The Impact of Artificial Intelligence on Income Distribution: A Case Study on the Service Sector in Iraq

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***Abstract*—This This study aims to analyze the impact of artificial intelligence (AI) on income distribution in the service sector in Iraq, using Zain Iraq Telecom as a case study. The study focuses on understanding the relationship between the application of AI in various aspects of Zain's operations and potential changes in salary structures and distribution among employees. Data was collected through a questionnaire specifically designed for the company's employees and analyzed using a variety of statistical methods, including descriptive analysis, internal consistency analysis, Cronbach's alpha for measuring reliability, and linear regression analysis to examine the relationship between AI implementation and income distribution.**

The results of the study indicate a strong and statistically significant positive correlation between the implementation of AI and income distribution at Zain Iraq, with a correlation coefficient (R) of 0.771 suggesting a strong association between the two variables. The questionnaire results revealed that Zain Iraq employees generally appreciate the company's income distribution system and are satisfied with their salaries, but there is a perceived weakness in the relationship between performance and rewards. These findings highlight the need for a transparent and fair performance evaluation and compensation system, with clear emphasis on the link between performance and rewards to maintain employee motivation and satisfaction. The study also found that employees recognize the clear benefits of using AI to enhance customer service, likely due to the reduction in their workload related to handling routine inquiries, allowing them to focus on more complex tasks and add value. However, there are concerns about the potential impact of AI on their jobs, including anxieties about AI systems used for monitoring, evaluation, and judging their performance more stringently than humans. These findings emphasize the importance of addressing employee concerns and providing training and support to enable them to benefit from technological advancements rather than becoming victims of them.

Keywords— Artificial Intelligence, AI - Income Distribution, Service Sector, Iraq

I. INTRODUCTION

The world is witnessing a remarkable development in the field of artificial intelligence, which is translating into radical changes in various sectors, including the service sector. This study aims to analyze the impact of artificial intelligence on income distribution in the service sector in Iraq, using Zain Iraq Communications Company as a case study model. The study focuses on exploring the relationship between the application of artificial intelligence in various aspects of Zain's business, and the potential changes in the salary structure and its distribution among employees. The importance of this study stems from the fact that it sheds light on an urgent topic in the context of the digital transformations witnessed by the world, especially in light of the widespread use of artificial intelligence in various aspects of life. The study provides a detailed analysis of the reality of applying artificial intelligence in the service sector in Iraq, and seeks to answer a fundamental question: Does artificial intelligence have a positive or negative impact on income distribution? Through this, the study tries to provide an accurate analytical framework that contributes to understanding the implications of the introduction of artificial intelligence into the work field in the service sector, in order to enable decision-makers to take proactive steps to guide the course of digital transformation in Iraq in a way that serves national interests and enhances sustainable development.

A. Literature Review

Many previous studies indicate the impact of artificial intelligence (AI) on income distribution, but their focus on the service sector in Iraq is limited. The studies agree that AI technologies are among the most significant technological developments in modern history and have a substantial effect on all aspects of life, including income distribution. AI can enhance efficiency and competitiveness, but it is important to address its potential risks to income distribution and inequality of opportunities.

Several studies, such as [1], indicate that AI affects the labor market in various ways. [2] Emphasize that AI may lead to reduced demand for labor in some fields, affecting income distribution. [3] Focus on how AI may increase the income gap between high-skilled and low-skilled workers, impacting social equity. [4] Confirm that AI contributes to increased productivity, which leads to higher profits and a better distribution of income between employees and capital. AI helps improve labor efficiency and reduce costs, resulting in increased profits and the potential for higher employee wages.

