oil concession agreement between the Turkish Oil Company and the Iraqi government. In addition, the Saudi Arabian government and the American Oil Company - Shell - have an oil concession agreement (Patel, B. N, 2000).

However, despite concluding their concession-style oil contracts with international oil companies, other countries have proved in their content materials and paragraphs that enabled them to claim participation in oil operations by establishing the right to own part or full shares of the International Petroleum Company, and the most prominent example appears to have been the oil concession contract between the British oil expert: Sir William Drassy and the Iranian government in 1951. Article 10 of that contract explicitly indicated that the Iranian government had the right to own the shares of the oil extracted, (Article: 10 of Darcy contract 1951 with Iranian Gov).

Although the idea of participation existed in most of the concession agreements concluded by other countries, including the oil concession contract between the Iraqi government and the Turkish Oil Company in 1925, article 3 states: “If a private oil exploitation company is formed in Iraq, it must allow the local government or other local interests to participate if it wishes not to exceed 20% of the company's capital” (Article 15 of the Concession contract)

With the information presented above, it is possible to draw the following conclusion: With these legal provisions, given the weak technical and economic potential of countries when entering into traditional concession contracts on the one hand, and the financial and technical capacity of those countries on the other hand. The same applies to the 1949 oil agreement between Getty Oil Company and the Government of Saudi Arabia, as well as the concession of Arabian Oil Company Limited (Japan) with the Government of Saudi Arabia in 1957. So is Kuwait's agreement with Shell (Article 23 of the concession contract).

However, in modern days the performance characteristics of national oil companies are likely to differ from those of private oil companies because they may be driven by different goals than private oil companies. The national oil firms may eventually constitute a barrier to the efficient operation of the global oil market, which may not be of much significance to oil-consuming nations in the short term, as will be further detailed below.

1.2 Research Questions

In order to illustrate the paper topic, five distinct questions are developed.

1. How important are National Oil Companies to the growth of the economy?
2. How does National Oil Company play a part in foreign policy?
3. Does KRG have a National Oil Company?
4. How do NOC and IOC relate to one another?
5. What prevents KGR from establishing a NOC?

1.3 Research Methodology

This section outlines the essential comparative methodologies and techniques applied in the current investigation to ascertain the aforementioned questions. By combining primary (observation) and secondary (document analysis) techniques of data collection, the method is fundamentally a qualitative study. Secondary sources include reviews of the current literature as well as relevant publications, periodicals, journals, websites, and publications in the field. An observational research design was employed in this investigation. This design employs a comparison approach to draw a conclusion in situations where the researcher has little or no control over the event. In order to investigate several approaches, put forth to address the issue of the National Oil Company's role in the Kurdistan Region Oil Process through International Oil Companies, this study employs a comparative methodology.

The main objective of the research is then achieved by applying the comparative results to determine a suitable substitute for National Oil Company's participation in the Kurdistan Region Oil Process through IOCs. A consequence of the aforementioned study methodology offers distinct advantages. For example, it allows researchers to cite options from English, foreign, and worldwide oil revenue streams. In certain areas of law, researchers might have to examine the laws of other legal systems;

for example, it could be difficult to evaluate the laws of other nations that establish NOCs and explain how KRG can profit from them.

1.4 The Role of NOC in Economic Development

The concept of energy security varies every nation. For countries that import resources, like the USA, it can generally be seen as insurance against the risks of damaging energy import disruptions that result in the loss of economic wellbeing. Although nations define energy security differently depending on whether they are net exporters or importers, an importing government strengthens the energy security of its own country by providing a consistent supply of energy at competitive costs to sustain the country's economy and industry (Vivoda, V, 2010). There are undoubtedly many benefits for the nation from the finding of large petroleum resource deposits in any state, but for these benefits to materialize, several stakeholders must play important roles in accomplishing this aim. It has been demonstrated that petroleum resources can contribute to certain economic progress (Addison, T, & Roe, A, 2018).

According to several studies, governments and national oil firms play crucial roles in the domestic and even international petroleum industries. The paradigm used by national oil companies to manage petroleum resources has recently come under fire and is thought to be a conduit for waste and corruption. Furthermore, the national oil companies frequently flout the rules of supply and demand. They typically have the vertical integration, wealth redistribution, job creation, general economic development, and energy and economic security as their goals because of their close relations to the national government. Although the national government may deem these objectives desirable, they are not likely to share the same objectives as the stated objectives of the private international oil companies, which is to maximize shareholder value (Tordo, S, 2011).

Iraq is a significant producer of natural gas and oil, with the fourth-largest confirmed crude oil reserves in the world. It is also the largest crude oil production of the Organization of the Petroleum Exporting Countries (OPEC). However, years of conflict and international sanctions have left much of Iraq's oil and gas deposits undiscovered. Nevertheless, the oil sector accounts for 36% of GDP and 90% of government revenue in Iraq; the majority of this revenue is generated through export sales made possible by the SOMO. Therefore, the oil industry in Iraq (SOMO) is essential to the country's economic situation, the health of the economy, and the continuous efforts to rebuild the nation, especially in terms of infrastructure development and the use of gas and oil to power infrastructure (EITI 2020) Additionally, Governments also use national oil companies as tools in the wider economic development process. The petroleum sector is the first significant economic sector opened to the world economy in various countries. As a result, the petroleum industry may be the

first to introduce international investment contract and property law concepts, as well as established accounting and financial standards, all of which are required for economic development to progress. The industry could act as a conduit for transferring technology to the rest of the economy. To spread development dollars, local content regulations may be introduced to ensure the establishment of ancillary service firms. The national oil corporation may also be compelled to provide subsidized fuels to companies that are part of the countries' long-term growth objectives. Kazakhstan is an example of a national oil company's development obligations, since KMG has explicitly declared its goals.

These goals include integrating Kazakhstan into the global economy and ensuring that KMG's growth and development is reflected in the country's overall economic growth (Pirog, R. L, 2007). As a result, the national oil company model may have had numerous positive effects on the KRG economy if it hadn't been merely on paper. This paper also argues in favor of the establishment of a national oil company in the KRG, which has recently seen a significant amount of petroleum discovered there by Chevron from the United States. Since 2007, the largest oil companies, including ExxonMobil Corporation, Rosneft, Gazprom, and DNA GAS, have abandoned their multibillion-dollar investments in the KRG basin's heavy oil potential. Oil companies agreed to contracts that increased their involvement in their KRG projects from a controlling interest of roughly 40%, (Azubike, V. C, 2020). The order on local content issued by the Nigerian National Petroleum Corporation (NNPC) led to a deliberate, planned expansion of the nation's oil industry capabilities. Nigerian providers would win bigger contracts as they expanded their skills. These businesses receive funding, finance assistance, training, and knowledge transfer from Shell. These actions eventually made sure that over 90% of all Shell contracts went to Nigerian industries.

In addition, the NOC oil corporations have shown that they can reach both great heights in terms of producing revenue and managing core industries, as well as horrific lows in terms of mismanaging resources and encouraging corruption. Brazil's Petrobras in the 1960s and 1970s, Petrobras gained specialized knowledge in deep-water exploration and production as a result of growing up in Brazil under military rule. Moreover, the company increased its productivity and skill levels during this time (Heller, P. R, 2017), The Brazilian petroleum industry became more competitive in the 1990s, and Petrobras continued to expand, giving the government dependable petroleum resources and revenue, sparking the nation's expanding oil services private sector, and expanding its operations overseas. By the 2010s, "experts" in the sector were applauding Petrobras as an illustration of successful company operations (Addison, T, & Roe, A, 2018), Furthermore, In several rising producers as well as some of the world's most oil-rich nations, such as Iran, Mexico, Saudi Arabia, and Venezuela, state companies control the majority of the energy output. National oil corporations

that disclosed information about their holdings in 2017 reported total assets of \$3.1 trillion. And in April, Saudi Aramco disclosed its own financial information, showing that it had a net income of more than \$100 billion the previous year, making it by far the most profitable company in the world (Patrick R.P. Heller, David Mihalyi and Morgan (D. Bazilian, 2019). Therefore, the aforementioned examples demonstrate that NOCs can benefit any state that produces oil if it wants to exploit its natural resources in an equitable manner and in accordance with good development principles.

1.5 Influence of the National Oil Company on Foreign Policy

Many researchers and politicians today hold the view that oil trade does have an impact on the security or diplomatic ties between producing and consuming countries. This is partly because it is believed that oil is different from other traded commodities and, in some ways, more significant. People also think that consumer countries respect their relationships with producer countries highly in order to maintain the oil flowing in the right directions. According to this logic, one might have certain expectations if oil trade between two countries were to increase or decrease. Increased oil trade may lead to stronger diplomatic ties, whilst lower oil trade may negatively impact the security or diplomatic ties between the parties. Effective collaboration between the NOC and IOCs leads to significant revenue generation from oil exports. The NOC plays a central role in managing these revenues, ensuring transparency, and directing funds towards critical sectors such as infrastructure, education, healthcare, and economic diversification projects. By using oil revenues strategically, the NOC can reduce the region's reliance on oil exports and stimulate the growth of other industries, promoting a more balanced and sustainable economy.

Additionally, if a producer nation's oil trader with a particular consumer nation declined and it was forced to look for new markets elsewhere, this could open the door for a different consumer nation to increase its trade with the producer nation and gain influence in tandem with its rising oil imports. This particular problem has been brought to light by the US Shale Revolution: As domestic oil production increases and oil imports decline in the United States, producer nations are shifting their oil exports to other major consuming nations, some of whom are political rivals of the United States, such as China. Some national oil companies have a significant impact on the economics of nations outside of their own. In order to avoid sanctions and maintain his hold on power in Venezuela, Nicolás Maduro is allegedly receiving financial support from the massive Russian oil company Rosneft. While this is going on, Sinopec and China National Petroleum Corp. are at the heart of China's Belt and Road initiative and are working with governments from South Sudan to Iran to assist them in extracting oil and funding public expenditures (Patrick R.P. Heller, David Mihalyi and Morgan D. Bazilian 2019).

Some argue that because the US supports democracy and global markets, Chavez sees the US as a threat to his revolution. To counter what he sees as US expansionism, Chavez is gaining clout throughout Latin America, the Caribbean, and beyond by promising economic assistance, joint energy projects, and a lower oil price. The Petroleos de Venezuela (PDVSA) plays an important role in these initiatives. Ecuador, Bolivia, Argentina, Nicaragua, and other countries have lately inked accords with the Chavez government. Iran has exploited the possibility of oil cutoffs to the West as a threat and possible deterrent in the debate over its nuclear weapons program. Russia has halted natural gas delivery to Europe due to conflicts with former Soviet Union nations over supply prices and transit costs (Pirog, R, L, 2007).

The authoritarian government of Azerbaijan has attempted to strengthen its energy relations with Europe in an effort to maintain its political independence following the fall of the Soviet Union. It accomplished this by giving funding for the construction of export pipelines that bypass Russia. Through Georgia, the Baku-Tbilisi-Ceyhan oil pipeline links Azerbaijan with the Turkish coast. It was originally put into use in 2006. To avoid going through Russia, Azerbaijan has been collaborating with British Petroleum (BP) and the European Commission on establishing a pipeline to transport Caspian gas to the European market. The Southern Gas Corridor project consists of the Trans-Anatolian Pipeline (TANAP), which runs from the Turkish-Georgian border to the Turkish-Greek border, the South Caucasus Pipeline, which connects Azerbaijan and Georgia to and Italy. The first gas supplies to Europe are planned to occur in 2020. Azerbaijan suggested the Baku-Tbilisi-Ceyhan oil pipeline and the Southern Gas Corridor as methods to improve the political and economic links between Baku and the EU. These initiatives are especially important to Azerbaijan since they help it maintain its political independence.

In addition, all above, Iran has developed close ties with China and other nations in the energy industry through its oil exports. As a result, the country has escaped the heavy economic sanctions that the West agreed to apply in response to its nuclear development largely unscathed. This choice was supported by both political and financial considerations. The money from oil sales to China came at a time when sanctions were biting, and it also offered Iran political leverage in talks over the Joint Comprehensive Plan of Action, the nuclear agreement negotiated by Iran and the US and its allies (AFET Committee, 2018).

The Kurdistan Regional Government is thus not an exception to this rule; whenever it NOCs is founded in reality, it likewise has the ability to use its national oil companies to achieve its foreign policy goals. Direct alliances and connections between national oil companies are the outcome, and these connections may lead to political relations. The production and use of oil, a key commodity in the world economy, can result in strategic partnerships. Like Saudi Aramco's choice to raise oil

production in the wake of Iraq's invasion of Kuwait, China's connections with Iran, Venezuela, Russia, and other countries that depend on oil can all be viewed as political. (Pirog, R, L,2007), Last but not least, NOCs work in tandem with their national governments to assist business clusters in particular sectors that may have connections to the oil and gas industry, such as machine tools, petrochemicals, automobiles, or oilfield services. Increasing public finances, generating appealing returns for investors, and generating long-term wealth and employment locally can all be balanced by a well-thought-out cluster plan.

1.6 Partnership with IOCs

Partnering with IOCs is a calculated move to gain access to greater project and management expertise as well as important international markets, as some NOCs are eager to grow and globalize their business.

Additionally, IOCs can provide cutting-edge knowledge, vital experience, and global exposure that certain NOCs might not have as easy access to. Consequently, the establishment of cross-investment and the development of institutional knowledge in important domains of important technological proficiencies can come from IOC-NOC partnerships. Utilizing the upstream industry, the NOC IOC alliances can advance national economic growth. NOCs have historically favored long-term partnerships, but they are now more interested in short-term, project-based deals. To create a greenfield refining and petrochemical project in Saudi Arabia, for instance, Saudi Aramco Total Refining and Petrochemical Company and Total formed (SATORP, Pant, H. V 2008). Furthermore, China National Petroleum Corporation (CNPC) signed an agreement to invest in chemical facilities, power stations, and railroads in (Kazakhstan Al-Fattah, S. 2013). Another trend that appears to be developing is that NOCs in hydrocarbon-rich nations like Saudi Arabia, Venezuela, and Russia appear to have increased negotiating leverage over IOCs. That is to say, in nations with substantial reserves, they are going to have fewer opportunities than in the past. This is a result of NOCs developing into competent national operators through increased experience and skill, utilizing oilfield services companies OFSCs' specialized services at a reduced cost, purchasing smaller businesses to gain access to technology and expertise, and cultivating talent and experience through international alliances. Large growing economy nations like China and India, which have limited hydrocarbon resources, are perceived as being harder negotiators when it comes to their dealings with IOCs. Oil prices affect cash flow and outlays significantly even though they may not be very volatile in absolute terms. Cordesman, (A. H., & Gold, B. 2014). The total effect of price volatility might complicate forecasting and cash flow management. As a result, NOCs must develop strict cash and risk management plans in order to combat this volatility. International tax planning becomes a crucial component of financial planning as NOCs go worldwide (Ibid). It is inevitable

that non-resident corporations NOCs will exploit opportunities for international tax planning, double tax treaties, and different tax rates in the nations in which they conduct business. Regarding Kurdistan Region, which is part of the global interest, there have been numerous arguments about the PSCs' major goal of forming partnerships in order to obtain modern technology and political interest inside IOCs. In accordance with Kurdistan Region Oil and Gas Law No. 28, 2007, Iraqi Kurdistan used production sharing agreements with foreign oil corporations. Even though Iraqi federal governments did not recognize oil contracts, this was nonetheless done. Article 112 of the Iraqi Constitution grants the Kurdistan regional government the authority to enter into oil contracts with foreign oil companies. (Hasan, Q. M., & Perot, K. A. 2021). The Kurdistan Region Government asserted that these contracts have legitimacy and serve to attract and encourage foreign investments in the region. Although production sharing contracts entail greater risk for multinational oil corporations, these contracts also offer a higher degree of benefit to these firms since they offer a structure that allows for the highest possible level of cost recovery. It is true that in production sharing agreements, foreign oil corporations take on the greatest amount of risk; yet, oil contracts also work better for them since they offer a structure that allows for the highest possible degree of cost recovery and oil output. Oil contracts between the Kurdistan Region of Iraq and the Iraqi government have evolved into a political rather than a legal or commercial dispute, (Zebari, D. F. 2020).

1.7 Reasons for KRG not establishing NOCs.

Company plans must present a sustainable future vision to NOCs and their governments. A clear and effective set of regulations governing the amount that NOCs can borrow, spend, and contribute to the national treasury can be facilitated by such a vision. Otherwise, it is difficult to maintain NOCs, which can result in failures like KRG. Here are several factors might have contributed to the KRG's failure to establish NOCs, including:

a. The Baghdad central government is refusing to acknowledge any NOCs established by the KRG or any transactions of this nature conducted through any other entity than SOMO.

Political Challenges: The KRG operates within a complex political environment, and establishing an NOC could have led to disagreements among various political parties and regions over revenue distribution and decision-making powers.

b. Financial Constraints: A NOC must be established with large upfront investments and continuous running expenses. Financial constraints may have prevented the KRG from establishing and sustaining such an organization.

