

time. Learning online should be supported to bring learning outcomes and learning quality together.

Key words: Computerized program, life skills.

Introduction

The computerized programs have a strong effect on children in their early stages if used well and beneficially as they have an interesting display that attracts children to learn through them. Besides, the children's ability to use the computerized program is high because of the ease of designing the program to suit the age group for which it is designed. In addition, the use of continuous reinforcement encourages children to learn better, and the variety of multimedia used in the program leads to a better learning by the children. This study gave the same results of Adams, R.H.(2006), Brandt, Petra Stamer (2016) and Dowswell, E& chessor, D(2014) in the field of the area of study and the findings.

Results and discussion

From the result, it recommended that education departments should generalize the use of computerized programs in kindergartens and all academic levels because of their strong and effective impact on receiving knowledge and developing their life skills. Nannies in Riyadh to diversify teaching methods and pay attention to the use of computerized educational programs in the educational process, as well as benefit from the available educational applications. The Ministry of Education adopt the production of educational software for the Riyadh stage, under its supervision. Product more educational programs to benefit from. Training nannies on how to develop life skills for kindergarten children. The unification of the Riyadh curriculum by the Ministry so that the programs can be widely applied and benefited from.

Conclusion

This study conclude that the effectiveness of designing a computerized program for kindergarten age stage (5-6) years should be studied. The effectiveness of the current computerized program to develop some life skills that are not included in the current study must designed. Building educational programs and educational applications on the mobile for the benefit of students at various academic levels.

Conducting a field study to find out the possibility of Riyadh to implement its educational programs.

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ENHANCING MARKET ANALYSIS AND FINANCIAL EVALUATION IN TURKEY THROUGH BUSINESS INTELLIGENCE TOOLS

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Abstract: This research offers a comprehensive approach to analyze the market and financial aspects of Turkey by leveraging the power of Business Intelligence tools. The research aims to bridge the gap between data and actionable insights, benefiting a wide range of stakeholders interested in the Turkish economy.

Key words: Macro economy, Business Intelligence, financial KPI, market analysis, machine learning

Introduction

Turkey's strategic location and rich cultural heritage position as a key player in the global economy, offering growth opportunities for globalization and technological advancements. Market analysis in Turkey provides insights into consumer behavior, industry trends, and competitive dynamics, guiding businesses and investors in making informed decisions. This imperative has given rise to the field of Business Intelligence (BI), an umbrella term that combines architectures, tools, databases, analytical tools, applications, and methodologies [1]. In the era of big data, BI tools and methodologies is better in term of data quality, consistency, currency [2] and play a vital role in transforming vast amounts of information into actionable insights, empowering stakeholders to navigate economic complexities and uncertainties effectively.

Results and discussion

Turkey's net debt presents significant challenges, both in terms of its contribution to the regional burden and its disparities compared to advanced economies. Fluctuations in net debt have been observed, indicating potential fiscal pressures or increased borrowing (Fig. 1, Analysis of Turkey Indicators).

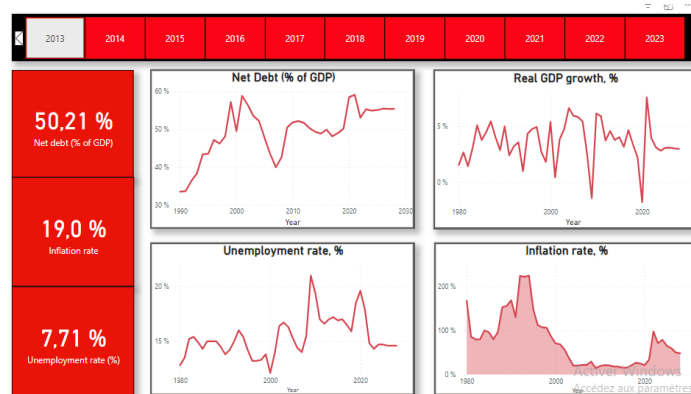


Fig 1. Analysis of Turkey Indicators [1]

Despite efforts to stabilize prices, Turkey experiences volatility in inflation rates, displaying wide fluctuations over time. The historical analysis of inflation rate highlights the nation's consistent struggle with inflationary pressures. While optimistic projections suggest positive labor market dynamics and economic growth potential, addressing structural impediments and promoting inclusive growth are crucial due to risks and challenges.