Integration and Replacement: [5] Discuss how AI affects the labor market through the concepts of "integration" and "replacement." Integration involves using AI to enhance workers' performance and productivity, while replacement involves substituting some human jobs with AI systems. The Solow model indicates that technological changes affect the rate of economic growth. [6] Discuss the impact of AI on innovation, suggesting that AI may lead to increased income concentration. [7] Emphasize the importance of addressing the risks of AI on income distribution. Stevenson (2018) notes that AI may lead to job losses for human workers, resulting in higher unemployment rates. The Acemoglu and Autor model highlights that technological changes affect the demand for various skill types, leading to increased income disparities among different skill levels. [8] Stresses the importance of

investing in research and development in AI fields to maximize benefits and achieve sustainable development.

Some recent studies highlight the importance of examining the impact of AI on the service sector, such as [9], which discusses the economic effects of AI on jobs and income inequality.

Impact of AI on Customer Service Jobs: ** [10] Focuses on how AI may reduce demand for labor in certain areas of the service sector, such as customer service jobs, which affects income distribution. [11] Emphasize the importance of considering technological factors and the status of workers when studying AI's impact on income distribution and social equity. [12] Study the negative impact of income inequality on countries' ability to achieve carbon emission reduction goals, underscoring the importance of examining AI's effect on income distribution across all sectors, including the service sector in Iraq.

Studies such as [13], [14] point to the significance of investigating AI's impact on income distribution in various regions and sectors. [15] Note that AI presents a new challenge for the economy, highlighting the need to study AI's effects on income distribution within the context of ongoing technological changes. [13] Further argue that AI contributes to economic growth, illustrating the importance of analyzing AI's impact on income distribution from the perspective of wealth increase and enhanced economic growth.

The Distinguishing Feature of the Current Study from Previous Studies:

This study differs from previous studies in its focus on the impact of artificial intelligence on income distribution in the services sector in Iraq, using Zain Iraq Telecommunications as a case study model. While most previous studies have focused on the impact of artificial intelligence on the economy in general or on the labor market, this study provides a detailed analysis of the specific impacts on income distribution within a particular company in Iraq, making it more effective in understanding the direct impacts of artificial intelligence on income distribution in a specific context. Additionally, this study provides a practical analysis of the aggregated data from Zain Iraq employees, using a set of specific questions to measure the extent of implementation of artificial intelligence techniques in the company, and the level of employee satisfaction with the salary distribution system and career advancement opportunities. This study contributes to providing a better understanding of the impacts of artificial intelligence on income distribution in the services sector in Iraq, which can enable decision-makers to take proactive steps to guide the digital transformation in Iraq in a way that promotes sustainable development and provides better opportunities for workers in the services sector.

B. Research Problem

The impact of artificial intelligence on income distribution has sparked widespread debate around the world, particularly in the services sector which constitutes the largest portion of the workforce in many countries. Iraq is one of the countries that is significantly affected by the developments in artificial intelligence, with observable transformations in the services sector which heavily relies on these technologies. Many questions have been raised regarding the impact of these technologies on the distribution of income among employees in companies operating in the services sector. Does the proliferation of artificial intelligence lead to a reduction in job opportunities or an increase in unemployment rates? Does it affect the salaries offered to employees? What are the mechanisms that can be followed to ensure a balance between the economic benefits of artificial intelligence and social justice in income distribution?

Therefore, the research problem can be formulated through the following question:

What is the impact of artificial intelligence on income distribution in the services sector in Iraq, and the extent of its impact on employee salaries and job opportunities, in the presence of companies like "Zain Iraq" that heavily rely on these technologies?

C. Importance and Objectives of the Research

This study aims to understand the impact of artificial intelligence on income distribution in the services sector in Iraq. This study is of great importance for several reasons:

The Changing Nature of the Services Sector: The services sector is undergoing widespread transformations due to the proliferation of artificial intelligence, which affects the structure of work, employee functions, and their compensation system.

Iraq in the Context of Digital Transformation: Iraq is one of the countries that suffers from economic and social challenges, which makes it susceptible to the effects of artificial intelligence on income distribution, requiring a thorough study to understand these effects and identify appropriate policies.