- c. Capacity and Expertise: Developing and managing an NOC requires significant technical expertise, experience, and institutional capacity, which the KRG might have lacked at the time of consideration.
- d. Foreign Involvement: Given that IOCs frequently contribute cutting-edge technologies, capital, and operational skills, it's possible that their presence in Kurdistan's oil industry discouraged the KRG from forming a NOC.

1.8 Conclusions and Recommendations

This article examined the role of NOCs in any producing counties and addressed the evolution of oil revenue in KRG and other international states, as well as new roles, possibilities, and rising difficulties that the oil and gas industry in KRG would face in the future. The study's main goal is to look at the impact of NOCs oil revenues on economic growth. The first section of the study is an introduction to the research's subject matter; it discusses the study's history in general, as well as the topic of oil revenue and economic growth general.

The National Oil Company of the Kurdistan Region serves as a crucial intermediary between the region's oil resources and International Oil Companies. Through its regulatory role, contract negotiations, and emphasis on environmental and social responsibility, the NOC ensures that oil exploitation is carried out responsibly and sustainably. Moreover, by leveraging partnerships with IOCs, the NOC gains access to advanced technologies and expertise, enhancing its capabilities in managing oil projects. In addition to the paper, if the NOC had been duly established and recognized by the Central Government, it might have contributed to the long-term stability and prosperity of the Kurdistan Region through the efficient management of oil income and the promotion of economic diversification. Therefore, this essay also argues in favor of the establishment of a national oil company in the KRG, in which employ energy exports both offensively and defensively in terms of foreign policy. They can be used to compel or hinder other governments from acting in a certain way. They might be applied as a form of punishment or to forge close economic ties. The dependency relationship that forms between an oil or natural gas producing state and a consuming state serves as the foundation for the offensive or defensive use of energy exports. A transit state serves as an essential intermediary when talking about pipelines.

This relationship can therefore be used as a weapon to threaten transit or end-user governments or as a shield against political pressure from outside the producing state. A defensive strategy might not always be advantageous for other nations. On the other hand, a successful defensive strategy, or the appearance of one, may inspire the authoritarian state in question to adopt a more proactive foreign policy. Conflict instability may result from this heightened willingness to take risks, whether

diplomatically or militarily. This analysis shows that if the study had not been limited to paper, the KRG may have benefited in a variety of ways from its further examination of the national oil company model's roles in foreign policy.

Nonetheless, the KRG's choice of not implementing National Oil Company in the region is impacted by a number of variables, including as financial limitations, political difficulties, and foreign intervention. While an NOC might have its benefits, the KRG can explore alternative approaches to effectively manage its oil resources through collaboration with International Oil Companies. By strengthening its regulatory framework, investing in capacity-building, renegotiating contracts, and establishing partnerships, the KRG can optimize the benefits of its oil sector for the long-term development and prosperity of the Kurdistan Region. Finally, it can be concluded that, in reality, KRG lacked the basic key capabilities to manage oil revenues in order to achieve the desired economic growth due to the presence of weak political and democratic institutions that have encouraged the institutionalization of bad governance, and outright disregard for the rule of law.

- Recommendations Based on the aforementioned results and suggestions, the study recommended that the Kurdistan Oil and Gas Law, which was approved by the Kurdistan National Assembly, the Region's parliament, on August 6, 2007, diversify its articles further to clarify the revenues share and also to show the cost of oil revenue, and that the government should promote greater private company participation.
- These NOCs have been mentioned in this law should be are putting it into practice because no NOCs have actually been formed as of yet, which is critical at this point for KRG. By doing this, the damage brought on by the unauthorized export of crude oil products will be reduced.
- The government must act quickly to provide assistance to the local indigenous inhabitants in the region where crude oil is being mined. There will consequently be less instability there. A body should be established by the government to ensure that foreign oil firms are socially responsible to the areas in which they operate and the oil distribution system.
- Establish guidelines for transparency in the management of natural resources, especially with regard to revenue from the sale of oil and gas. There may be enhanced transparency in government-owned oil national companies' reporting as a result of all of them adopting the extractive industries transparency initiative and holding both majority and limited control over oil and gas reserves.
- Last but not least, KRG should be able to use its natural resources to advance its foreign policy.

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Statues

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An Evaluation of students' performance in Summer Internship Program: Supervisors' Perspective

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Abstract:

The current study aims to evaluate the performance of students who are participating in summer internship program for three months from the perspective of local and international private companies in Kurdistan Region of Iraq. An analytical Descriptive method was applied and Mix method was employed through questionnaire and interview to collect the data. The population consists of all the supervisors in (64) private companies who are doing their business in KRG, as well as the sampling includes (185) supervisors. In general, the results survey show that students have the ability to learn more practically, work with different background, dependability on themselves, commitment with their job and time, having a positive attitude to work as well as satisfied with their internship experience. On the other hand, the result from the interview illustrates that most traits that helps the student's advancement are work seriously and respect the laws and instructions of the company, as well as adhere to working hours. In addition, it has been mentioned that most of students have improved their interpersonal skills in terms of communication, teamwork, make decision, Time management, solving problems and Leadership. The value of the current study can be recognized as this study was conducted in in the various (local and international) companies with different sectors such as (Telecommunication, construction, Healthcare, universities, foods, Bank). In addition, this is considered to be the second study which is accompanied in term of summer internship program in Kurdistan as well as Iraq after the study of Abdulla *et al.*, 2019. Moreover, this study benefits both companies and universities at the same time.

Keywords: Summer ininternship program, Ability to learn ,Dependability, career development, Quality of Work, soft skills.

Introduction

Over the last decade there has been a growing debate about the program of Internship in the university in order to prepare the students with a high performance for the labor market with the skillful manpower. The transmission from university to marketplace has become a vital and sometimes daunting phase for fresh graduated. Many students are faced with a variety of career-related tasks which can determine the success of their future (Ocampo et al., 2018). Internship

program is considered to be a process that provides students good experience as well as enabling them to transform classroom knowledge into practice during the program. Therefore, there has been a growing debate about the internship program in many universities around the world.

The competitive nature in the labor market makes students in various colleges showing their skills, talents and brands themselves to stand out from their peers. Internships summer program can be exploited as an opportunity for students to go into the marketplace with a competitive advantage. Many scholars have suggested that preparing graduates theoretically for the marketplace cannot be achieved well without training practically in a relevant field in order to implement what they learned in their classes for three to six months accordingly (Abdulla *et al.*, 2019). The hands-on internship provides interns a valuable experience which cannot be conveyed through lectures (Francis & Alagas, 2017). Additionally, Gault and his colleagues have identified that internship program can be realized as a bridge to link the theory and practice by taking part in supervised and planned work (Gault *et al.*, 2010).

Internship program has become a chance not only for the students, graduates and alumni to find the place in market, meanwhile it truly has become an opportunity for the employers to catch the more applicable and skilled students during the period of internship program. Jones (2017)¹ has mentioned that internship program nowadays is used as a strategic talent pipeline from many companies in order to determine and investigate potential candidates as well as hiring them. According to Ruslan and his colleagues (2008), an internship is a short duration of work activities in the company that is not more than six months implemented by universities due to the requirement for students' graduation. While (Hora *et al.*, 2019) suggest that Internship is based on the notion that they enable students to encourage their valuable professional knowledge and skills, provide opportunity for students to translate academic knowledge to real-world situations, and supply companies with a steady stream of new talent.

Problem statement

Recently, public, and private universities in Kurdistan region of Iraq have started implementing internship program. Local and international organizations at the same time are trying to find students having skills such as soft skills, knowledge, talents as well as they need individuals who well-educated, skilled, enthusiastic, and committed workforce in order to hiring them into full-time positions after graduation. Therefore, gaining the feedback from the companies about the students' performance, knowledge and skills would on of the most important issue that universities is looking for in order to realize the factors that students must have in their class as well as in the marketplace. Anjum, 2020 has mentioned that feedback is a vital element in upgrading and maintaining the

performance as well as needed from both the corporate supervisor and the educational institution at the same time. Therefore, it should be provided by company and academic supervisor to check the intern's progress. However, (Tonot and Othman, 2021) have argued that the performance of students in the practical training program is still questionable. Therefore, there main research question can be asked as **“what are the perspective of employers about the performance of the student in the 3 months internship program?”**

The purpose of the paper

Public and private universities offer an internship program for the students every summer, as well as it is essential for them to explore the effectiveness and performance for their students. One way of determining this would be obtaining companies' feedback regarding to their candidates in the internship program. Therefore, the main objective of this paper is to investigate the opinion of supervisors in companies of the students' performance in the summer internship programme for three months, to determine the main skills, competence, and experiences that they have got during this program.

Literature review

Nowadays, the main aim of companies is to find the fresh employees having the knowledge, skills, attitudes, and others characteristics (KASOs). Internship program can be seen as the opportunity for employers to find interns having (KSAOs). Some researchers have agreed that the program of internship can be mostly viewed as win-win propositions for both students and employers. For instance, internship may be recognised as a program that offers an outstanding source for selecting and hiring new and fresh employees (Knemeyer & Murphy, 2002).

Internship program has many benefits for each of students, universities, employers, stakeholders, and community. (Ruslan et al., 2020) pinpointed that internship program brings a lot of opportunities to help, guide and prepare students with realistic potentials of their desired future careers after implementing the internship placement. According to Miller & Gonzalez (2016), it is likely from the internship program to prepare students to gain awareness and valuable experiences that enables them to be effective in their profession in terms of their specialty, job ethics and essential laws. From the perspective of employers, internship program is useful to host interns in order to prepare the potential workforce with avoiding the cost of hiring employees. Mello (2006) argues that internship program is considered to be the effective ways to secure the process of employment in the industry. Therefore, it can be said that internship practices play a significant role in the training students getting the job after their graduation.

Furthermore, there are some advantages of internship program such as increasing job skills and knowledge, growing personal and social efficacy, gain experience, applying lecture hall theories into practice (Maertz& Marks, 2014). In addition, it improves self-confidence, the interpersonal and communication skills of the interns during their internship program (Gerken *et al.*, 2012: 11). Francis and Alagas (2017) suggested that internship practice for students from hospitality and tourism programmes can increase their confidence and encourage their intents of working as well as learn new concepts in the hospitality industry. Internships are outstanding source of students learning teamwork, for enhancing resumes, improve self-confidence, develop personal and professional relationships, chance to connect with potential employers, and learn administrative operations (Seyitoğlu and Yirik, 2020).

On the other hand, there are also some drawbacks for internship program. For example, a recent study has discovered that employers without financial compensation exploit students when they hire interns (Abdulla *et al.*, 2019). Job characteristics, organizational environment, and contextual factors can be seen as a determination of the internship program (Ruslan *et al.*, 2019). In addition, the main disadvantages of internships for the companies are that they have to deliver guidance, wide support, training and feedback to the interns at every stage in order to make them effective for the organizations (Anjum, 2020). While Hora and his colleagues have mentioned that financial issue would be another barrier of internship participation, and they found that the students are unable to participate in an unpaid internship without parental financial support. (Hora *et al.*, 2019).

Many scholars have discussed the perspectives of the internship program from employers. In the study of Holyoak (2013), this was about the perspective of the supervisors in their six to eight months internship program using interview tools to collect the data from six supervisors. She has found that learning is a key component in the interviewees' accounts, as well as not all students proceeded in the way they assumed, and not all the supervisors perceived the expected learning in their interns. At the same time, Anjum has investigated in his study that business students in universities in Pakistan through internship programs have improved their professional skills, knowledge, and capabilities (Anjum, 2020). However, Aggett and Busby (2011) in their specific study, which was conducted on Tourism, Hospitality in one of British university discovered that a number of issues and suggestions are made for initiatives that emphasize the value of the opportunity and encourage students to consider their career development.

Another study found that the factors lead to satisfy employers with internship experiences and then hiring an intern for a full-time position after the assignment: are performance clear tasks, challenging assignments, exposure to different parts of the business, and respectful treatment (Maertz Jr *et al.*, 2013). While, the study of (Amer and Ismail, 2014) which aims to evaluate the internship program

offered by Instructional and Learning Technologies Department (ILT) in the College of Education, Sultan Qaboos University (SQU), Muscat, Sultanate of Oman, from 29 supervisors perspectives, has showed that the most important recommendation for the university is that the distribution of interns should be based on their interest, and more attention should be given to the development of skills in areas of management and technical report writing. In addition, the findings of the study by (Tonor and Othman) also point out that during internship program the most of the students performed well would be relied on interview with organizations' supervisor for evaluation and it suggested that the students need to improve on work quality, communication skills and technical skills.

Once reviewing some research measuring Supervisors' Perspective about student's performance in the internship program, it can be said that most of them were specifically conducted on different field as well as different environment. Therefore, our study focused on the evaluation of student's performance in summer internship program, which is offered by the collaboration between all the universities in Kurdistan region and the Deputy Prime Minister office, from the perspective of private sectors in Kurdistan region of Iraq.

Methodology

This study is a quantitative research, but in order to better comprehend strengths and weaknesses of internship programs in KRG, some qualitative research elements were also utilized. In current study, a survey using questionnaires was applied to collect the data. These questionnaires were distributed to managers who supervise the students during three-month internship program in (64) private companies who are doing their business in KRG. In total, 185 questionnaires were returned fully completed from a total of 212 questionnaires.

The questionnaires evaluated students' performance based on some criteria such as (relations to others, judgment, ability to learn, attitudes towards work, dependability, quality of work, attendance, punctuality). An analytical Descriptive method was applied and Mix method was employed through questionnaire and interview to collect the data. In term of the interview, semi structured interview applied in order to evaluate the performance of the students. The statistical tools which were used to analyse the data, were (frequency, Mean, Materiality, correlation coefficient and regression).

Population and sampling procedures

The population consists of all the supervisors in (64) private companies who are doing their business in KRG, as well as the sample of the study consisted of (185) supervisors.

Research Hypotheses

The following hypotheses were formed according to current study:

- The viewpoints of respondents working in the private companies in Iraqi Kurdistan Region differ towards describing the variables of the current study.”
- there is significant role of Quality of work in overall performance in the researched private companies.
- all the respondents in the private companies in Iraqi Kurdistan Region satisfying with hiring all the students in their organization.

Findings and analysis

Table 1. Frequency of relations to others

variable	weight	terms	Freq	%	Arithmetic mean
Relations to others	5	exceptionally well accepted	27	14.6	3.481081
	4	works well with others	75	40.5	
	3	Gets along satisfactorily	53	28.6	
	2	Has some difficulty working with others	20	10.8	
	1	Works very poorly with others	10	5.41	

Source: prepared by the researchers based on the outcomes of (SPSS) program

It can be seen from Table 1 that the highest frequency of terms belonging to *relations to others* is 75 which is “works well with others” with the percentage of 40.5% following by the item with frequency of 53 “Gets along satisfactorily” with the percentage of 28.6% and the least Frequency of *relations to others* is “Works very poorly with others” with 10 frequency and 5.41% rate. Only 14.6% of total sample are “exceptionally well accepted” according to their evaluators with Frequency of 27; and only 10.8% of the total participants “has some difficulty working with others” with frequency of 20.

Table 2. Frequency of Judgment

variable	weight	terms	Freq	%	Arithmetic mean
	5	Exceptionally mature	12	6.49	3.194595

Judgment	4	Above average in making decisions	62	33.5
	3	Usually makes the right decisions	72	38.9
	2	Often use poor judgment	28	15.1
	1	Consistently uses bad judgment	11	5.95

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 2 exhibits the Judgment terms frequency. It appears that the highest frequency is 72 with the percentage of 38.9% for the term “Usually makes the right decisions”. Following by the term “Above average in making decisions” with frequency of 62 and the percentage of 33.5%. The term “Consistently uses bad judgment” gained least Frequency, which is 11, with percentage 5.95% rate. Followed by the second least frequent term “Exceptionally mature” which is 12 with only 6.49%.

Table 3. Frequency of terms of Liability to learn.

Variable	Weight	Terms	Freq	%	Arithmetic Mean
Liability To Learn	5	learns very quickly	22	11.9	2.816216
	4	learns readily	32	17.3	
	3	average in learning	70	37.8	
	2	rather slow to learn	11	5.95	
	1	very slow to learn	51	27.6	

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 3 represents the frequency and percentage of terms belonging to “*liability to learn*” variable. It seems that the highest frequency is 70 for the term “average in learning” with the percentage of 37.8% and the lowest frequency is 11 for the term “rather slow to learn “with percentage rate 5.95%. Only 11.9% of total sample are “learns very quickly” according to their evaluators with Frequency of 22; and 27.6% of the total participants “very slow to learn” with frequency of 51.