Turkey witnessed a remarkable surge in total consumer credits between 2012 and 2023, with an average Consumer Confidence Index (CCI) of 85.61. However, the declining trend in consumer confidence emphasizes the need for proactive measures to restore sentiment and ensure economic resilience.

The rise in total deaths can be attributed to population aging, changes in disease prevalence, and improvements in life expectancy. The highest death rate was observed in 2014 at approximately 2.19%, significantly higher than the lowest rate in 2023 at approximately 0.53%. Similarly, the highest average total fertility rate was recorded in 2014 at approximately 2.20 live births per woman, which declined to approximately 1.86 by 2023, reflecting shifts in reproductive behaviors (Fig. 2).

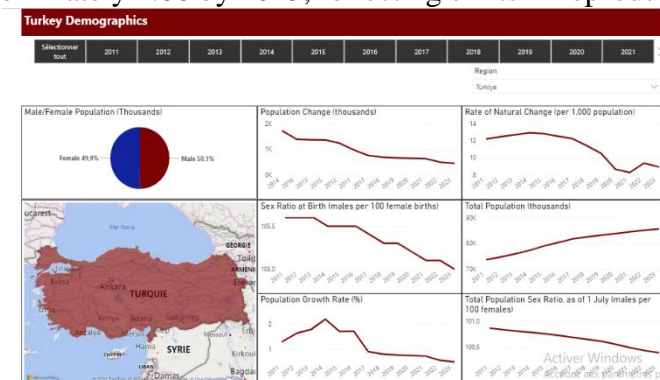


Fig 2. Analysis of Turkey demographic [2]

To enhance the accuracy of AI predictions, machine learning algorithms are employed [3]. The Mean Squared Error (MSE) is utilized as a measure of the average squared difference between predicted and actual values. For life expectancy in both sexes, the MSE is calculated as 41.09 (Fig. 3).

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# Machine Learning Model
# Let's predict 'Life Expectancy at Birth, both sexes' based on 'Total Population' and 'Births'

# Features and target variable
X = df[['Total Population, as of 1 July (thousands)', 'Births (thousands)']]
y = df['Life Expectancy at Birth, both sexes (years)']

# Split data into training and testing sets
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)

# Train a linear regression model
model = LinearRegression()
model.fit(X_train, y_train)

# Make predictions on the test set
predictions = model.predict(X_test)

# Evaluate the model
mse = mean_squared_error(y_test, predictions)
print(f'Mean Squared Error: {mse}')

Mean Squared Error: 41.087572468737264

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Fig 2. Model of the algorithms to increase the accuracy of predictions made by AI [3]

Conclusion

Based on the comprehensive analysis conducted using data from Power BI, SQL Server, and Kaggle ML models, several key insights have emerged regarding economic trends in Turkey.

While Power BI provided detailed visualizations of economic metrics, SQL Server facilitated data storage and management, enhancing the analytical process. Additionally, insights gleaned from Kaggle ML models contributed to a deeper understanding of predictive trends. Ultimately, this research underscores the importance of leveraging diverse data sources and analytical techniques to gain holistic insights into economic dynamics, facilitating informed decision-making and strategic planning for stakeholders in Turkey's economy.

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OPTIMIZATION OF GEOMETRIC PARAMETERS OF HIGHER KINEMATIC PAIRS TO MINIMIZE THEIR WEAR

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Abstract: In the contemporary industry of machine manufacture, the analysis of the interplay between machine elements that are susceptible to friction is of paramount importance. The magnitude and qualities of this friction have a direct impact on the efficiency of mechanisms, their longevity, and their dependability. However, friction is not solely a resistive force to be surmounted, but it also has latent potential to engender heat, oscillation, and attrition. Coulomb's law, which governs the ratio of friction force to normal force, is the central point of investigation for academics. Precise determination of the friction coefficient, as well as comprehension of the dynamics of this phenomenon, can profoundly enhance the performance and longevity of mechanisms. This is especially true in the context of incessant growth and integration of automatic systems, where even a minor shift in frictional characteristics can have momentous implications on the operations of all