Bridging the Knowledge Gap: Studies on the impact of Artificial Intelligence (AI) on income distribution in Iraq are limited, making this study important to bridge the knowledge gap in this area.

Therefore, the research objectives are:

1. To analyze the impact of the application of Artificial Intelligence on income distribution in the service sector in Iraq, using Zain Iraq as a case study.

2. To identify the relationship between the application of Artificial Intelligence in various aspects of work at Zain Iraq and the potential changes in the salary structure and its distribution among employees.

3. To provide practical recommendations to ensure the benefits of Artificial Intelligence are utilized to improve the efficiency of the service sector, while considering the achievement of social justice in income distribution.

D. Research Variables

This study focuses on examining the relationship between two main variables:

Independent Variable: Application of Artificial Intelligence in the service sector. This variable includes various aspects of the application of Artificial Intelligence at Zain Iraq, such as the use of chatbots for customer service, data analysis to improve marketing, process optimization, and the development of customer service strategies based on data analytics.

Dependent Variable: Income distribution in the service sector. This variable includes a set of factors related to income distribution, such as the salary structure, career advancement opportunities, basic salaries, incentives, and bonuses.

This is to study the extent of the impact of the application of Artificial Intelligence on income distribution in the service sector.

E. Research Hypotheses

The study assumes that there is a positive relationship between the application of artificial intelligence in the service sector and income distribution. This means that the application of artificial intelligence will lead to improved process efficiency, increased productivity, which will in turn improve the company's performance, thereby increasing employment opportunities and raising employee salaries.

F. Research Methodology

This study is based on the descriptive method, using a specially designed questionnaire to collect data from employees of Zain Iraq Telecommunications Company. The study focuses on understanding the impact of artificial intelligence on income distribution in the service sector, using a set of questions designed to measure the extent of implementation of artificial intelligence techniques in the company, and the level of employee satisfaction with the salary distribution system and career advancement opportunities. Statistical analysis techniques, including ANOVA, Correlation, and Regression, are used to process the data collected from the questionnaires, test the study hypotheses, and determine the relationship between the application of artificial intelligence and income distribution in the company. Through this methodology, the study seeks to provide accurate information and analysis on the impact of artificial intelligence on the service sector in Iraq, and provide practical recommendations for developing sustainable strategies to deal with this technological development.

G. Research Population and Sample

This study focuses on the impact of artificial intelligence on income distribution in the service sector in Iraq, using Zain Iraq Telecommunications Company as a case study. Zain Iraq is one of the leading telecommunications companies in Iraq, and it is characterized by its adoption of modern technologies, including artificial intelligence, in various aspects of its operations. The reasons for selecting this company are:

Widespread Presence: Zain Iraq has a wide network of branches throughout Iraq, which facilitates access to employees to collect data.

Reliance on Technology: Zain Iraq is known for adopting modern technologies, including artificial intelligence, in various aspects of its operations.

Data Availability: Zain Iraq is likely to be able to provide statistical data on the salaries of its employees and their job levels, which will help to verify the validity of the research conclusions.

Focus on Digital Transformation: Zain Iraq aims to improve its services and provide a better digital experience for customers, making it an interesting subject in the field of artificial intelligence.

The study sample includes the managers and employees of Zain Company, and the number of managers and employees according to the company is 900. To calculate the size of the random sample from the population, the following statistical formula is used:

$$n = \frac{N}{1+N\,(e)^2}$$

where: n is the required sample size; N is the total population size (600 in this case); e is the margin of error (usually 0.05 for a 5% margin of error).

Using a 5% margin of error, i.e., (e = 0.05), the sample size calculation will be as follows:

$$n = \frac{600}{1+600(0.05)^2} = \frac{600}{1+600(0.0025)} == \frac{600}{1+1.5}$$

$$n = \frac{600}{2.5}$$

$$n \approx 240$$

Therefore, the appropriate random sample size for a population of 600, with a 5% margin of error, is approximately 240. To ensure that the number does not decrease below the required amount, 260 questionnaires are distributed, and 255 are retrieved, as 5 questionnaires were incomplete or unanswered, resulting in a representative random sample of 255.