Table 4. Frequency of attitude: application to work

Variable	Weight	Terms	Freq.	%	Arithmetic mean
Attitude: Application To Work	5	outstanding in enthusiasm	37	20	3.394595
	4	very interested	77	41.6	
	3	average in interest and diligence	27	14.6	
	2	somewhat indifferent	12	6.49	
	1	definitely not interested	30	16.2	

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 4 shows the Frequency rate of terms related to “attitude: application to work “. It appears that 41.6% of the participants are “very interested” according to their supervisors with 77 frequency. On the other hand, the term “definitely not interested” gained 16.2% rate among the participants with frequency 30. It is also clear that only 20% of the participants are “outstanding in enthusiasm” with 37 Frequency. The lowest frequency is for the term “somewhat indifferent” with the percentage rate 6.49%.

Table 5. Frequency of dependability

Variable	Weight	Terms	Freq.	%	Arithmetic Mean
Dependability	5	completely dependable	39	21.1	3.594595
	4	above average in dependability	79	42.7	
	3	usually dependable	34	18.4	
	2	sometimes neglected	18	9.73	
	1	unreliable	16	8.65	

Source: prepared by the researchers based on the outcomes of (SPSS)program

Table 5 exhibits the dependability of the participants according to the five terms presented. The highest number of participants were “above average in dependability” with frequency 79 and 42.7% rate. Followed by the term “completely dependable “with frequency of 39 and the percentage of 21.1%. While the results show that only 8.65% of participants were “unreliable”, with frequency of 16, the evaluators rated 9.73% of the participants as “sometimes neglected” with frequency of 18.

Table 6. Frequency of relations to others

variable	weight	terms	Freq.	%	Arithmetic mean
Quality of Work	5	excellent	41	22.2	3.711957
	4	very good	84	45.4	
	3	average	33	17.8	
	2	below average	17	9.19	
	1	very poor	9	4.86	

Source: prepared by the researchers based on the outcomes of (SPSS) program

According to Table 6, the lowest number of the participants' *quality of work* were “very poor” with frequency 9 and percentage rate of 4.86%. Although the highest percentage of the participants were ranked as “very good regarding the quality of work, still the second highest frequency is for those whom described as excellent, with frequency of 41 and percentage rate of 22.2%. On the contrary, the “average” and below average” terms gained 17.8% and 9.19% rates respectively.

Table 7. Frequency of overall performance

variable	weight	terms	Freq.	%
overall performance	5	excellent	25	13.5
	4	very good	108	58.4
	3	average	22	11.9
	2	below average	17	9.19
	1	very poor	12	6.49

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 7 presents the overall performance terms' percentage and Frequency. The highest frequency from the table is 108 which represent “very good” participants in their overall performance, with the percentage of 58.4%. On the other side, only 6.49% of the participants overall performance were ranked as “very poor” with frequency of 12, following by the “below average” participants in their

overall performance with frequency of 17 and percentage rate of 9.19%. it is likely that the “excellent” participants were not the majority, although their Frequency is higher than “average” participants, with percentage rate of 13.5% for the former and 11.9% rate for the latter.

Table 8. Weighted average of the variables.

Variables	Weighted mean	Level
Relations to others	3.481081	Above average
judgment	3.194595	Above average
Liability to learn	2.816216	Below average
attitude: application to work	3.394595	Above average
dependability	3.594595	Above average
Quality of Work	3.711957	Above average
overall performance	3.296216	Above average

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 8 exhibits the weighted mean of each evaluation criteria used by the participants’ supervisors.

The only variable below average of the scales, which is calculated by $\{(1+2+3+4+5)/5=3\}$, is “Liability to learn” to gain 2.816 according to the supervisors of the participants evaluation. Followed by the second lowest weighted mean, “Judgment” is slightly above average with weighted mean value 3.194. On the other side, the highest weighted mean value is 3.594 for “dependability” of the participants according to their supervisors’ evaluation. Then, the variable “Relations to others” is above average with value of 3.48, followed by “attitude: application to work” with above average value 3.394 too. Based on the results from the above tables, the first hypothesis which state “The viewpoints of respondents working in the private companies in Iraqi Kurdistan Region differ towards describing the variables of the current study.” Is accepted.

Table 9. Correlation and coefficient of determination

Variable	Weighted mean	P-value
Quality of Work	3.691892	-
overall performance	3.616216	-
R	0.94	0.008
R ²	0.88	0.006

Source: prepared by the researchers based on the outcomes of (SPSS)program

Table 9 shows the weighted mean of two main variables “Quality of work” and “overall performance” with the correlation and coefficient of determination between them. It appears that both variables have above average weighted mean with 3.69 and 3.61 respectively. Table 9 also represents the correlation between them, with (r=0.94) which is considered as a strong correlation between the variables. Coefficient of determination indicates that %88 of “overall performance” variance is interpreted by “quality of work” according to the supervisors of participants. **Therefore, the third hypothesis which state that “there is significant role of Quality of work in overall performance in the researched private companies” is accepted.**

Table 10. Frequency of commitment

Commitment	state	Freq	%
attendance	regular	173	93.5
	irregular	12	6.49
punctuality	regular	176	95.1
	irregular	10	5.41

Source: prepared by the researchers based on the outcomes of (SPSS) program

Table 10 express that %93.5 of the participants has regular commitment in in terms of attendance and %95.1 of them are regularly punctual. Only %6.49 have irregular attendance and only %5.41 have irregular punctuality.

Table 11. Frequency hiring and discussion.

hiring and discussion	state	Freq	%
Would you hire this student in your organization?	yes	142	76.8
	no	43	23.2
Have you discussed this report with the student?	yes	116	62.7
	no	69	37.3

Source: prepared by the researchers based on the outcomes of (SPSS) program

According to table 11, only %23.2 of the supervisors were answered with “no” when they were asked if they would hire the student they had supervised in their organization, while the majority with percentage %76.8 answered with “yes” to the same question. It seems that %62.7 of the supervisors have discussed the report with the student while %37.3 of them not. **Based on the results, the third hypothesis which stated that” all the supervisors in the private companies in Iraqi Kurdistan Region satisfying with hiring all the students in their organization” is rejected?**

Conclusion and recommendation

The current study aims to evaluate the students who are participating in summer internship program for three months from the perspective of local and international private companies in Kurdistan Region of Iraq. In general, the results of the survey using questionnaire demonstrate that not all the students have the ability to learn and very interested according to their supervisors in their internship experience. In addition, the outcomes illustrate that internship program realize that the level of “Relations to others, judgment, Attitude: application to work and dependability” from the point view of managers are average. The findings, of this research, indicate that the internship program in KRG plays a significant role in developing the interns’ skills and makes them better prepared for future career. The overall results depict that internship programs have an impact on the professional growth and there is significant role of Quality of work in overall performance in the researched private companies.

This study has recommended that the internship program should be more maintained by the universities as well students. The university should focus more on enhancing the skill and knowledge of the students as well as motivating them applying their KSA in the marketplace.

Ethical consideration

The researchers were keen to emphasize the neutrality of the questionnaire by not interfering with the answers of the respondents and giving them the freedom and sufficient time to answer its paragraphs.

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Cybersecurity in the Humanitarian Sector: New Challenges and Solutions

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Abstract:

Non-governmental organizations (NGOs) provide essential support and services to over 1 billion people worldwide, leveraging technology to carry out their activities and manage sensitive data, leveraging technology to carry out their activities and manage sensitive data. For example, social media, messaging apps, and collaboration platforms help humanitarian organizations to communicate and coordinate with their teams, partners, and beneficiaries in real-time. NGOs use mobile data collection tools and geographic information system (GIS) mapping to gain insights into community needs. Drones and remote monitoring technologies aid humanitarian organisations in responding to crises and disasters, especially in hard-to-reach areas. Digital payment systems increase aid distribution efficiency and stimulate local economies. Unfortunately, cyberattacks and information operations aimed at humanitarian and development NGOs are on the rise, with malicious actors relentlessly attacking NGOs in the cyberspace because of the data they hold. In fact, the non-governmental sector is the second most targeted one after IT. In the last three years, cybercriminals and state-sponsored actors have accessed systems and personal records, stolen millions of dollars in donations, conducted surveillance operations, and carried out disinformation campaigns against NGOs - even large organisations like Save the Children, Mercy Corps, and Roots of Peace. These attacks not only endanger lives, but also compromise the trust that is critical to the work of NGOs.

Keyword: Cybersecurity - Humanitarian organizations - Challenges – Solutions-NGOs- Cybercriminals

Commentary

Humanitarian organizations need to collect and process huge quantities of personal data. While digitalization improves the effectiveness of responses and operations, it also raises concerns about the risk of cyberattacks on sensitive information. Earlier this year, a group of unknown hackers breached the systems of the International Committee of the Red Cross (ICRC) and accessed the personal data of vulnerable populations across the world. This high-profile case is a stark reminder that humanitarian organizations face cyber threats.

The sector needs to assess current approaches and find robust solutions to safeguard digital assets. The sector is now exploring the use of digital emblems – digital markers or signals to identify protected assets in cyberspace – to enhance protection measures in adapting to the new realities of working in the digital space (Chen, Christopher, and Alistair, 2020)

As discussed above, an organization like the ICRC establishes its presence and work on the basis of acceptance and the trust that derives from its neutrality, impartiality, and independence, its exclusively humanitarian objectives, and its confidential approach. In this sense, being able to establish bilateral, confidential dialogue with all stakeholders, irrespective of whether they are state or non-state actors, or whether they are accepted as lawful groups or not, is an essential requirement to carrying out a humanitarian mandate. These are the features that shape the dialogue a humanitarian organization needs to have, fundamental and foundational principles that should extend naturally to activities in the cyber realm (Marelli, 2020).

Challenge

Most humanitarian organizations lack the expertise and technical skills to build a resilient digital infrastructure. The leadership of some of the world's more important organizations are so focused on responding to crises that they overlook the need to conduct risk assessments before their data is the target of a breach. In most humanitarian organizations, there is often little to no funding for cybersecurity (Rishi, 2021)

What Can Be Done?

While cybersecurity practices are very common in the private sector, their adoption is not widespread among humanitarian organizations. To build a sustainable resilient digital infrastructure, the following points should not be overlooked.

- **Risk Assessment:** Understanding the spectrum of potential data breaches is very critical to the security of a system. While building a new application or a system, a threat model should be created where each identified threat is matched with mitigation measures.
- **Security Audit:** Security audits should be conducted at regular intervals. An annual security audit is recommended by an external party not associated with the development team.
- **Build Internal Capacity:** Have at least one information security officer within the organization who can monitor the system and call in the external security provider when needed.

- **Secure Security Funding:** It is important to ensure the financing of security of any project, so make sure to include the security budget in the proposal to the donors. Make a comprehensive presentation to the donors on the potential threats and necessary mitigation measures.
- **Contingency Plan:** It is lifesaving if the organization has a contingency plan ready to go for when an incident or breach occurs. All staff within the organization must know who to contact once they detect a security compromise. The security officer or team must have an outlined plan on what to do with the affected infrastructure and what external organization can be contacted for assistance.
- **Improve Communication with Partners:** All the partner organizations must follow the same security protocols. Clear communication between partners can help flag any potential threat that can then be timely solved.
- **Consistent Data Policy:** A consistent and highly secure data protection policy must be adhered at all stages of the project. (Rishi, 2021)

Cybersecurity in the Humanitarian Sector:

Humanitarian organizations have been increasingly using and storing large quantities of data and communications within their digital infrastructure. This quick transformation of information and communication technology (ICT) in the humanitarian landscape has made it a new potential target for cyber-attacks by criminals, terrorists, and authoritative regimes. (Rishi, 2021)

In recent times, coordinated attacks on humanitarian organizations have raised questions about the preparedness of the aid sector in responding to and mitigating risks in cyberspace. In January 2022, a cybersecurity company hired by the ICRC discovered that a server containing information related to the International Red Cross and Red Crescent Movement's Restoring Family Links service was compromised by an unknown group of hackers. This exposed the personal data and information of over 500,000 vulnerable individuals, many of whom were separated from their families due to armed conflict, disasters, and migration. The exposed data included names, locations, and contact information collected by at least 60 National Red Cross and Red Crescent Societies around the world.

This was by no means a unique and isolated incident. In June 2021, hackers launched a phishing attack on humanitarian and development organisations by mimicking the email account of the US Agency for International Development (USAID). Hackers also infiltrated the computer networks of the United Nations in 2019 and in 2021. The main issue is that cybersecurity remains underfunded

and under-prioritised in the aid sector. While demand increases for data-driven approaches, investment in data protection has not kept pace. Large international NGOs have started to invest in inhouse cybersecurity experts and access to technical know-how; however, many of the smaller organizations have less resources and capacities to secure their data (Chen, Christopher, and Alistair, 2020) Developing a cybersecurity strategy. Once a humanitarian organization carries out an in-depth analysis of its cyber-perimeter, based on its status, mandate, and working modalities, it needs to formulate a clear cybersecurity strategy informing its stance in cyberspace as well as its decisions to prioritize investment areas and allocate resources. Such a strategy should set out: 1) the legal protections it needs to seek out; 2) the technical protection to which it is entitled for its data; and 3) the operational dialogue to employ and the stakeholders with whom it needs to engage (Marelli, 2020).

Digital Emblems: Opportunities and Challenges

Under International Humanitarian Law (IHL), the Red Cross, Red Crescent, and the Red Crystal emblems are used to identify and legally protect personnel, units, establishments, and transports in times of armed conflict. Generally, the emblems aim to protect medical services of the armed forces and civilian hospitals in war time. They are used by the National Red Cross and National Red Crescent Societies, the International Federation, and the ICRC.

Cyber-attacks are now a reality in armed conflict. The ICRC is exploring how the red cross, red crescent, and red crystal emblems can be digitalised and used in the cyber realm to cope with this new dynamic. In practice, digital emblems can be used to mark out protected digital assets – for instance, the personal data files of vulnerable populations found on the ICRC servers – to help avoid erroneous targeting, as well as to signify that they enjoy protection under IHL. While there is definite protective value in the use of digital emblems, challenges remain in implementation and doubts exist regarding their effectiveness. At an ICRC Expert Meeting in 2020, it was highlighted that marking an asset with a digital emblem runs the risk of identifying it as a ‘soft target’ to malicious actors, which ironically makes the asset more easily and systematically targeted.

As IHL is only applicable during times of armed conflict, situating digital emblems under its ambit might not necessarily increase its protective value in times of peace and normalcy. Furthermore, the physical emblems were created specifically to protect medical assets; transferring this protection to non-medical assets is problematic as it requires the restructuring of current humanitarian legal frameworks (Chen, Christopher, and Alistair, 2020). **Tackling Challenges in Cyberspace: Lessons from Singapore**

The use of digital emblems shows how the humanitarian sector is trying to enhance its security by adapting to new threats in the digital space. But, more than such piecemeal initiatives, what is required is system-wide investment and reform, specifically with regard to cybersecurity and resilience. To tackle challenges in the digital space, the aid sector can learn from national governments and the private sector that have demonstrated experience in cybersecurity. The Global Cybersecurity Index 2020 ranks Singapore fourth globally and first in the Asia-Pacific region when it comes to cybersecurity. Singapore's Cybersecurity Strategy 2021 lays out key pillars and enablers to strengthen the security and resilience of the nation's digital infrastructure.

There are a few strategies which can be adopted by the humanitarian sector.

Firstly, humanitarian organizations need to build resilient infrastructure. This will require stakeholders to support investment in cybersecurity.

Secondly, humanitarian organizations need to improve in-house capacity to assess, respond to, and mitigate cyber threats. This requires sustained investment in capacity development to help build up a pool of cybersecurity talent and to ensure that research and ideas translate into new cybersecurity products and services.

Thirdly, the sector needs to enhance cyber cooperation with different sectors to create more relevant and effective legal instruments. The idea of a Digital Geneva Convention has been brewing since 2017. The premise is that the Digital Geneva Convention would commit governments to adopt and implement norms to protect civilians on the internet, without introducing restrictions on online content, in times of peace. It aims to protect the humanitarian system through modified legal frameworks that can cope with existing and future realities that will include digital protection. It also pushes for increased collaboration with technology companies. Just as the Fourth Geneva Convention recognized that civilian protection required the active involvement of the Red Cross, protection against cyberattacks requires the active assistance of technology companies (Chen, Christopher, and Alistair, 2020).

An innovative solution - The Cyber Peace Builders Program:

To help them rise to cyberthreats, the CyberPeace Institute, an independent and neutral nongovernmental organization dedicated to ensuring the rights of people to security, dignity and equity in cyberspace, launched the CyberPeace Builders program in July 2021.

The CyberPeace Builders is a network of corporate cybersecurity volunteers supporting NGOs to enhance their cybersecurity posture. Volunteers interact with NGOs via a job board hosted on a

secure platform operated by the Institute. Jobs are co-defined with NGOs and broken down into hourly units. By design, jobs are neither time-sensitive nor time-consuming. They last between 1 and 4 hours. Volunteers can choose the jobs they want to do based on their skills, availability and interest.

Their diverse backgrounds – some have cybersecurity and IT skills, others have legal, communication or training experience – allow tailoring their responses to the NGOs' needs, with services provided to NGOs including:

Pre-incident: awareness training, security planning, vulnerability scanning, etc.

Post-incident services: attack notification, spyware detection, remediation, etc.

Support: legal advice, data protection, awareness comms, IT investments, etc.