H. Study Instrument

This study is based on a specially designed questionnaire to collect data from employees of "Zain Iraq" Telecommunications Company, relying on a set of published and peer-reviewed research [7], [8], [16]. The questionnaire consists of two main parts: the first is related to the application of artificial intelligence in the company, and focuses on surveying employees' opinions on the use of artificial intelligence in areas such as customer service, data analysis, and process improvement. The second part of the questionnaire focuses on income distribution in the company, and investigates employees' views on the salary system, career advancement opportunities, and the fairness of salary distribution among them. Each section of the questionnaire includes a set of numeric classification questions to measure the extent to which employees agree with specific data related to the application of artificial intelligence and income distribution in the company. The questions were formulated in a neutral and objective manner to avoid any biases that may affect the research results, with an emphasis on the importance of obtaining honest answers from all participants. A 5-point scale was used to measure agreement with each item in the questionnaire (from strongly disagree to strongly agree) to enable researchers to collect quantitative data that would allow them to accurately analyze the impact of artificial intelligence on income distribution.

II. Results and Discussion

Based on a comprehensive theoretical framework that focuses on the theoretical impacts of applying artificial intelligence on income distribution in companies, integrating relevant economic models such as Solow, Acemoglu and Autor, and Hémous and Olsen, and applying them to a case study of the service sector in Iraq using the "Zain Iraq" company as a model, data was collected through a specially designed questionnaire for the company's employees, and then analyzed using a set of statistical methods.

A. *Theoretical Framework of the Relationship between Applying Artificial Intelligence and Income Distribution in Companies*

Artificial intelligence (AI) technologies are considered one of the most important technological developments witnessed by humanity in the modern era, with their clear impacts on all aspects of life, including the service sector. The application of AI affects work efficiency, process improvement, and the creation of new opportunities, but this impact is not without potential risks, especially on the distribution of income between labor and capital. This theoretical framework starts from an integrated understanding of the relationship between the application of AI and the distribution of income in companies, by reviewing the relevant theoretical principles and economic models, and providing a precise analysis of the expected mechanisms of influence.

1) Basic Concepts

Artificial Intelligence (AI): It is a broad field that includes the development of computer systems that simulate human mental capabilities, such as learning, thinking, and problem-solving.

Income Distribution: It is the division of the added value (profit) in the company among the different factors of production, such as capital and labor.

Efficiency: It is the company's ability to use resources optimally to increase productivity and achieve its goals.

Substitution: It is the replacement of human labor with AI systems in performing tasks.

Integration: It is the use of AI systems to help workers perform their tasks better and increase their productivity [2].

2) The Theoretical Effects of Applying AI on Income Distribution

Economic theory suggests that the application of AI can affect income distribution through several key mechanisms [6]:

- Increased Productivity: AI systems can improve the efficiency of production processes, leading to increased productivity.
- Changing Demand for Labor: AI techniques may replace some human labor functions, leading to a reduction in demand for labor in those areas.
- Increased Returns to Capital: The application of AI may lead to increased returns to capital, especially if AI is used to develop new products or services [4].

3) Economic Models to Illustrate the Effects

There are several economic models that can be used to analyze the impact of AI application on income distribution, including [3], [5].

- Solow Model: This model suggests that technological changes affect the rate of economic growth, but it does not provide a detailed analysis of income distribution.
- Acemoglu and Autor Model: This model indicates that technological changes affect the demand for different types of skills, leading to an increase in the income gap between workers with different skills.
- Hémous and Olsen Model: This model focuses on the impact of AI on innovation and found that AI may lead to increased income concentration.

4) A case study on the service sector in Iraq

These economic concepts and models were applied and reflected through the survey questions to analyze the impact of AI on income distribution in the service sector in Iraq. The service sector is one of the most affected sectors by AI technologies, especially in the fields of customer service, marketing, and data management. AI technologies may lead to a reduction in demand for labor in some areas of the service sector, such as customer service jobs, which will impact income distribution. And an increase in capital returns in the service sector, especially in technology companies that develop and apply AI systems.

5) Risks of applying AI on income distribution

AI may lead to an increase in the income gap between high and low-skilled workers, which will affect social justice. And the loss of human jobs, leading to higher unemployment rates. AI may also affect the distribution of opportunities, as not everyone may have the ability to access the education and training necessary to adapt to the requirements of the labor market in the AI era. Therefore, an educational policy must be developed that focuses on training the workforce on the skills that suit the requirements of the labor market in the AI era. And increasing investment in research and development in the field of AI, to obtain the greatest possible benefit.

According to the previous information, AI technologies are considered one of the most important technological developments in modern history, and they have a significant impact on all aspects of life, including income distribution. AI can improve efficiency and competitiveness, but it is important to address its potential risks on income distribution and inequality of opportunities. Addressing these risks requires a collaborative effort between the government, the technology sector, and the community to ensure that everyone benefits from the advantages of AI and achieve sustainable development.

B. *Practical framework and hypothesis testing*

After collecting data through a specially designed questionnaire, the data was analyzed using a set of statistical methods to determine the impact of applying artificial intelligence on income distribution in the service sector in Iraq, using Zain Iraq telecommunications company as a case study. Internal consistency validity tests and Cronbach's alpha measure were applied to measure the reliability of the measures used in data collection, then descriptive analysis was used to determine the characteristics of the sample and the extent of the spread of the study variables. To analyze the relationship between the variable of applying artificial intelligence and the variable of income distribution, linear regression analysis was used, which is used to determine the linear effect of an independent variable on a dependent variable, with examination of the normal distribution of the residuals to confirm the validity of the regression results.

TABLE I. INTERNAL CONSISTENCY VALIDITY TEST

Dimension	KMO and Bartlett's Test	
Application of Artificial Intelligence	KMO	.868
	sig	000
Income Distribution	KMO	.846
	sig	000
Questionnaire	KMO	.918
	sig	000

Preparation: Student based on the data collected through the tool and SPSS software

The results of the internal consistency validity test in the table indicate that all the measures included in the questionnaire have high levels of internal validity, where the KMO values are greater than 0.8, indicating the suitability of the data for factor analysis, while the sig values less than 0.05 indicate that the Bartlett's Test rejects the null hypothesis that the variance-covariance matrix between the variables does not differ significantly from an identity matrix, therefore, these results confirm the reliability of the measures used in data collection and analysis.

TABLE II. CRONBACH'S ALPHA RELIABILITY COEFFICIENTS

Reliability Statistics		
Cronbach's Alpha	N of Items	Variable
.870	6	Application of Artificial Intelligence
.855	6	Income Distribution
.918	12	Questionnaire

Preparation: Student based on the data collected through the tool and SPSS software

The results of the Cronbach's Alpha coefficient table show that all the measures used in the questionnaire have a high level of internal consistency reliability, where the Cronbach's Alpha value is 0.870 for the first measure "Application of Artificial Intelligence", 0.855 for the second measure "Income Distribution", and 0.918 for the overall questionnaire measure. These values indicate that the items within each measure are highly correlated and contribute uniformly to measuring the intended variable, and therefore the measures used for data collection can be relied upon.