This program has ultimately made it easier for many companies to engage their employees in volunteering activities, and it has even been proven to support retention rates (Francesca, 2023).

Whilst the ever-evolving technological landscape poses new challenges to the humanitarian sector, it also provides unprecedented opportunities to improve the efficiency and efficacy of aid delivery. As highlighted by the Cyberpeace Builders Program, digital solutions paired with expert support and knowledge can enhance crisis preparedness and disaster response. Looking ahead, it will be crucial to strengthen collaborative approaches and partnerships to safeguard humanitarian organisations from cyberattacks and allow them to continue harnessing digital tools and solutions to deliver on their important missions (Francesca, 2023).

Humanitarian organizations need to constantly innovate and invest in new solutions to stay ahead of the curve.

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Entrepreneurial Leadership: A Systematic Literature Review

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Abstract:

This study aimed to supply an inventory framework for existing research in this field. Provide a systematic review of the main characteristics, dimensions taken by researchers, and what the literature focused on in this process, highlighting and main gaps. To this end, the researchers conducted an in-depth literature review to assess the situations and statuses of entrepreneurial leadership styles among the concerned community. Findings indicated that the characteristics and features such as able to motivate, risk taking, and achievement oriented were mostly common in previous studies while the dimensions were innovation, proactivity, and risk-taking in majority of studies. The focus of studies vary depending on the conceptualization of entrepreneurial leadership to its relations with other dynamics in organizations from macro to micro. Furthermore, 47 articles have been taken in this study in order to attain main strategies of the article. Ultimately, this effort could open the way as the first point for future research by combining and collecting the findings.

Keywords: Entrepreneurial Leadership, Systematic Review, Dimensions.

Introduction

Business climate factors are transferring rapidly, requiring organizations to adapt and cope with the sharp-promote in the economy, technology, and opportunities. In this regard, contemporary business managers who hold only leadership or entrepreneurial traits are not adequate to sustainably compete in the current business streams (Pauceanu et al., 2021). Likewise, Esmer & Dayi (2018) stated that only processing leadership traits or entrepreneurial traits are not enough to implement managerial opportunism and survive in the rapidly changing of environmental factors.

Thus, managers must have both entrepreneurial and leadership features to create, seize opportunities, and take risks to achieve entrepreneurial advantage for the organization. Furthermore, entrepreneurial leadership is considered as the definitive factor for organizations in the recent business climate (Leitch and Harrison, 2018). Accordingly, entrepreneurial leadership is stated as the start point for organizational survival and success. Besides, the occurrence of entrepreneurial

leadership in various aspects, such as small businesses, start-up businesses, large enterprises, and public administration contexts (Kuratko et al., 2011), adds importance to this study and further motivates scholars to investigate the critical dimensions of entrepreneurial leadership.

Studies over the past two decades have provided important information on entrepreneurial leadership and its area association (Miller & Briton, 2011; Rauch et al., 2009). In particular, since the mid-1980s, a considerable amount of literature has been published on entrepreneurial leadership aims and its influence on the opportunism behavior of the firm. Although studies have recognized entrepreneurial leadership factors influencing opportunism process in the firm (Conner and Prahalad, 1996; Hill, 1990; Chen et al., 1998), research has yet to investigate the effect of entrepreneurial leadership on organizational overall performance as the critical issues of the organization.

The research data in this study are drawn from sixty-two sources related to the determination process of entrepreneurial leadership's dimension. By employing these sources, this study attempts to illuminate the characteristics, dimensions, and focusing areas of entrepreneurial leadership.

The main arena to take this study in order to concentrates on the selected criteria and previous studies as a subject and method of entrepreneurial leadership which examines the terms of characteristics, its dimensions and focusing area. Then main findings of current study were presented and explained in literature review part. Finally the findings were discussed and exhibited in discussion and conclusion part. It was expected examined studies within the context of current study would give us a better understanding of entrepreneurial leaders' characteristics and main dimensions in current business conditions and knowledge about the main effect of entrepreneurship activities. Furthermore, to the best of our knowledge, there is a lack of systematic literature review made comprehensive and adequate preparation within various views and several perspectives to provide a complete image of entrepreneurial leadership and its dimensions. Hence, this research aims to implement and cover this scientific gap, which provides a review that adds value by combining numerous un-associated articles from different practices, theoretical frameworks from several disciplines, and published webs. In addition, this article opens space for the creative opportunity of related knowledge for future research.

Method

Based on the systematic literature review, this study aimed to produce an in-depth systematic review of entrepreneurial leadership with associated concepts. The literature's systematic review is centric and focuses on academic issues, which can be dependable for any research that gives researchers a high ability to map and possibly assess the updated body of knowledge (Harrison & Burnard, 2019).

Also, to determine the research questions, realize the gap that aimed to fulfill (Tranfield et al., 2003). As such, the study depends on inclusion and exclusion criteria for the studies to be reviewed logically and specific by better available proofs and evidence (Lacerda et al., 2019).

The inclusion criteria of the research are based on:

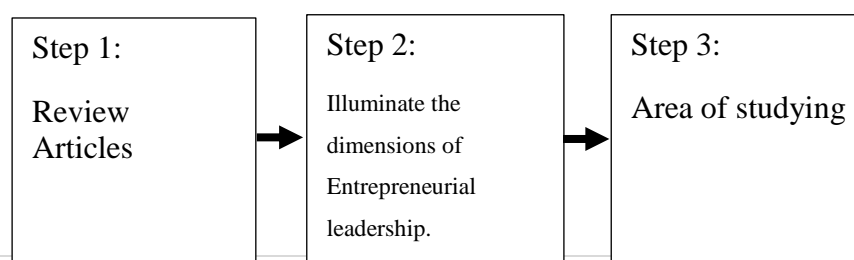
- Studies that are relevant to the research.
- Studies should be oriented with an analysis of entrepreneurial leadership, main dimensions, and significant characteristics.
- Studies matched the concept of entrepreneurial leadership with different criteria.
- Studies should be in English.
- Studies carried out in scientific journals and databases of Scopus, Social Science Citation Index, Web of Science or having impact factors journals or books.

The exclusion criteria of the research are based on:

- Studies focused on other kinds of entrepreneurship styles.
- Unreliability studies (i. e. not included in databases or without impact factor index)
- Exclude studies of objectives of the study.

Furthermore, determining and selecting the studies and research required generic expressions among “entrepreneurial” and “leadership,” which applied to the research topic and keywords. Moreover, for a proper systematic review of the literature, it’s paramount to determine and define specific items of the study to the fullest that provide value to the subject of the study (Linde & Willich, 2003). We concentrated mainly on studies that deeply embraced the conceptualization of the construct of entrepreneurial leadership to explain the responses to the research question, “What are the main dimensions of entrepreneurial leadership?”. The question aims to explain the dilemma of main dimensions among literature and the standard dimensions among studies. Hence, dimensions of innovation, creativity, proactivity, vision, risk-taking, and decision-making are the critical components of entrepreneurial leadership.

On the other hand, this review taken place through regular steps in as shown in the given diagram below:



LITERATURE REVIEW

Entrepreneurship

The literature contains various expressions and statutes of entrepreneurial leadership statements. Moreover, many scholars explained that entrepreneurial leadership exists as a combination between “leadership ”and “entrepreneurship,” which has become a crucial statute and a desirable topic in literature (Cai et al., 2018; Renko et al., 2013; Pauceanu et al., 2021).

More importantly, Zahra and Mike (2016) give evidence that entrepreneurship is an intersection junction of the leader and the opportunity within a highly unpredictable business environment, arguing that entrepreneurship is a conclusive way to economic growth and technological development of social institutions. According to Leitch et al. (2012), entrepreneurship is the tendency that is considered the powerful driving force behind organizational development, success, and achievements. In contrast, entrepreneurial leadership has been reviewed as the central concept in economics, labor, organizational capital, finance, and other era related to the organization’s current and future existence. Additionally, entrepreneurial leadership is essential for understanding economic development (Weissbrod, 2019). On the other hand, entrepreneurship can be described as utilizing various facets and circumstances in private (Simba & Thai, 2018) and public institutions according to social and cultural contexts (Kuratko et al., 2011).

Suriyankietkaew (2019) stated that entrepreneurship is managing the firm’s suitability through creative analysis. For his part, Gartner (1990) concluded that entrepreneurship is a global phenomenon that demonstrate the strength of a new sector of business with various components towards the inner aims of entrepreneurs to set-up new creations and thought. On the other hand, an entrepreneur is a visionary person with wisdom who can access and assess the opportunities and take risks toward success within various markets (Simba & Thai, 2018). In addition, in their study, Shane and Venkataraman (2000) defined entrepreneurship as the mechanism of discovering a profitable opportunity and exploiting it through a creative approach and high performance.

Leadership

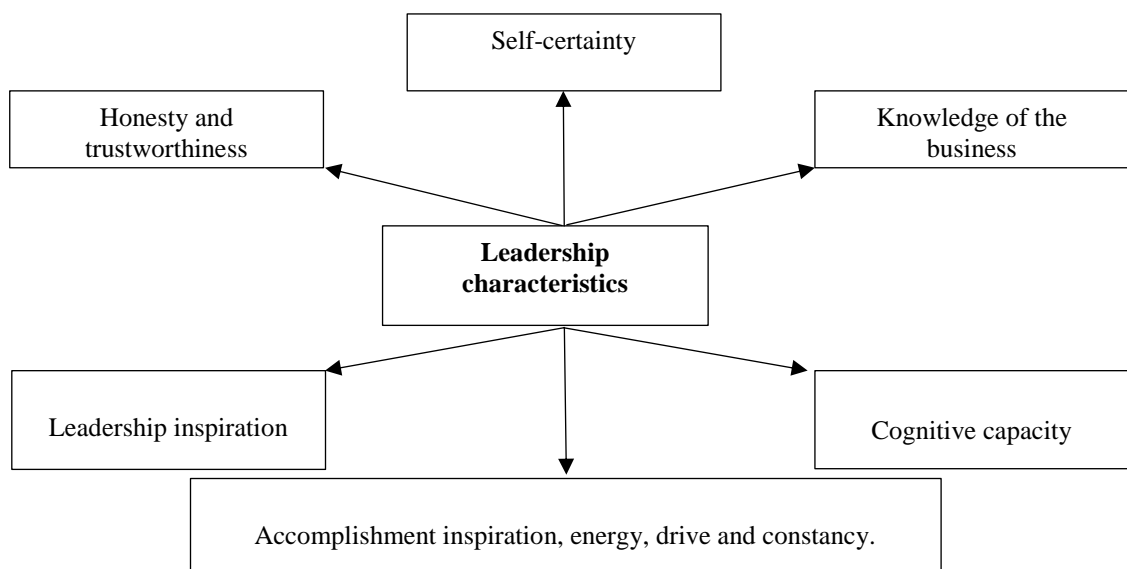
Leadership is the influencing process (Renko et al., 2013; Cai et al., 2013). More deeply, (Lin and McDonough, 2011; Stone et al., 2004; Antonakis and Day, 2017) agreed that leadership is basically about the social influence approach. As a result, the leadership process focuses on the effects of leaders on the activities and behaviors of people pursuing goals.

Furthermore, Harrison et al. (2018) demonstrates leaders’ comprehensive work in three main anchors and missions. First, establish and build up vision directions and view the future’s collective picture. Second, connecting and jointing with individuals which alliances group of people towards

their aims—third, concentrating and motivating on practical outcomes and from various introductions and definitions of the concept of leadership are underlined in the literature. At the same time, there is a mutual point and common thought which focuses that leadership is the impact approach on a team or group of people and orienting them in the right direction through utilizing the leader’s inner qualities and emotions to implement organizational aims (Bettis, & Hitt, 1995; Fontana & Musa, 2017).

Nonetheless, Pauceanu et al. (2021); Luthans (2002); Macik-Frey et al. (2009) elaborate that only one feature or element alone is not able to ensure the success of the leadership process, which is proof of the argument that influential leaders build relations and traits to motivate others through major characteristics as shown in Figure 1.

Figure 1: Leadership characteristics



Sources: (Pauceanu et al., 2021; Luthans, 2002; Macik-Frey et al., 2009)

Entrepreneurial Leadership

Noteworthiness, The process of entrepreneurship is associated and overlapped with organizational activities such as; planning, scanning, and decision-making (Lumpkin et al., 2013; Lumpkin et al., 2009).

These all aim to sustain and survive opportunism. The literature provides various definitions for entrepreneurial leadership per their objectives and the organizational context. Ireland et al., (2003) stated entrepreneurial leadership as opportunity-seeking behaviour. The literature on entrepreneurial leadership is still in its infancy and requires more proof. Meanwhile, the studies have become widely emerged in the literature quantitatively and qualitatively to accomplish business-associated

obstacles and challenges through adapting various dimensions to characterize the theme of entrepreneurial leadership in a variety of organizational fields (Lacerda et al., 2019; Voss et al., 2005), but Furthermore, the main dimensions of innovative proactivity and risk-taking of entrepreneurial leadership concept have gain more interesting and attention among studies (Dwi Widayani et al., 2020; Zyl & Mathur, 2007; Lumpkin & Dess 1996; Dess et al., 2011; Tarabishy et al., 2005).

Success in seizing opportunities depends on efficient leadership skills to a large extent (Esmer & Dayi 2018), especially within highly unpredictable and unstable business environments. Thus, scholars such as Alvarez & Busenitz (2001) consider entrepreneurial leadership as the efficient skill of leadership that includes several actions to seize and obtain benefits from the opportunities through innovativeness at the organizational level. Cognisant of this, scholars have various views on entrepreneurial leadership in the field of study.

As such, Kuru (2016) explained that entrepreneurship emerged as blending from leadership capabilities and entrepreneurial behaviours towards successful opportunism. Confirming with that, Currie et al. (2008) stated that entrepreneurial leadership is the vital capacity to recognize and capture the opportunities. Additionally, Harrison et al., (2016) stated that entrepreneurial leadership is completed with a leader's ability to address the opportunity within obstacles of conditions to developing economic perspective; this is in line with (Okpara's 2011) studies. On the other hand, there are agreement views among Yang et al., 2019; Mcgrath & MacMillan, 2000) agreed that entrepreneurial leadership influences leaders' behavior and explores value through initiating opportunities, mobilizing resources, and building commitment. Consistently, Gupta et al., (2004) defined entrepreneurial leadership as a unique type of leadership responsible for creating visions through participating the entire organization towards exploration and exploitation opportunities.

Importance of Entrepreneurial Leadership

Entrepreneurial leadership strongly impacts and influences entrepreneurial actions derived from intentions through creating various explanatory opportunities (Chen et al., 1998). Furthermore, Currie et al. (2008) proved that the importance of this process emerges in the first step of identifying the opportunities that organizations are looking for, arguing that entrepreneurial leadership enables identifying the risk that must be taken as the first step in the opportunism process. Likewise, entrepreneurial actions have become extremely important in today's business era, as they support organizations to create and achieve organizational goals as a predictor of firm performance (Suriyankietkaew, 2019).

At the expense of others, combining leadership and entrepreneurial traits has been extremely important as the critical capability that motivates teams towards better outcomes attracts and engages them in collaborative creativity. Furthermore, entrepreneurial leadership plays a credible role in the global environment of business, especially in increasing competitive rates, complicated forecasting, disappearing industry lines, and abundance of new business (Bettis & Hitts, 1995; Fontana & Musa, 2017). Otherwise, Leitch et al. (2012) explained the importance of entrepreneurial leadership when it participates in social and institutional capital cohesion.

On the other hand, the vital essence is under the dimensions encompassing entrepreneurial leadership, which is different among literature (Dess et al., 2011; Jones & Crompton, 2009; Kuratko, 2007; Dwi Widayani et al., 2020; Esmer & Dayi, 2018). After all, Entrepreneurial leadership is the capital and infrastructure through fulfilling opportunism's current and future needs (McCallum and Connell, 2009).

Characteristics of Entrepreneurial Leadership

The entrepreneurial leadership field is a relatively young area of study among literature; it is still in progress. Predominantly, entrepreneurial leadership, which performs the main characteristics of entrepreneurs and leaders, has manifested as a new leadership style in the literature on entrepreneurship. Many researchers have considered these characteristics critical to organizational survival and performance (Fernald et al., 2005; Surie, 2004). Fundamentally, Gupta et al., (2004) believed that leaders in current times should be characterized by high entrepreneurship traits in their opportunism process. More specifically, the importance of the entrepreneurial leadership characteristics' has become notably perceived and highly manifesting among literature as per the significant impacts of entrepreneurial leadership on the organizational overall value chain process in the marketplace (Mitchell et al., 2004).

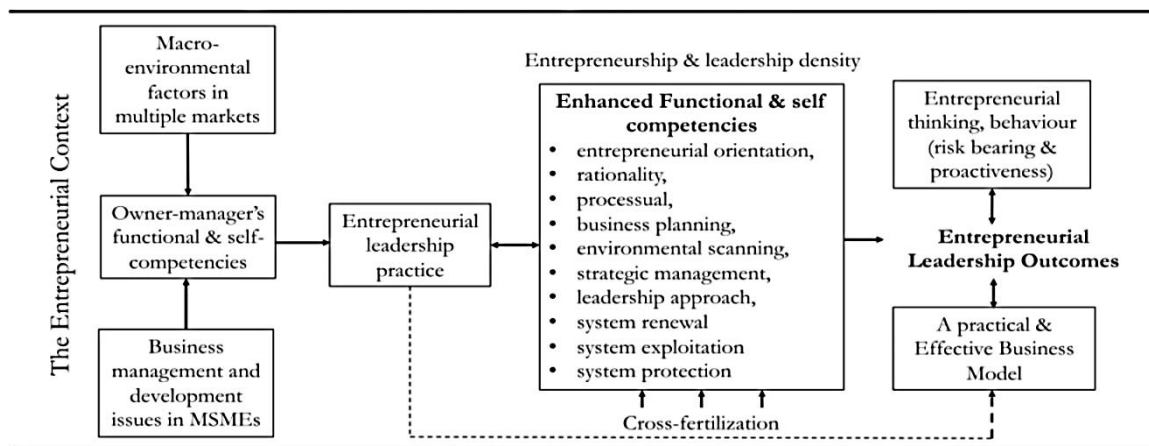
However, some studies in the literature called for various characteristics, but the extraordinary characteristic of entrepreneurial leadership is the process of opportunism, which encourages the subordinates to exploit an opportunity; and be creative in new business processes (Gupta et al., 2004; Cai et al., 2018). This process has not been presented in the descriptive models that indicate the inability to comfort others (Mccallum and O' Connell, 2008; Hunter and Lean, 2014).

Hence, our article contributes to the research by fulfilling the literature gap by adding a characteristic that has not been mentioned clearly in the literature on entrepreneurial leadership. Consistently, Renko et al. (2013) Entrepreneurial leadership is characterized by attributes that are interrelated to each other and intertwined roles in performing, which separated it from other leadership styles. Several studies highlighted the characteristics that belong to entrepreneurial leadership. Ates et al.

(2013) mentioned that entrepreneurial leadership holds managerial characteristics for the adequate performance of the whole organization, arguing that entrepreneurial leadership's tendency carefully undermines the firm's development and growth.

Also, to link management activities and practices to the firm's capabilities. In the same line, Simba and Thai (2019) explained that the feature of entrepreneurial leadership emerges through the outcomes of practices and functions that are related to various management tasks and multiple operations of the organization, combining them all to business effective's development as explained in Figure 2.

Figure 2: Characteristics of the outputs of the entrepreneurial leadership



Source: Simba & Thai, (2018, p. 10)

Furthermore, Fuller (2006) added that entrepreneurial leadership is multi-roles as holding various tasks through taking charge of operational activities and strategic objectives in the firm. Additionally, according to Fernald et al., (2005) and the research of the Young Entrepreneur Council, they have clarified the five most significant features of entrepreneurial leadership out of 12 as below:

1. Vision: dreaming and imagining are the fundamental characteristics of leaders to create a new era. Likewise, developing an organization's deserved future is the initial character of leaders within opportunity-oriented tasks in formulization and determines vision and mission. Similarly, Harrison et al., (2016) considered that vision is the crucial attribute of entrepreneurial leadership to face the upcoming obstacles.
2. Decisiveness: the role of developing and determining superior strategies that are profitable for the firm.
3. Consciousness: the entrepreneurial leaders should be aware of changes and utilize their qualities sustainably.

4. Concentrate: the prevailing principles of entrepreneurial leadership to focus on effective implementation of the labour.
5. Opportunity-oriented and opportunity-interpretation.

Theoretically, Galloway et al. (2015:p.4) have identified the characteristics of five main features that are related to the emotional intelligence of entrepreneurial leadership, which adapted from Nixon et al. (2012:12), namely Goleman’s five features of emotional intelligence in the context of entrepreneurship, which including empathy, self-regular, self-aware, social skills, and motivated as explained in table 1.

Table 1: Goleman’s five main features of Entrepreneurs’ as emotional intelligence

	Features	Considerations
1	Empathy	Considered as the capability of understanding the emotions and felling of others.
2	Self-regular	Stated as ability to think before reactions and reorganize moods.
3	Self-aware	Ability to realize and understand self-emotions and moods and recognize how others are influenced.
4	Social skills	Ability to develop and establish needed relations and manage them with others
5	Motivated	Ability to strive for the aims with total energy.

Source: Galloway et al., (2015:4)

In contrast, Pauceanu et al. (2021) explained entrepreneurial leadership as a conception that emerges and grows through a combination of the possibility of leadership and the essence of entrepreneurship. Since then, it has been given as the high adventure characteristics of leaders to obtain opportunities and influence individuals (Ma and Jiang, 2018). Consequently, at that point, the researchers are collecting the mutual characteristics to compare the leadership and entrepreneurial behaviors in table 2. Additionally, in table number 4, the researchers collected the mutual characteristics that joint to both leadership and entrepreneurship can move, achievement-oriented, creative, flexible, patient, persistent, risk-taking, and visionary, which adapted from Pauceau et al. (2021) that have been taken by Ferland et al., (2005). Besides the investigation of Pauceau and Ferland, and after surveying the literature, the researchers also added “positive” as a new characteristic of entrepreneurship to the table that has been explored in articles of Zhao et al., 2010; Esmer and Dayi, 2018; Hunter and Lean, 2014; Wilson et al., 2007; Young Entrepreneur Council, 2013).

Table 2: Comparing the leadership and entrepreneurial characteristics.

Characteristics of entrepreneurship	Characteristics of leadership
Able to move (3)	Able to communicate (12)
Achievement-oriented (15)	Able to listen (9)
Autonomous (6)	Able to motivate (15)
Creative (10)	Able to work with others (7)
Flexible (2)	Achievement-oriented (7)
Highly tolerance of ambiguity (5)	Charismatic (13)
Passionate (3)	Committed to mission (7)
Patient (1)	Creative (5)
Persist (3)	Flexible (6)
Risk-taking (24)	Honest and sound (12)
Visionary (6)	Patient (3)
	Persistent
	Risk-taking (6)
	Strategic thinking (5)
	Trustworthy (12)
	Visionary (29)
	Positive (6)

Source: Ferland, et al., 2005; Pauceau et al., 2021; Researchers

Table 3: Mutual characteristics

Characteristics	Entrepreneurship	Leadership
Able to motivate	3	15
Achievement oriented	15	7
Creative	10	5
Patient	1	3
Persistent	3	2
Risk-taking	24	6
Visionary	6	29

Source: Ferland, et al. (2005)

Dimensions of Entrepreneurial Leadership

In fact, determining the dimensions of entrepreneurial leadership statutes is one of the most critical aims for scholars in the literature. Also, it is an essential task of researchers to figure out the real purpose of their articles. Consequently, this research will review all the dimensions according to literature design to provide a widely thought and actual image of the dimensions of entrepreneurial leadership.

Importantly, dimensions are sometimes overlapped among scholars' in specific sectors and tended to be comprehensive. There are different ideations and conceptions of the dimensions of entrepreneurial leadership (Lumpkin & Dess 1996). Nevertheless, the dimensions of entrepreneurship are much-explored in literature. They have been highlighted as the leadership

contexts, significant influences, and particular roles in different aspects of an organization's performance and productivity, especially in opportunity-focused strategies (Miller & Briton, 2011; Green et al., 2008).

Otherwise, the difference in these dimensions among literature came from different situations. As such, the size of a firm affects the components of entrepreneurial leadership. While small companies concentrate on the capacity of their employees and community aspects in their opportunity tasks (Sageder et al., 2018; Marques et al., 2014), big size firms focus on the larger contexts and circumstances to establish their activities, including their character in the market through diversity, unstable and volatile environmental factors (Block and Wagner, 2014; Baron and Tang, 2011), which have been a focal point to many researchers in the last few decades.

On the other hand, each of the researchers in the literature measured the dimensions of entrepreneurial leadership separately for different purposes. Each of these dimensions participates in the rate of opportunism and contributes to an organization's behavior, causing divergence in the literature on the manifestation of entrepreneurial leadership (Baron and Tang, 2011; Miller and Briton, 2011). Currie et al. (2008) examined the paradox of the English public sector using three primary dimensions: innovativeness, proactivity, and risk-taking. Similarly, Lacerda et al. (2019) defined these dimensions by adding two more components (autonomy and competitive aggressiveness) adapted from Miller (2011). This technique helped gauge entrepreneurship by clearly reflecting entrepreneurial orientations on an organization's future aspects. Otherwise, the study of Byrne (2013) is underpinned by five dimensions of vision, strategic vision, problem-solving, decision making, risk-taking, and power of negotiating to elaborate the entrepreneurial leadership model as the pathway in higher education. Notably, after surveying and reviewing the related studies on the dimensions of entrepreneurial leadership in the literature, some are overlapping among the terms that refer to the dimensions of entrepreneurial leadership under the determination of researcher objectives, such as (variables), (characteristics), (activities), and (features). In a sense, we included the inconsistency dimensions encompassing 11 categories. Table 4 shows the process of matching determined and observed dimensions with the authors in the literature. As well as the rate of dimensions differ among literature based on the total number of determined articles.

Table 4: Construction of dimensions of EL within literature

Dimensions of Entrepreneurial Leadership	The sources	N of Studies	The rates
Innovativeness Proactivity Risk-Taking	(Covin & Slevin, 1998; George & Marino 2011; Covin, Green and Sliven 2006; Dess et al., 2011; Kuratko, 2007; Darling & Beebe, 2007; Dwi Widayani et al., 2020; Jagdale and Bhola, 2014; Kenneth et al., 2013 ; Ashley & Gita, 2007; Mateus et al., 2019; and Zyl & Mathur, 2007; Tarabishy et al., 2005; Zyl and Manthur, 2007; Widyan et al., 2020; Currie et al., 2008; Morris and Jones:1999; Chen, 2007; Ireland, et al., 2006)	19	40.426 %
Innovativeness, Creativity Risk-Taking	(Cai et al., 2018; Abdalla and Nakagawa, 2022; Bagheri, and Pihie, 2011)	3	6.383 %
Visionary Opportunity Seeking Proactivity Risk-Taking	(Sawaeen and Mohd, 2020). Moreover, Becherer et al., 2008 stated that the critical factors and characteristics are the main dimensions of the entrepreneurial leadership process in the organization	2	4.255 %
Innovation Opportunity-Oriented, Proactivity Risk-Taking Strategic Factors	(Schmelter, et al., 2010; Shafique and Kalyar, 2018)	2	4.255 %
Autonomy Innovativeness Taking Risks Pro-Activeness, Competitive Aggressiveness	(Lumpkin and Dess, 1996; Miller, 1983; Lumpki et al., 2009; Li et al., 2009). Again, both (Kollmann and Stokman 2010; took the exact dimensions of the effects of entrepreneurial orientating as a function of the leadership on exploratory innovation and seized opportunities as well, in the specific type of SMEs firms, which is an adolescent organization. Meanwhile, both Eresia-Eke et al., (2019, p. 2), and Dess & Lumpkin (2005, p. 148) determined these dimensions as the indicator of the orientation role of the leaders in the marketplace to exploratory and exploitative tasks as a prediction of upcoming opportunities	7	14.893 %
Visionary Problem-Solving Decision-Making Risk-Taking Strategic Policies	(Yang, Pu & Guan, 2019; Tarabishy et al., 2005; Pauceau et al., 2021; Ireland et al., 2003; Hussain & Li, 2022). Ferland et al. (2005) also stated that strategic initiatives achieve long-term plans per the organizational leadership's strategic policies.	6	12.765 %

Note: Total examined studies are 48.

Table 4 (Continued)

Dimensions of Entrepreneurial Leadership	The sources	N of Studies	The rates
Vision Innovation Creation Decision Making Organizational Culture	The study of Coliser et al. (2004), which is aimed to compare reviews of entrepreneurship and leadership, admits that there is an overlap with the study of Flamholtz (2011, p.23) in dimensions of vision, innovation, and creativity. The second one added organizational culture to the context of entrepreneurship in overseeing the development and change	2	4.255 %
Strategic Factors Communicative Factors Personal Factors Motivational Factors	Hejazi et al., 2012	1	2.127 %
Innovation Vision Risk-Making Decision-Taking	(D'intino et al., 2008:41; Serling 1992:13)	2	4.255 %
Proactivity Innovativeness Risk-taking Cast including Enactment Building Commitment and Specifying Limits	Bagheri and Pihie, 2011; Gupta et al., 2004; Swiercz and Lydon, 2002)	3	6.382 %

Note: Total examined studies are 47.

Focus of the Articles

Twelve studies were examined and analysed to address the focused area of entrepreneurial leadership that can be summarized in an inclusive view (table number 5). According to the studies, various fields have been focused on different variables. Unsurprisingly, there is a general view concerning the significant role of entrepreneurial leadership in the current and long-term actions and processes of organizational survival.

Table 5: Focuses area of articles

Name of Author	Type of study	Focusing area
Ewald et al. (2015)	Conceptual	The study reviews the consistent entrepreneurship journey through emotional and instrumental approaches. The dynamic approach uses a high degree of social legitimacy, whereas the instrumental approach requires a low degree of legitimacy. Additionally, sustainable entrepreneurship faces the law of social legitimacy.
Lacerda et al. (2019)	Analysed	Lacerda et al. analyses 17 studies that focus on EO in a non-profit context and the main factors of manifestation of EO. He concluded that adopting EO behavior in non-profit organizations enhances entrepreneurial tasks, managerial issues, and strategic decisions.
Bagheri and Pihie (2010)	Empirical	This study focuses on family impacts in developing entrepreneurial leadership capabilities and talents among university students.
Carpenter (2012)	Empirical	This study examines the main attributes that belong to entrepreneurial leadership, which is determined as opportunity oriented, visionary, master strategic.
Chen (2007)	Empirical	This article adapts dimensions of innovation, proactivity, and risk taking to explain the entrepreneurial leadership and variations and dissimilarity amongst literature about the number and type of those dimensions.

Table 5 (Continued)

Name of Author	Type of study	Research area
Choi (2009)	Conceptual	This conceptual article discusses the role of entrepreneurial leadership in global competitiveness, and it suggests that obvious and constant vision is the essence in practices of entrepreneurial leadership to groundbreaking -as mentioned in the article- the competitiveness in global business
Cogliser and Brigham (2004)	Comparative Review	The main object of this article is the comparison review of the concepts of entrepreneurship and leadership. Explained that both entrepreneurship and leader are intersecting and overlap in four fields of influence, creation, innovation, planning, and vision
Coyle (2014)	Empirical	This study demonstrates entrepreneurial leadership's influences in conforming to and sharing the entrepreneurial culture of universities. The study also focuses on the positive and beneficial implications of this culture to universities through five sectors; strategic commutations, connecting with day-to-day roles of staff, creation, HR policies, and sharing of entrepreneurial value among leaders and staff.
Freeman (2014)	Conceptual	This research studies entrepreneurial leadership as the process which consists of six steps: new business idea, setting validity vision, setting team, executing the model to creation, and changing the circumstance.
Currie et al., (2008)	Empirical	This study concentrates on the public sector and explains the perception of three axes: how to manage various stakeholders' issues, the capability to determine and utilize opportunities in the public sector as an essential part of entrepreneurial function, and the required skills for managing political factors.
Hoang et al., (2022)	Empirical	This study examines the role of entrepreneurial leadership on the employee's innovative behavior in an ethical matter. The study investigates 178 small and medium-sized hotels. The study concluded that entrepreneurial leadership significantly impacts innovation through the motivation related to inner behaviour.
Dixit et al., (2022)	Empirical	This article shows the real impact of social entrepreneurial leadership on women empowerment conditions and the benchmarking process. This study determined seven themes for exploring this impact: financial independence, autonomy, self-confidence, mobility, innovation, and creativity. The result explained that social entrepreneurial leadership significantly influences women empowerment through benchmarking.
Leitch et al., (2012)	Conceptual	The study entails evolution and development of entrepreneurial leadership as social process starting from small entrepreneurial firms, taking in to account the real role of social resources in this process.

Finding and Discussion

Findings: This study separately focuses on entrepreneurship and leadership to show the whole perception of these two concepts, which eventually become entrepreneurial leadership. Findings of the review explain that the dimensions of entrepreneurial leadership have been demonstrated through several articles; dimensions such as creation, innovation, risk-taking, and proactivity, visionary have been determined and identified from the review. More specifically, this review concluded that the dimensions of innovation, proactivity, and risk-taking had been taken by the vast majority of articles which is 19 articles out of 47 articles. Consequently, these dimensions are considered very strong, if not deterministic, factors encompassing entrepreneurial leadership. Meanwhile, one key finding

of this review is that researchers share mutual characteristics and features. In other words, some of the various characteristics of entrepreneurial leadership in literature have been reviewed.

This review also resulted prime focus of the research with different subjects, which state that entrepreneurial leadership is affected by other factors and will affect other fields of the organization. In contrast, some studies focus on the implications of entrepreneurial practices and activities on organizational aspects.