TABLE III. DESCRIPTIVE ANALYSIS FOR THE DIMENSION OF APPLICATION OF ARTIFICIAL INTELLIGENCE

Article	Sample	Mean	Standard Deviation	Measure Result
Artificial intelligence systems have been implemented to improve customer service, such as chatbots to respond to customer inquiries.	255	4.1529	.81094	Agree to some extent
Artificial intelligence is used to analyze data and improve the company's marketing strategies for its services.	255	3.7529	.88610	Agree to some extent
Artificial intelligence systems have been trained to improve the effectiveness of the company's operations.	255	3.8863	.76256	Agree to some extent
AI has been implemented in order processing operations and to improve the company's response speed.	255	3.8471	.84889	Agree to some extent
AI has been utilized in analyzing customer data and better identifying their needs.	255	3.7647	1.04971	Agree to some extent
Artificial intelligence systems have been employed to organize tasks and improve efficiency in the service sector.	255	3.7020	.93352	Agree to some extent
Application of Artificial Intelligence	255	3.8510	.69069	Agree to some extent

Preparation: The student based on the data collected through the tool and the SPSS program.

The overall mean of 3.8510, which is close to 4 on a 5-point scale, indicates that Zain Iraq employees generally agree on the existence of artificial intelligence (AI) application in the company. The standard deviation of .69069 indicates a relative difference in employees' views on the application of AI, meaning that there is a group of employees who strongly support the application of AI, while another group shows less enthusiastic approval, which may be an indicator of varying appreciation for the benefits of AI or its impact on their jobs.

The highest rated item in terms of agreement: Artificial intelligence systems have been implemented to improve customer service, such as chatbots to respond to customer inquiries. (Mean 4.1529). This suggests that employees see a clear benefit in using AI to improve customer service, which may be due to the reduced burden on them in handling routine inquiries, which may enable them to focus on more complex tasks and add more value.

The lowest rated item in terms of agreement: Artificial intelligence systems have been employed to organize tasks and improve efficiency in the service sector. (Mean 3.7020) This suggests that some employees feel concerned about the impact of AI on their jobs, or their concern about AI systems used for monitoring and evaluation, which may judge their performance more strictly than humans.

The descriptive analysis shows that Zain Iraq employees acknowledge the existence of AI application in the company, and confirm that it is used for certain tasks such as customer service, but there are some concerns about the potential impact of AI on their jobs. These results indicate the need to address employee concerns and provide training and support so that they can benefit from technological changes rather than becoming victims of them.

TABLE IV. DESCRIPTIVE ANALYSIS OF THE INCOME DISTRIBUTION AXIS

Article	Sample	Mean	Standard Deviation	Measure Result
I feel that the company's salary system is fair and equitable.	255	3.8275	.92304	Agree to some extent
I feel that employee salaries in the company are commensurate with levels of experience and responsibility.	255	3.7647	.94719	Agree to some extent
I feel that the system applied to salary distribution in the company provides equal opportunities for all employees.	255	3.8745	.89615	Agree to some extent
I am satisfied with the salary offered to me by the company.	255	3.9961	.78619	Agree to some extent
I believe the company prioritizes more experienced workers in distributing salaries and raises.	255	3.9020	.83371	Agree to some extent
I feel that my job performance affects my salary level in the company.	255	3.6471	.90978	Agree to some extent
Income distribution	255	3.8353	.67360	Agree to some extent

Preparation: The student based on the data collected using the tool and SPSS program.

The overall mean of 3.8353 indicates that Zain Iraq employees generally agree with the company's income distribution system, but it is observed that this opinion is not unanimously held. This may be the result of a balance between positive and negative factors in the system, which may raise concerns among some employees. The standard deviation of .67360 indicates a variation in employees' opinions about income distribution. This variation may be due to factors such as differences in experience levels, job functions, and personal circumstances, which may affect their perception of the system's fairness.

The highest ranked item in terms of agreement is: "I am satisfied with the salary offered by the company" (mean 3.9961). This suggests that employees are generally satisfied with their salary levels, and may indicate that the company offers competitive salaries in the market, enabling it to retain its employees and attract talent.

The lowest ranked item in terms of agreement is: "I feel that my job performance affects my salary level in the company" (mean 3.6471). This suggests that some employees feel that their performance is not reflected in their salary increases, and may indicate issues with the company's evaluation, compensation, and career progression system, and a lack of a clear relationship between performance and reward.

The descriptive analysis shows that Zain Iraq employees appreciate the company's income distribution system and are satisfied with their salary levels, but there is a perceived weakness in the relationship between performance and reward. These results suggest the need to adopt a transparent and fair evaluation and compensation system, and to emphasize the link between performance and reward, to ensure the maintenance of employee motivation and overall satisfaction.

TABLE V. OUTPUTS OF THE KEY INDICATORS OF THE RESEARCH MODEL

Model Evaluation Metrics						
Model	R	R Square	F-ANOVA	Sig	Std. Error of the Estimate	Durbin-Watson
1	.771a	.595	371.7	000	.4295	2.003
a. Predictors: (Constant), AI Application						
b. Dependent Variable: income distribution						
Coefficientsa						
Model		Unstandardized Coefficients		Unstandardized Coefficients	t	Sig.
		B	Std. Error	Beta		
(Constant)		.938	.153		6.146	.000
AI Application		.752	.039	.771	19.281	.000
a. Dependent Variable: income distribution						

The Preparation: The student based on the data collected by the tool and the SPSS program.

The results of the regression analysis indicate the acceptance of the research hypothesis, which states that there is a positive relationship between the application of artificial intelligence and income distribution. With the model being significant according to the ANOVA probability result = 0.000. The correlation coefficient (R) of 0.771 shows a strong positive relationship between the application of artificial intelligence and income distribution, as the correlation value approaches 1, indicating a strong correlation. The coefficient of determination (R Square) of 0.595 indicates that the application of artificial intelligence explains approximately 59.5% of the variance in income distribution in Zain Iraq company. This means that artificial intelligence techniques play a significant role in the form of income distribution. The Durbin-Watson test of 2.003 indicates that there is no problem with the autocorrelation of the residuals in the regression model, which means that the results are not affected by the presence of a trend in the residuals in the regression model and that the residuals are independent. The p-value of 0.000 (Sig) indicates that the coefficient of applying artificial intelligence is highly statistically significant, which means that the relationship between the application of artificial intelligence and income distribution is not just a result of luck, and that there is a real relationship between the two variables. The regression coefficient (B) of 0.752 indicates that an increase in

the use of artificial intelligence by one unit leads to an increase in income distribution by 0.752 units, which means that there is a direct and strong positive effect of the application of artificial intelligence on income distribution. This result is due to several reasons, including:

Increased Productivity: Artificial intelligence systems can improve work efficiency and increase employee productivity, leading to increased profits and better distribution of income between employees and capital.

Cost Reduction: Artificial intelligence systems contribute to reducing the costs of operations and production, leading to increased profits and the ability to increase employee salaries and provide better incentives.

Development of New Services: Artificial intelligence systems contribute to the development of new products and services and the improvement of the quality of current services, leading to increased demand for these services and profits, and consequently, increased salaries and improved income distribution.

Regression analysis confirms the presence of a strong, statistically significant positive relationship between the application of artificial intelligence and income distribution at Zain Iraq. The results indicate that the application of artificial intelligence contributes to improving operational efficiency, increasing profits, and providing better opportunities for employees, which leads to improved income distribution. The following figure illustrates the distribution of the residuals:

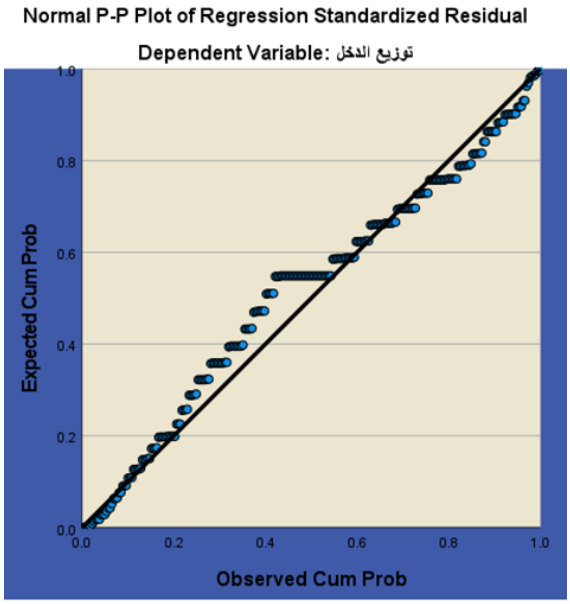

Fig. 1. Examination of the normal distribution of the residuals. (Source: - SPSS program output)