Discussion: Entrepreneurial leadership is a sector that is increasingly gaining attention from researchers. Furthermore, it has been one of the most attractive and salient topics in literature following the increased rates of papers, publications, and research on this subject. To the best of our knowledge, the current review is considered to add value to the entrepreneurial leadership literature according to the table number 4 and 5. It is based on the contributions and suggestions of many earlier research studies that have been conducted on entrepreneurial leadership and its impacts on various fields. As explained that most of the investigated articles have taken three dimensions to shape the concept of entrepreneurial leadership this review enriches the perception and understanding of entrepreneurial leadership by also highlighting the scope of entrepreneurial leadership dimensions, characteristics, and, accordingly, the overall business implications of entrepreneurial leadership have influenced.

Limitations and Suggestions for Future Research

A team of researchers neglected some of influencing dimensions in their criteria which have been selected by others that caused to overlap among those dimensions in this field. This has been crucial of the legitimacy process of entrepreneurship. From this view, future studies could examine the specific dimensions according to the requirements of their purpose rather than randomly. Moreover, researchers should test how entrepreneurial leaders be ready for opportunism process in their organizations in accordance to the provided dimensions and characteristics. More logically, firms should eliminate the over-tasks that may damage seizing opportunities within the current organizational resources (Ieland et al., 2003: p. 16).

Accordingly, future studies must deeply investigate the core role of each task of entrepreneurial leadership in opportunism process. More generally, as the leaders are images that represent the entire organizational activities and steer other employees to their performance under uncertain environment (Leitch & Harrison 2018: p. 12). In addition, to bridge the gaps as a term of research methodology, future research must have further focused on vacuum area. A few research investigated leader's image when they performed entrepreneurially, to logically investigate the influence of leaders on individuals, group, and teams in their activities. Therefore, the effects and images that remain in employee minds through their practices with entrepreneurial leaders should

be explored by future studies. Lastly, usually the majority of studies discussed entrepreneurial leadership as the seizing process towards opportunities and providing sustainable labour regardless of the advanced impacts on the social aspects (Lumpkin et al., 2013; Zahra and Mike, 2016), and governmental benefits that could lead to further prosperity. Thus, future studies should be entailed how economic and financial crisis, organizational issues, and sustainable development can be changed through implications of entrepreneurial leadership.

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The Extent Practiced Smart Leadership by The Heads of Scientific Departments and Its Role in The Job Performance of Teachers: An Analytical Study from Opinions of a Sample of Teachers in The Scientific Departments at Salahaddin University, Erbil

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Abstract:

The research seeks to find out the availability of smart leadership practices among the heads of scientific departments in the faculties of Salahaddin University, Erbil, from the point of view of a sample of faculty members, as well as to identify the role of smart leadership in its dimensions (emotional intelligence, spiritual intelligence, and rational intelligence) in the job performance of teachers in its fields (scientific research, teaching performance, university and community service, behaviors). In order to achieve the objectives of the research, a questionnaire was designed and distributed to the research sample consisting of 338 teachers to measure the nature of the relationship and the influence between the two variables using statistical methods for social sciences (SPSS). It was relied upon to analyze and test research hypotheses that stipulate the existence of smart driving practices in addition to the existence of a relationship and influence between the dimensions of smart driving and the job performance of teachers together and individually, and one of the most prominent results of the research is the There is a positive relationship and effect between the dimensions of smart leadership and the job performance of teachers at the macro and micro levels. Among the most prominent recommendations are to increase interest in scientific research and participation in scientific conferences to serve the community.

Keywords: Smart leadership, Job performance, Salahaddin University / Erbil.

Introduction

Universities are among the most important institutions that play an active and important role in the development process as an organizational, scientific, and academic structure that brings about more processes of social and economic change in society by providing its various sectors with qualified, trained, and equipped faculty members with the latest knowledge, and this depends on the efficiency and effectiveness of the performance of faculty members. It is the main engine that contributes to an effective and essential role in the university reaching its goal, as well as its responsibility in achieving the bulk of the goals of higher education. especially with regard to achieving the building of university youth. Therefore, it requires the administration of colleges and universities to pay

constant attention to their job performance, improve it, and develop it. On the other hand, today the world is witnessing rapid changes in various economic, technical, and social fields, including the revolution in knowledge, information, and communication technology. As organizations are facing great challenges that require innovation and response to the requirements of change to ensure survival and competition, the need has increased to adopt modern trends in leadership that enable From exploiting opportunities and investing them with the risks that this contains to enable organizations to achieve sustainable competitiveness, and confirms (Mohammadib & Mazdai: 2012: 83) The absence of an influential leader is clearly evident today, as an active leader who can succeed in the past business environment may not succeed in the present business environment. Current circumstances and situations have changed in recent decades, and leaders have not succeeded in adapting to these changes. Therefore, there is an urgent need for smart and creative leaders because it is not possible to practice work according to the old rules. Careers for faculty members in the faculties of Salahaddin University, Erbil.

1.Methodology

1.1Research problem

The problem of the study lies in knowing the level of job performance among faculty members in the faculties of Salah al-Din University, Erbil, because of its importance, as it is the final output of the efforts of the organization. Linking the success and failure of the university to the job performance of faculty members, as well as the issuance of the national classification for Iraqi universities and the universities of the Kurdistan Region imposed on universities, increases interest in job performance in order to reach advanced positions, if not the first. On the other hand, smart leadership is considered one of the modern leadership patterns that have attracted the attention of writers and researchers in the field of management thought, due to its great role in creating, sustaining, and inspiring the vision and applying this vision in partnership with the team, and its contribution to solving many of the problems left by the industrial era in the world, and this new style of leadership helps to solve the huge problems, whether economic, political, technological, and others that we face today.

Accordingly, the research problem can be formulated through the following questions

1. What is the extent to which the heads of scientific departments in the colleges of Salahaddin University practice smart leadership?
2. What is the level of job performance areas for faculty members in the faculties of Salahaddin University, Erbil?
3. Is there a relationship and effect between smart driving and job performance?

1.2 Importance of research:

The research gains academic importance in dealing with two important variables in the environment of university organizations, which are represented by both smart leadership and job performance. Its field aspect is that it has taken the university as a field and a field of research, and therefore its importance stems from its importance to society. The researched university can also benefit from the current research results by enhancing the level of its practices for smart leadership and identifying its role in achieving the job performance of faculty members in the faculties of Salahaddin University, Erbil

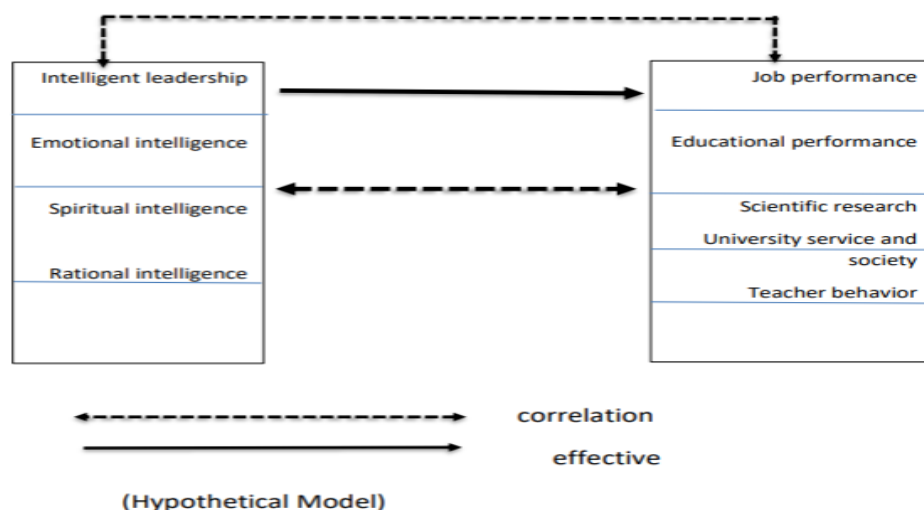
1.3 Research objectives:

The research seeks to achieve the following goals:

- 1- Knowing the level of smart leadership practice by the heads of departments in the faculties of Salahaddin University
- 2- Knowing the job performance level of faculty members in the faculties of Salahaddin University, Erbil
- 3- Determining the nature of the correlation and influence relationships between the two research variables in order to lay the foundations for the field side and the foundation for discussing the results of the analysis of the research data.
- 4- Revealing the results of testing the hypothetical research scheme and research hypotheses, and the possibility of generalizing the research results to the research field

1.4 Hypothesis scheme of the research

In the light of the research problem and its objectives, the hypothetical scheme of the research was developed as shown below:



1.5 Research assumes

A set of hypotheses emanating from the research form were formulated to complement the research requirements, which will be tested at a significant level (0.05), as follows:

The first main hypothesis: There is a significant correlation between smart leadership and job performance in the faculties of Salah al-Din University, Erbil, and sub-hypotheses branch out from it, with the existence of a correlation between each of the smart leadership practices and the areas of job performance.

The second main hypothesis: There is a significant effect of smart driving on job performance

2.Theoretical framework

2.1 Smart leadership

In today's business environment, leaders at all different levels face enormous challenges. It is about achieving and sustaining accelerated operational results. Globalization, economic change, and stricter regulation and governance make it difficult to increase shareholder value. In the twenty-first century, leading knowledgeable or intelligent workers is probably different from leading a worker. Industry in the twentieth century. Therefore, the permanent development of the leadership process is due to the relentless pursuit of business organizations to confront the state of environmental uncertainty resulting from those factors, and this requires the presence of smart leaders and a high level of creativity and creative thinking to envision the future of their organizations and accurately determine the direction of business in them. The success of organizations depends on the availability of Intelligent leaders are able to make organizations learn and adapt to the rapid fluctuations in their work environment. Over the past decade, the importance of directives and intelligent leadership in higher education has increasingly emerged in the process of structural changes. Leaders must act amidst confusion, uncertainty, and instability. At the same time, the complexity of this environment will increase. Therefore, success in the current environment requires a different way of thinking about issues, including a long-term approach to leadership, sharing of views, and a willingness to collaborate in order to achieve Shared Strategies (Sydanmaanlakka, 2008). From the point of view of (Iannotta et al: 2020) it is considered a behavior that appears naturally in work contexts to inspire change and produce innovation in ways of thinking at work and the use of advanced technologies to improve organizational effectiveness in terms of the principles of agility, independence, trust and responsibility and contributes to its inspiring vision along with behaviors Ethically driven in creating a common meaning for change, which leads to harmonization of individual and organizational values, goals, and interests. Building a system capable of achieving excellence and rapid adaptation to environmental change (Sydänmaanlakka: 2003,46)

Smart leadership means that the leader possesses dynamic intelligence and faces unprecedented challenges, and this is beyond any intelligence test. That is why smart leadership needs other types of intelligence beyond all standard intelligence tests to reach total intelligence that covers all aspects of the organization, which is also the intelligence of lively life, unfamiliar challenges and

competition that target organizations in general in all their smart, unfamiliar and innovative procedures (Mazdai & Mohammadib 2012:83). And (Daderman, 2013: 46) defined it as the process of sharing knowledge, information, and skills that are based on three types of intelligence (emotional, spiritual, and rational) that are available in the process of problem-solving and decision-making within the organization, while (Mattone, 2013:34) sees it as the decision-making process. Regarding how to interact with workers to motivate them, and then translate these decisions into effective activities that achieve competitive advantage. (Yakoboski, 2010:1) refers to smart leadership as the ability to discover new strategies in a changing environment with limited resources to meet challenges and accomplish tasks in the labor market in a way that achieves outstanding results.

Based on the foregoing, the researchers see that smart leadership is the orientation of the management of organizations and senior management, with the organization leaders possessing a mixture of creative capabilities and multiple types of special intelligence capable of processing information, involving it, and communicating it among faculty members in a manner that adapts to the environment in facing environmental challenges and making strategic decisions accordingly. In the long term, it enhances job performance.

2.2 Dimensions of smart leadership

The researchers tried to describe smart leadership according to a set of dimensions that came after analyzing and interpreting all aspects related to it to give an objective picture of it according to their view of its content and content, as (Daderman, et al, 6, 2013) believes that there are three dimensions of smart leadership that are considered basic keys that reflect The culture of the organization and these dimensions are (emotional intelligence, spiritual intelligence, rational intelligence)

A. Emotional intelligence

Despite the role of technology in raising the efficiency and effectiveness of organizations, human considerations remain a basic pillar for organizations towards success and excellence. Among these human facts was the emergence of the concept of emotional intelligence, or what some call emotional intelligence (Al-Atwi: 2, 2005). In avoiding sadness and anxiety so that it does not affect the thinking process. A leader who enjoys emotional intelligence believes that he is more loyal and committed to the organization in which he works, and is happier in his work, and has better performance at work, and has the ability to use his intelligence to improve and raise the level of decision-making, and is able to introduce happiness, joy, confidence, and cooperation among his employees Through his personal relationship with them (Mayer, al et, 2000: 268).

(Cicei & Stanescu, 2012: 108) indicates that emotional intelligence means the ability of an individual to express and access their feelings, as well as the ability to understand emotional emotion, the ability to regulate emotions and promote emotional growth and define it (Daderman, 2013: 65) as the ability Accurate visualization of situation, comprehensive assessment, ability to generate emotion when

thoughts are easy, ability to understand emotion, emotional knowledge, and ability to organize in a way that serves the organization.

B- Spiritual intelligence

Spiritual intelligence has a special effect on managers, as with a high level of it, managers can solve their problems and avoid negative tendencies by workers, as it helps to control routine and laziness in management, and prevent all emotions that disturb their thinking. Krauss et al, 2009: 65) and spiritual intelligence is linked to leadership styles as it relates to motivating workers and developing their personalities, and (Hafer & Martin, 2009: 249) believes that spirituality is one of the elements of intelligence because it leads to enhancing capabilities and adapting to assets, and provides skills that enable Problem solving and achieving goals. (Hyde, 2014: 47) defined spiritual intelligence as the capabilities and capabilities that enable individuals to solve complex problems and achieve goals, while (Garcia, 2012: 5) indicates that it is the ability to use a multi-sensory approach including intuition, meditation and visualization to reach one's inner knowledge of order to solve problems.

C- Rational intelligence

The concept of mental intelligence crystallized in the middle of the last century, as it was proven that there are differences and differences between individuals in mental intelligence, and it was possible to measure these differences by putting a number of tests and measures called the “Quotient intelligence” scale, and managers began to rely on measures of mental intelligence in selecting employees, at the end In the last century, the concept of emotional intelligence appeared, and we knew its decisive impact on self-management and relationship management. Emotional intelligence represented the management’s crossing card from the era of intellectual capital to the era of relationship management. Thus, every new concept of intelligence represented an entry card to a new administrative era. To reach logical solutions to administrative problems, while the emotional intelligence rate measures your ability to implement these solutions and convince others of them, there is no conflict between mental and emotional intelligence, but rather the two complement each other, and it is wrong to separate them. The manager cannot make a right decision based on the mind alone, but rather He must consult his heart and conscience as well, and the manager cannot make a correct decision based on the heart and conscience alone (Al-Kurd: 2016, 19). Organizations that have a leader with rational intelligence have different characteristics from organizations with traditional performance. The distinction of the organization in its objectives is a reflection of in addition, rational intelligence can be acquired and non-hereditary, and can improve and develop according to special and environmental conditions. Rational intelligence matures through learning processes in life situations in general, as well as what can be acquired through more self-learning and systemic (Sydänmaanlakka 2003).

2.3 Job performance

The job performance of the workers in the organization is the basis and success of the organizations, and in order for the organizations to be able to achieve their goals, they must give great attention to studying the behavior of the workers as individuals, groups and organizations, and the relationship between the worker and the organization becomes one of the important elements of the organization in the effective exploitation of its human resources to obtain permanence and survival and achieve its advantage Competitiveness (Cherian 2013), since job performance occupies a special place within any institution, as it is the final product of the outcome of its activities, at the level of the individual and the institution, where the institution is more stable and longer survival when the performance of the two years is an outstanding performance, and in general, the interest of management and its leadership The level of performance usually outweighs the interest in its employees, and therefore it can be said that performance at any organizational level within the organization, and in any part of it, is not only a reflection of the motives and capabilities of subordinates, but also a reflection of the motives and capabilities of superiors and leaders (Al-Sharif, 2004). If job performance is important in organizations, its importance increases even more in universities, and most universities seek to determine the quality and quantity of the performance of the individuals working in them, to determine the capabilities and capabilities possessed by each individual, and the extent of individuals' needs for development (Al-Abadi, Al-Ta'i, and Al-Asadi, 2008), where it is the responsibility of The faculty members at the university perform many scientific and professional tasks, such as teaching students and providing them with the necessary knowledge and expertise in various fields of specialization, and the consequent preparation, preparation and evaluation, carrying out scientific research, conducting studies, research, authoring, following up on new developments in the field of specialization, and contributing to activities that lead to the advancement of nations. And provide appropriate solutions to the problems facing the world, and contribute to the development and scientific and technological progress that serves humanity. He contributes to the management of the university through his membership in committees or assuming administrative positions, and his participation in student activities, and in community service (Al-Zahrani, 1993, 9).