The Normal P-P Plot of the residuals shows that the residuals generally follow a normal distribution, as the residual points form an approximately straight line along the diagonal of the plot, with some variation at the tails. This indicates that the regression model is appropriate for the data, and the results are reliable and unaffected by the normality of the residual distribution. Since the residuals form a straight line, it means that the basic assumptions of regression analysis, such as independence and homogeneity of variance, are met, and therefore the results are reliable.

III. Conclusions and Recommendations

A. Conclusions

1) There is a positive relationship between the application of artificial intelligence and income distribution. Economic theory suggests that the application of artificial intelligence affects income distribution through several mechanisms, including:

- Increased productivity: Artificial intelligence systems improve work efficiency and increase employee productivity.
- Cost reduction: Artificial intelligence systems contribute to reducing operational and production costs, leading to increased profits and the potential to raise employee salaries.
- Development of new services: Artificial intelligence systems help develop new products and services and improve the quality of existing services, leading to increased demand for these services and profits, and consequently, increased salaries and improved income distribution.

2) The results of the regression analysis showed a strong and statistically significant positive relationship between the application of artificial intelligence and income distribution at Zain Iraq. The correlation coefficient (R) of 0.771 indicates a strong positive relationship between the application of artificial intelligence and income distribution, as the correlation value approaches 1, indicating a strong correlation.

3) Employee satisfaction with the income distribution system despite concerns: The Acemoglu and Autor model suggests that technological changes affect the demand for different types of skills, leading to an increase in the income gap between holders of different skills.

1 The survey results showed that Zain Iraq employees appreciate the company's income distribution system and are satisfied with their salary levels, but there is a sense of weakness in the relationship between performance and reward. These results indicate the need to adopt a transparent and fair system for evaluation and equity, and to highlight the relationship between performance and reward, to ensure the preservation of employee motivation and the achievement of everyone's satisfaction.

2 The survey results showed that employees see a clear benefit from using artificial intelligence to improve customer service, which may be due to the reduction of the burden on them in dealing with routine inquiries, which may enable them to focus on more complex tasks and add value.

3 The survey results showed that there are some concerns about the potential impact of AI on their jobs, such as their concern about artificial intelligence systems used for monitoring and evaluation, and which judge their performance more strictly than humans. These results indicate the need to address employee concerns and provide training and assistance so that they can benefit from technological changes instead of becoming victims of them.

B. Recommendations

1. This study recommends that "Zain Iraq" develop strategic plans to enhance the implementation of artificial intelligence in areas such as improving operational efficiency,

marketing, data management, and creating new job opportunities. This could include investing in research and development, and developing a training program for employees to ensure effective and positive use of artificial intelligence.

2. The study recommends reviewing the company's performance evaluation and compensation system, and clearly and transparently highlighting the relationship between performance and reward. This could include adopting a comprehensive compensation system that takes into account all factors that affect performance, such as level of experience, responsibility, and effort.

3. The study recommends using artificial intelligence more broadly in customer service, focusing on developing smart tools that facilitate communication with customers and effectively manage customer complaints. This could include the use of enhanced chatbots and the development of smart customer support platforms.

4. The study recommends launching training programs for employees to enable them to adapt to technological developments and master new skills that suit the job market in the age of artificial intelligence. This could include training employees on the use of artificial intelligence tools and data management, and equipping them with communication, collaboration, and critical thinking skills.

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