(Odeh and Sabbarini, 1990) stresses that interest in the subject of the job performance of faculty members and the teaching activities of scholars, researchers and decision-makers in universities and higher education departments is for two main reasons:

- Decision-making by teachers for the purposes of improving job performance and teaching practices.
- Decision making by officials regarding faculty members in terms of their promotion, confirmation and rewards.

Effective job performance by faculty members can lead to the achievement of the general goals for which universities are established, which is to provide knowledge, research and community services (Blanchard, 2004: 100). Society and behaviors to achieve the goals of the university.

A -Job performance for faculty members

For this study, the researchers adopt the dimensions (educational performance, scientific research, university and community service, behaviors), which are adopted by (Al-Sarayrah, 2011, 626) as they include the tasks and duties of a faculty member in general in all universities, which are:

A- Educational or teaching performance

This process includes the teaching plan during the year, including the academic courses, as well as the activities that he has to carry out to improve the methods, efficiency and effectiveness of teaching, or to update the use of techniques and teaching aids. , and focuses on the extent of the student's awareness of the scientific material and the extent of the ability to apply (Matterod et al., 2002, 28). The educational performance performed by the professor is one of the most important inputs in achieving the educational goals, and it is also the strongest influencer in bringing about the required changes among university students (Ghalib and Alam, 2008: 178). Teaching according to scientific foundations and theoretical and applied treatment (Radwan, 2014: 145) Teaching performance is the behavior that the teacher performs during teaching situations, whether he enters the lecture or outside it. its management of the class and its contribution to university activities or other acts or acts, which may contribute to the progress of student learning (Smart, 1991, 136) indicates that the teaching performance reflects the relationship between the educational activities carried out by faculty members and the educational change that appears in the students' behavior as a manifestation of the teaching results

B- Scientific research

(Abdul Aziz: 111, 2011) indicates that scientific research is one of the indicators of measuring the success or failure of university education, and this is also one of the duties of a university professor whose purpose is to improve and upgrade the professional growth of this actor and to enhance his other duties in the fields of knowledge transfer and community service, so he must The university administrative body provides resources and an appropriate climate that leads to the advancement of the scientific research movement in the university, through:

- Provide adequate financial resources from budget allocations or research revenues.
- Equipping landmarks, laboratories and workshops with one of the equipment and techniques.
- Encouraging faculty members to attend and participate in research in international forums and to publish their research in international peer-reviewed journals.
- Establishing central bodies that supervise, coordinate and follow up on scientific research activity in universities.

(Radwan, 2014, 146) confirms the scientific research function that distinguishes the university institution from the rest of the other educational institutions, and it has become an urgent necessity for any modern society, which it uses for analysis, study, problem solving and addressing all the issues in it, and it is considered the basic pillar of the pillars of evaluating the activities of the faculty member His dismissal of teaching and neglect of scientific research will inevitably lead to a weakness in the teaching process and the professor's creative inclination.

C- University and community service

The contribution of the faculty member in the service of the university and the community is an essential element of evaluating his performance. The service of the university explains the role of the faculty member and his effectiveness in serving the university and professional and administrative activities at the college or university level or the work of the committees in which he participates. As for community service, his role is clarified through consultations to solve problems (Al-Najjar, 2004: 5) and (Al-Azzawi, 2007: 85) mentioned (Diaa Al-Din, 1995: 152) that a university teacher cannot achieve himself and prove his existence, what He was not committed to the issues of his society and the requirements of its growth and prosperity, lived through its problems and found appropriate solutions to them, by providing consultations to government and private agencies, spreading knowledge through public lectures and seminars, conducting research for the benefit of community institutions, and directing constructive criticism of society and the university.

3. Description of the study population, its sample, and justifications for its selection

Determining the study population is one of the important axes that contribute directly to the success or failure of the study, as it is the main source for obtaining data for the study. The current study population represents the faculties of Salah Al-Din University in the city of Erbil. Erbil, and their number reached () members, while the number of study sample members reached (338) members in (15) colleges. The field of study was chosen for the role played by the colleges in community service and the suitability of the study variables with the nature of the work of faculty members in the colleges in terms of their dealings with the study variables. Where (340) questionnaires were distributed to faculty members in the faculties of Salah al-Din University in the city of Erbil. (338) valid questionnaires were retrieved for analysis, which means that the response rate was (99.41%).

Table (1) shows this.

Table (1) Number of questionnaires distributed and returned

	college	Number of forms		Number of forms	
		Distributed and returned		Valid and Percentage	
1	Physical education and physical sciences	30	30	30	%100
2	arts	25	24	24	%96
3	Basic education	25	25	25	%100
4	Administration and Economics	35	35	35	%100
5	Education	10	10	10	%100
6	Education - Shaqlawa	8	8	8	%100
7	Education - Maxhmur	7	7	7	%100
8	the sciences	25	25	25	%100
9	Political science	25	25	25	%100
10	Islamic sciences	25	25	25	%100
11	Languages	25	25	25	%100
12	Agricultural Engineering Sciences	25	24	24	%96
13	literature	25	25	25	%100
14	Law	25	25	25	%100
15	Engineering	25	25	25	%100

Source: Prepared by the researchers from the results of the statistical analysis.

3.1 Description and diagnosis of research variables

The current paragraph deals with the description and diagnosis of the research variables and their dimensions, according to the opinions of the respondents and the results of the statistical analysis, and based on the descriptive measures, which were represented by the percentage, the arithmetic mean, and the standard deviation. The results of the analysis of the description and diagnosis of the research variables can be presented as follows:

A- Description and diagnosis of the smart leadership variable

It is clear from Table (2) the results of the description and diagnosis of the smart leadership variable, where the arithmetic mean of this variable was (3.878), which indicates that the practice of academic leaders in the colleges of Salah al-Din University, Erbil, leadership intelligence. This result confirms the standard deviation, which reached (0.73421).

Table (2) Description and diagnosis of the smart leadership variable

Descriptive Statistics intelligent leadership					
	N	Minimum	Maximum	Mean	Std. Deviation
X1	388	2.00	5.00	4.1057	.70558
X2	388	2.00	5.00	3.9021	.72653
X3	388	2.00	5.00	4.0180	.65666
X4	388	2.00	5.00	3.7758	.77007

X5	388	2.00	5.00	3.9278	.68949
X6	388	2.00	5.00	3.9845	.69681
X7	388	2.00	5.00	4.0000	.71166
X8	388	2.00	5.00	3.8711	.69244
X9	388	2.00	5.00	3.8402	.72975
X10	388	2.00	5.00	3.9021	.70120
X11	388	1.00	5.00	3.7835	.80665
X12	388	2.00	5.00	3.8196	.73201
X13	388	2.00	5.00	3.7912	.69715
X14	388	2.00	5.00	3.6649	.91279
X15	388	2.00	5.00	3.7912	.78436
Valid N (listwise)	388			3.878513	0.73421

Source: Prepared by the researchers from the results of the statistical analysis.

B- Description and diagnosis of the job performance variable

Table (3) shows the results of describing and diagnosing the job performance variable of the faculty members, where the arithmetic mean of this variable was (3.88646), which indicates the availability of fields of job performance among the faculty members in the colleges of Salah al-Din University, Erbil. This result is confirmed by the standard deviation, which amounted to (0.71644).

Table (3) Description and diagnosis of the job performance variable

Descriptive Statistics Job Performance					
	N	Minimum	Maximum	Mean	Std. Deviation
Y1	388	2.00	5.00	3.7964	.77579
Y2	388	2.00	5.00	3.8196	.73553
Y3	388	1.00	5.00	3.7603	.71656
Y4	388	2.00	5.00	3.6753	.73503
Y5	388	2.00	5.00	3.9147	.73086
Y6	388	2.00	5.00	3.9304	.73510
Y7	388	2.00	5.00	3.9768	.67970
Y8	388	2.00	5.00	4.0490	.67067
Y9	388	2.00	5.00	4.0077	.69509
Y10	388	2.00	5.00	3.9639	.70710
Y11	388	1.00	5.00	3.8402	.79093
Y12	388	2.00	5.00	3.9021	.69379
Y13	388	2.00	5.00	3.9330	.64351
Y14	388	2.00	5.00	3.7938	.76335
Y15	388	2.00	5.00	3.9253	.69482
Y16	388	2.00	5.00	3.8814	.71987
Y17	388	2.00	5.00	3.9407	.70001
Y18	388	2.00	5.00	3.8222	.74835
Y19	388	2.00	5.00	3.8737	.63248

Y20	388	2.00	5.00	3.9227	.76025
Valid N (listwise)	388			3.88646	0.71644

Source: Prepared by the researchers from the results of the statistical analysis.

3.2 Correlation hypothesis analysis

Multiple correlation analysis (Pearson) was applied to analyze the results of the correlation between the research variables and their dimensions individually and collectively in order to test the correlation hypothesis. The results of the said analysis were as follows:

The first main hypothesis: Table (4) shows the following:

There is a significant and direct correlation between the smart leadership variable and the job performance variable with a correlation coefficient of (0.356**) and a significant level (0.05), which indicates the existence of a kind of positive correlation between the two variables at the macro level. And that the more smart leadership practices are improved and put into practice, the more this will lead to an improvement in the levels of job performance of faculty members in the faculties of Salahaddin University, Erbil.

Table (4) The association between smart driving and job performance at the macro level

Correlations			
		INLE	JP
INLE	Pearson Correlation	1	**356.
	Sig. (2-tailed)		000.
	N	388	388
JP	Pearson Correlation	**356.	1
	Sig. (2-tailed)	000.	
	N	388	388
.Correlation is significant at the 0.01 level (2-tailed) .**			

Source: Prepared by the researchers from the results of the statistical analysis.

With regard to the association between smart leadership practices and areas of job performance, as shown in the table (5) the highest value of the association between emotional intelligence and spiritual intelligence was with a coefficient of (0.756 * *) and a significant level of (50.0). While there was less correlation between the practices of rational intelligence and the areas of university and community service with a coefficient of (0.183 * *) and a significant level of (50.0). Based on these results, the first main hypothesis is accepted, which states that (there is a statistically significant positive relationship between smart leadership and job performance combined and individually).

Table (5) The correlation between smart driving practices and job performance domains

Correlations								
		EIN	SIN	RIN	EP	SR	SS	BE
EIN	Pearson Correlation	1	.756**	.711**	.367**	.200**	.184**	.253**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000

	N	388	388	388	388	388	388	388
SIN	Pearson Correlation	.756**	1	.737**	.453**	.252**	.192**	.268**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	388	388	388	388	388	388	388
RIN	Pearson Correlation	.711**	.737**	1	.431**	.208**	.183**	.271**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	388	388	388	388	388	388	388
EP	Pearson Correlation	.367**	.453**	.431**	1	.510**	.427**	.476**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	388	388	388	388	388	388	388
SR	Pearson Correlation	.200**	.252**	.208**	.510**	1	.792**	.713**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	388	388	388	388	388	388	388
SS	Pearson Correlation	.184**	.192**	.183**	.427**	.792**	1	.713**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	388	388	388	388	388	388	388
BE	Pearson Correlation	.253**	.268**	.271**	.476**	.713**	.713**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	388	388	388	388	388	388	388
**. Correlation is significant at the 0.01 level (2-tailed).								

Source: Prepared by the researchers from the results of the statistical analysis.

3 - 3 Impact Relationship Analysis:

Testing the second main hypothesis: This paragraph was devoted to testing the second hypothesis to identify the effect of smart leadership on job performance variable as follows:

1. Effect on the macro level: The simple regression coefficient and the entry method were used to test the effect of smart leadership on job performance variable. It was found from the results of the analysis in Table (6) that there is an effect of smart leadership on job performance, based on the calculated (F) value that amounted to (55.948), which is higher than the tabular (F) value of (3.924). This confirms the value of the calculated level of significance of (0.000), which is significantly lower than the default level of significance of the study, which is (0.05), as shown by the parameters of this analysis at the macro level, the following results:

A. In light of the regression equation, the value of (B 0) indicates that there is an emergence of smart leadership through its dimensions with a value of (2.685) when the value of job performance and through its dimensions is equal to zero, which indicates that the job performance of the job

performance of teachers in the colleges surveyed derives part of Its performance is one of the smart leadership practices practiced by academic leaders that were adopted by the current research.

B. The value of the marginal tendency (B 1) amounted to (0.356), which explains that the change in smart leadership by (1) in the colleges surveyed, will be accompanied by a change in job performance by (0.356), which is a good percentage that can be relied upon in interpreting the influence relationship. For smart leaders in job performance.

C. The value of the determination coefficient (R 2) amounted to (0.127), which indicates that the change in smart leadership among the academic leaders in the study, which was (12.7%), can be attributed to the smart leadership variable, and the remaining percentage, amounting to (77.3%) The change in smart driving is due to other reasons that were not approved in the current study model, and the tables below illustrate this.

Table (6) shows the impact of smart leadership on job performance

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	^a 356.	127.	124.	43709.		
a. Predictors: (Constant), INLE						
ANOVA						
Model		Sum of Squares	Df	Mean Square	F	.Sig
1	Regression	10.689	1	10.689	55.948	^b 000.
	Residual	73.745	386	191.		
	Total	84.434	387			
a. Dependent Variable: JP						
b. Predictors: (Constant), INLE						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	.Sig
		B	Std. Error	Beta		
1	(Constant)	2.685	162.		16.562	000.
	INLE	310.	041.	356.	7.480	000.
a. Dependent Variable: JP						

Source: Prepared by the researchers from the results of the statistical analysis.

Based on the results of the regression analysis of the smart leadership variable, the second main effect hypothesis can be accepted, which states that (there is a statistically significant effect at the level of 0.05 of smart leadership on the job performance of the faculty members in the surveyed colleges).

4- Conclusions

1- The results of the analysis showed that there are high levels of smart leadership practices among academic leaders in the faculties of Salahaddin University, Erbil, which indicates that the colleges and university administration is keen to provide smart leadership practices (emotional, spiritual, and public) in a way that serves the strategic goals of the university and achieves job performance.

2- Show the results of the analysis about the existence of areas of functional performance among the members of the teaching staff, and this confirms the keenness of the university and college administration to enhance educational performance and the teaching of scientific research in a way that is in the service of the university and society and that the teaching staff adhere to the desired behaviors and ethics when carrying out their work.

3- The results of the research analysis revealed the presence of positive correlations, combined and alone, between smart leadership and job performance, which indicates the existence of a kind of positive correlation between the two variables, and that the better the smart leadership practices, the more this leads to improving the areas of job performance among faculty members in the colleges surveyed.

4- The results of the research showed that there is an impact of smart leadership on job performance, and thus we conclude that the more the university and college administration relies on employing smart leadership practices in their operations, the more they can improve the levels of job performance.

5- Recommendations

1- The administration of the university and the colleges under study should pay attention to their intellectual resources and the heads of scientific departments and to develop their capabilities to perform the work efficiently and effectively, due to the importance of these resources in the leadership of the university, and to direct attention to providing the latest work requirements of modern and advanced equipment and devices.

2- Work on developing the skills of university leaders and enhancing their skills and capabilities by improving their capabilities and skills in the field of emotional intelligence, rational intelligence and spiritual intelligence, by involving them in training courses in which intelligence and its types of emotional, spiritual and rational are the main subject.

3- The need for university administration and colleges to pay attention to instilling and developing leadership values among all faculty members and creating belonging and a sense that their fate is linked to the university's success, survival and continuity in work.

4- The university and the colleges under study should cooperate with each other in holding workshops related to identifying the means through which the levels of academic leadership can be improved in a way that serves them in the field of achieving their job performance.

5- Providing an appropriate organizational and academic climate for the practice of smart leadership and its roles among faculty members who possess leadership traits in order to be a source of sustainable leadership work in the university and colleges under study instead of relying on employing leaders from outside.

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Conference Program



ICABEP2023

PROGRAM FLOW

September 25th - 26th, 2023

08:30 – 09:00	❖ Registration , Institute of Management, University of Szczecin, Poland
09:00 – 10:15	<ul style="list-style-type: none"> ❖ Introduction to the Conference – Dr. Aleksandra Klich ❖ National Anthem of Poland, Iraq and Kurdistan Region ❖ Promotional Videos of Szczecin University, TIU, and Salahaddin University
	<p><u>Welcome Speech</u> prof. dr hab. Waldemar Tarczyński <i>President</i> <i>University of Szczecin, Poland</i></p>
	<p><u>Welcome Speech</u> assist. prof. dr. Idris Hadi <i>Head Board of Trustees</i> <i>Tishk international University, Erbil</i></p>
	<p><u>Welcome Speech</u> Ziyad Raof <i>Representative of Kurdistan Region in Poland</i></p>
	<p><u>Welcome Speech</u> prof. dr. Abdulkarim Karim <i>*Representative of President of Salahaddin University</i> prof. dr. Ahlam Wali <i>*Representative of College of Administration and Economics</i> <i>Salahaddin University, Erbil</i></p>
	<p><u>Opening Address</u> dr. Mohammed Salih Mustafa <i>Head, international Relations, and Diplomacy Department</i> <i>Faculty of Administrative Sciences and Economics, FASE, TIU</i></p>
10:15 – 10:45	<p><u>Keynote Speaker – I</u> prof. dr. inż. Krzysztof Kompa, <i>Executive Vice-President of CEST international Research association, Senior associate in</i> <i>College of Business and Economics at the University of Johannesburg, South Africa</i> <u>Presentation topic:</u> <i>Key drivers of dividend payouts. A case study of Polish energy companies</i></p>
10:45 – 11:00	COFFEE BREAK
11:00 – 11:30	<p><u>Keynote Speaker – II</u> dr. hab. Jaroslaw Korpysa, Prof. US <i>Director Doctoral School, University of Szczecin, Chair of the scientific committee UNESCO Chair</i> <i>for Social Sustainability, University of Szczecin, Poland</i> <u>Presentation topic:</u></p>

	Decision Criteria and Determining Factors Importance Validation for Sustainability of Entrepreneurial Startups
11:30-12:00	Prof. Eleftherios Thalassinos <i>Ret. Prof. University of Piraeus</i> <i>Aff. Prof. University of Malta</i> Presentation topic: Quantitative Methods: Merging with Digital Technologies and Going Global
12:00-12:20	dr Ahmet Demir <i>Tishk international University, Erbil</i> Presentation topic: A Solution to Subjectivity Problem of Multi-Criteria Decision-Making Analysis Methods
12:20-12:40	Dr. Aleksandra Klich <i>Head of Legal Clinic, Faculty of Law and Administration, University of Szczecin</i> Presentation topic: The Problem of Personal Data Protection in Remote Work
12:40 - 13:45	Lunch Break

◆ September 25th, 2023
◆ Parallel Sessions
◆ Session I - A, Room 010
◆ Session Chair: dr hab. Jarosław Korpysa, Prof. US

Time	Paper Title	Author Name
13:45 - 14:00	<i>The Role of Medical Representatives in Marketing in The Kurdistan Region: An Evaluation</i>	<i>Ali Omar Yassen, Pary Hadi</i>
14:00 - 14:15	<i>An Evaluation of Students' Performance in Summer Internship Program: Supervisors' Perspective</i>	<i>Daroon Abdullah, Othman Kareem. Mahmood, Ava Omar Fatah</i>
14:15 - 14:30	<i>The influence of Working Environment on Employees' Performance: The Case of Koya Technical Institute in City Erbil/Iraq</i>	<i>Bestoon Othman, Kaval Kawa Abdulkareem, Wirya Najm Rashid, Lask Arsalan Bayiz</i>
14:30 - 14:45	<i>Comparative User Experience Analysis of Visual Variants on A tourism-Centric Website</i>	<i>dr. Jarosław Duda</i>
14:45-15:00	<i>Legal Tech Tools Used in The Judiciary on The Example of Polish Legal System</i>	<i>dr hab. Kinga Flaga- Gieruszyńska prof. US</i>

15:00 – 15:15	<i>Evaluating User Experience of A Virtual Reality Education App interface for Children</i>	Assoc. Prof. Eng. Mariusz Borawski
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◆ September 25th, 2023
◆ Parallel Sessions
◆ Session I – B, Room 001
◆ Session Chair: Dr. Dana Sajjadi

Time	Paper Title	Author Name
13:45 – 14:00	<i>The Extent Practiced Smart Leadership by The Heads of Scientific Departments and Its Role in The Job Performance of Teachers- An Analytical Study From Opinions of A Sample of Teachers in The Scientific Departments at Salahaddin University / Erbil</i>	Abdulrahman Z Abdulrahman, Mudhafar Hamad Ali, Jamil Abdulkarim Abdullah
14:00 – 14:15	<i>The Role of Organizational Power in Promoting Entrepreneurial Orientation , An Analytical Study of The Opinions of Faculty Council Members in a Sample of Private</i>	Ahlam Ibrahim Wali, Mahabat Noori Abdullah, Nashaat Basheer Shakir
14:15 – 14:30	<i>The Role of National Oil Company in Kurdistan Region Oil Process Through international Oil Companies</i>	Karwan Dhahir Saber, Hemdad Faisal Ahmad
14:30 – 14:45	<i>Using Statistical Methods to forecast The Erbil international Airport Data</i>	Paree Khan Abdulla Omer, Samyia Khalid Hasan, Kurdistan Ibrahim Mawlood
14:45 – 15:00	<i>The Financial and Non-Financial Benefits of Public Education</i>	Jinyue Yang

◆ September 25th, 2023
◆ Online Sessions
◆ Session I – C
◆ Session Chair: Prof. dr hab. inż. Kesra Nermend

Time	Paper Title	Author Name
14:00 – 14:15	<i>Investors Protection and Financial Performance of Companies in Developing Countries</i>	Abubakar Balarabe Karaye
14:15 – 14:30	<i>Corporate Governance Best Practice and Financial Performance of Listed Firms in Malawi</i>	Abubakar Balarabe Karaye
14:30 – 14:45	<i>The Inter-relationship between Financial Empowerment, Governance and Human Development: Evidence from the G-20 Nations</i>	Alok Arun, Bibhuti Bhusan Mishra and Sibanjan Mishra
14:45 – 15:00	<i>Financial inclusion for Sustainable Development in South Asian Countries</i>	P. K. Mishra, B. B. Pradhan
15:00 – 15:15	<i>Sustainable Accounting: A Conceptual Analysis and Its Relevance</i>	Adeel Maqbool & Waqar Ahmad

15:15 – 15:30	Are The Adults of Bangalore Urban Financially included? A Descriptive and Analytical Research	Ghousia Khatoon, Hussaini Bala, Samira Ben Belgacem, Umair Zahid
15:30 – 15:45	Psychophysiological research in the design of useful education materials in elementary school	Małgorzata Nermend

◆ September 25th, 2023
◆ Online Sessions
◆ Session I – D
◆ Session Chair: Dr. Ahmet Demir

Time	Paper Title	Author Name
14:00 – 14:15	Integration of Structural Equations Modeling Vmcm, Vikor, topsis to Develop Benchmarking Method for Service Organizations: Case Study Kurdistan Region of Iraq	Karwan Rashid
14:15 – 14:30	Trends in Leadership and Entrepreneurship in Post-Covid Era	Suchusmita Mishra, Bibhuti Bhusun Mishra
14:30 – 14:45	Examining The influence of Individual Personality Traits on Turnover intention Among Faculty Members in Private Universities of India	Roopal Shrivastava
14:45 – 15:00	The Impact of Glass Ceiling Theory on Entrepreneurship Emancipation	Fayeq Ali Ali
15:00 – 15:15	The Importance of E- Marketing for Agricultural Products	Ahmad Suleyman
15:15 – 15:30	Occupational Trends and Employment Dynamics in Poland Perspectives From CEDEFOP Data	Sultana Begum
15:30 – 15:45	Building a Model of What influences a Shopper's Decision to Buy online	Dier Mousa Ahmed, Aram Jawhar Mohammed
15:45 – 16:00	Psychophysiological research in the design of packaging	Bartłomiej Piwowski

SEPTEMBER 26th, 2023

Session Chair: dr hab. Małgorzata Tarczyńska-Łuniewska, Prof. US
University of Szczecin

10:00 – 10:30	<p style="text-align: center;">Keynote Speaker - III Dr. Mohammad Salih Mustafa Head, international Relational and Diplomacy Department, Faculty of Administrative Sciences and Economics, Tishk international University, Erbil</p> <p style="text-align: center;">Presentation Topic: The Middle East's Predominant Issue</p>
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10:30-11:00	dr Nalattia Marska-Dzioba, University of Szczecin <u>Presentation Topic:</u> Insurance Market in Poland
11:00-11:30	Keynote Speaker - IV Prof. Dr. Ghousia Khatoon <i>Head, Accounting Department, Faculty of Administrative Sciences and Economics, Tishk international University, Erbil</i> <u>Presentation Topic:</u> Empowering the Underprivileged - A peep into the Challenges and Strategies

11:30- 12:00	COFFEE BREAK
◆ September 26th, 2023	
◆ Parallel Sessions	
◆ Session I- A, Room 010	
◆ Session Chair: dr inż. Anna Borawska	

Time	Paper Title	Author Name
12:00 – 12:15	<i>Spillover Effect of Catastrophic Events on Global Financial Markets: An Event Study Analysis</i>	<i>Guru Ashish Singh</i>
12:15 – 12:30	<i>Modeling and Analysis of Daily Temperature Using Logistic Regression and Markov Chain</i>	<i>Mohammad Mahmood Faqe Hussein, Samira Muhamad Salih, Akhterkhan Saber Hamad</i>
12:30 – 12:45	<i>Securitization of The Kurdistan independent Referendum in 2017</i>	<i>Faruq Abdul Mawlood</i>
12:45 – 13:00	<i>The Role of Organizational Justice in Administrative Creativity: An Analytical Study of the Viewpoint of A Sample of Heads of Scientific Departments in A Number of Private Universities in Erbil, KRG, Iraq</i>	<i>Muhsin Othman Hassan, Parishan Maarroof Jameel, Jalal Abdalla Mohammed</i>
13:00 – 13:15	<i>Utilizing Eye Tracking to assess User Experience and Efficacy of Diverse Advertisements on A Culinary Recipe Website</i>	<i>Mgr. Inz. Patryk Wlekły</i>
13:15 – 13:30	<i>Panel Data Analysis Compared With Linear Regression Analysis Using Wk1 and Wk2 in Modeling Grain Production in Kurdistan Region From 1992-2017</i>	<i>Wasfi T. Saalih Kahwachi</i>

◆ September 26th, 2023
◆ Parallel Sessions
◆ Session I – B, Room 001
◆ Session Chair: Dr. Mohammad Salih Mustafa

Time	Paper Title	Author Name
12:00 – 12:15	<i>State Responsibility for Wrongful Acts and Its Implications: The Case of The involvement of Turkey in Northern Syria</i>	<i>Bayad Sarwar Abdullah</i>
12:15 – 12:30	<i>Kurdish Media 's Coverage of The Yazidi Genocide: The Public Opinion Distortion</i>	<i>Hawre Hasan Hama, Choman Mahmood H. Rashid, Sirwan Burhan Hasan Hussein</i>
12:30 – 12:45	<i>To Study The Relationship Between Audit Firms, Fraud Prevention and Fraud Detection With Special Reference to Erbil Holding Companies</i>	<i>Waqar Ahmad, Kadhim Saeed Awla</i>
12:45 – 13:00	<i>Navigating Chines Hegemony: Assessing its Impact on International Order, Stare Sovereignty and Territorial Integrity</i>	<i>Dana Mohammed Danish Aladdin Sajadi</i>
13:00 – 13:15	<i>Cognitive Neuroscience Approaches in User Experience Research</i>	<i>mgr inż. Adrianna Mateja</i>

◆ September 26th, 2023
◆ Online Sessions
◆ Session I- AA
◆ Session Chair: Dr. Uma Shankar Singh

Time	Paper Title	Author Name
12:00 – 12:15	<i>Examining The Impact of Consumer Buying Behavior on influencer Marketing</i>	<i>Jyoti Juhi</i>
12:15 – 12:30	<i>Impact of Digital Transformation on forthcoming Business Model</i>	<i>Suchusmita Mishra, Bibhuti Bhushan Mishra</i>
12:30 – 12:45	<i>The Importance of Business Ethics in Corporate Culture</i>	<i>Aditi Bajpai</i>
12:45 – 13:00	<i>Agricultural Crop insurance in Sustainable Farm Management</i>	<i>Bibhuti Bhusan Pradhan, Kumar Sambhav Giri, Kautuk Kumar Sardar</i>
13:00 – 13 15	<i>Entrepreneurial Leadership: A Systematic Literature Review</i>	<i>Diyar A. Mustafa Khoshnaw</i>
13:15 – 13:30	<i>Exploring Consumer Acceptance and Factors influencing the Adoption of Point of Sale (POS) Systems in Iraq</i>	<i>Aws Yhya Abed, Sultana Begum</i>

13:30 – 13:45	<i>Is It Possible to Conduct Civil Proceedings Remotely in Poland?</i>	dr. Hab. Joanna Studzińska, Prof. ALK
13:45 – 16:00	<i>Use the psychophysiological data in a multi-criteria decision-making model</i>	Mateusz Piwowarski

♦ September 26th, 2023
♦ Online Sessions
♦ Session I- BB
♦ Session Chair: Dr. Waqar Ahmad

Time	Paper Title	Author Name
12:00 – 12:15	<i>Us and China's investment Strategies in The Middle East and The Impact of These Strategies on The Middle East Economy</i>	Osman Nuri Aras, Ashoor Ali Saleh
12:15 – 12:30	<i>Cybersecurity in The Humanitarian Sector: New Challenges and Solutions</i>	Mouhamed Ali Al Hamoud Al-Arab
12:30 – 12:45	<i>Political and Economic Implications of The Russia Ukraine War for Nigeria</i>	Basiru Musa
12:45 – 13:00	<i>The Determinant Roles of Turkish Identity in Relations With The Kurdistan Region in Iraq</i>	Recep Bilgin
13:00 – 13 15	<i>The Impacts of China's Investment on Nigeria's Development</i>	Ahmet Arabaci

♦ September 26th, 2023
♦ Online Sessions
♦ Session I- CC
♦ Session Chair: Dr. Karwan Dhahir Saber

Time	Paper Title	Author Name
12:00 – 12:15	<i>Turkey-Iraqi Kurdistan Relations From Poststructuralist Perspective After The Cold War</i>	Recep Bilgin
12:15 – 12:30	<i>The Kurdistan Regional Government as A Model for The Kurds in The Middle East</i>	Firsat Shakur Omer Saeed
12:30 – 12:45	<i>The Kurdish Revolution of 1961 and 1976</i>	Bayar Ibrahim Ramadan
12:45 – 13:00	<i>Women's Political Representation in India</i>	Madhupriya Srivastava
13:00 – 13 15	<i>The Reconstruction of Indian Foreign Policy Under Modi Regime</i>	Sachin Tiwari

13:15 – 13:30	<i>Indian Culture in The Narendra Modi Government</i>	<i>Rachna Devi</i>
13:30–13:45	<i>The Importance and Constraints of Introducing Taxonomy for Environmentally Sustainable Business Activity: Literature Review</i>	<i>Ninditya Nareswari</i> <i>Malgorzata Tarczynska-Luniewska, Wanda Skoczylas</i>
13:45–14:00	<i>The impact of metrology on the economy – methodological framework.</i>	<i>Małgorzata Tarczynska-Luniewska, Mariusz Doszyn, Pawel Majda, Mirosław Pajor, Barbara Batog, Monika Rozkrut, Dominik Rozkrut</i>
14:00–14:15	<i>LegalTech instruments in the practice of the legal advisor – Polish experiences</i>	<i>dr Michał Wojdała</i> <i>mgr Bartosz Skrendo</i>
14:15–14:30	<i>Stress levels among employees from Generation Z</i>	<i>Sara Drożdżyńska</i>

CLOSING CEREMONY

13:30 to 13:45

GROUP PHOTO SESSION

September 25th–26th, 2023

Szczecin, Poland

Join Teams Meeting Room

- ◆ Topic: 5th ICABEP 2023
- ◆ Time: Sep 25, 2023, 08:30 AM Szczecin, POLAND
- ◆ Time: Sep 26, 2023, 10:00 AM Szczecin, POLAND

Session B – Parallel/Online Session

Duration: September 25-26, 2023

- ◆ **Link:**

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NTkzNWNmMDAtZmM0ZC00ZmRiLWJjYWItMGMxYzZkZmVjYWI3%40thread.v2/0?context=%7b%22Tid%22%3a%22af892dd6-4563-4455-9c05-a398a43f2362%22%2c%22Oid%22%3a%22cda01b3b-f06e-4ea7-9359-c3d5edfe4cf5%22%7d

Short link: <https://shorturl.at/eAGK9>

Session C – Parallel/Online Session

Duration: September 25-26, 2023



- ◆ **Link:**https://teams.microsoft.com/l/meetup-join/19%3ameeting_YjgzNmFlMDQtOGU2MC00YWlxlWEzODMtODAwMlGUzMmY2NTQ4%40thread.v2/0?context=%7b%22Tid%22%3a%22af892dd6-4563-4455-9c05-a398a43f2362%22%2c%22Oid%22%3a%22b57c4173-c128-4f92-b4c7-ca4e7868eac8%22%7d

Short link: <https://shorturl.at/nBFY9>

Standard Time Zone

The opening ceremony will be according to Poland time zone.

- ◆ **Poland : 09:00 am**
- ◆ **Erbil : 10:00 am**
- ◆ **India : 00:30 pm**



International Conference on Accounting, Business, Economics and Politics

September 25th – 26th 2023



ICABEP

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ICABEP 2023

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