

## Assessing The Effectiveness of Talent Management Strategies in Private Sector Banking Environments

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**Abstract:** The study focuses on talent management practices in private banking using SEM (Structural Equation Modeling) through AMOS software powered by SPSS. It analyzes the acquisition, promotion and retention of talent and then examines their impact on organizational performance. With the help of regression and descriptive statistical analyses, the interrelationships of the factors are explained in the research work. The regression model had weak explanatory power (limited) and still accounted for a large proportion of unexplained variance (explanation of variance is still minimal). SEM shows how complex latent variables are apparently related to each other, helping to develop optimal strategies. Descriptive data analysis provides an overview of important key metrics and allows the results to be used in the optimization of competence management.

**Keywords:** Talent management, private sector banking, Structural Equation Modeling (SEM), AMOS, SPSS, regression analysis, descriptive statistics, organizational effectiveness.

### I. Introduction

The competitive banking sector landscape is increasingly driven by effective talent management strategies that are the core of organizational success. This research encompasses an in-depth analysis of how the strategies must be measured over time. This study utilizes the SEM method which is enhanced by AMOS in SPSS to take the details of the connections between various talent management factors and their effect on corporate banking environments. Through the utilization of analysis to understand the latent factors of talent acquisition, development, and maintenance against the observed indicators the workforce study aims to shed light on the dynamics behind stability and performance. Data analysis, model visualization, fit indices, and parameter estimates must be involved in the research process as contributing factors and indicators that supply strategic decision-makers with information for enhanced talent management, plugging any gaps in the private banking sector.

### Aims and Objectives

#### Aims

This study evaluates the effectiveness of people management strategies in private sector banking using Structural Equation Modeling (SEM) simplified using AMOS in SPSS.

#### Objectives

- To be fully conversant in talent management strategies.
- To use structural equation modelling (SEM) for analysis.
- To establish long-lasting links between the many components of talent management.
- To evaluate the impact of strategies on an organization's effectiveness.

### II. Literature Review

#### A. The Effects of Talent Management Practices Implementation on Long-Term Organizational Performance

The dynamic nature of the market where companies compete makes management tasks even more demanding and the achievement of organizational goals is crucial. Although not fully researched, researchers and practitioners have recently expressed concern about the use of talent management techniques to achieve sustainable organizational

performance that meets the operational and strategic goals of companies [1]. Due to problems such as globalization, intense competition, and technological breakthroughs, companies today struggle to remain relevant in the global market.

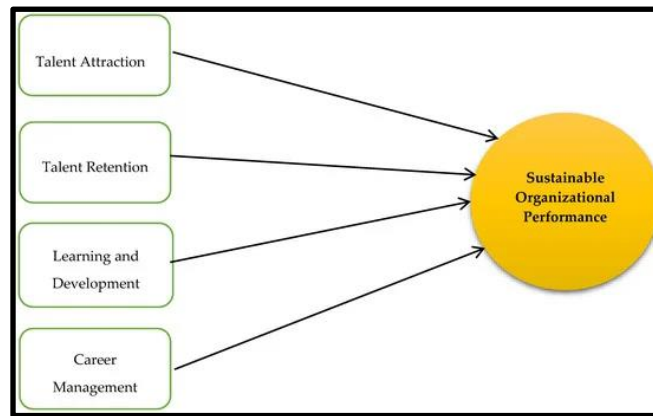


Fig 1: Sustainable Organizational Performance

The purpose of this study is to determine how talent management techniques affect long-term organizational success in the private banking sector.. The survey sample included 36 managers with banking experience . Data for this study are collected using a standardized questionnaire. The proposed assumptions are evaluated using the structural equation modeling technique (SEM) [1]. An organization prioritizes its human capital rather than increasing production and differentiating goods and services because its people are its most valuable asset.

#### *B. Analysis of the literature and research design on the subject of HR competence management in the private sector*

The field of talent management (TM) is founded a little over two decades ago to develop human expertise. This study critically examines the field of competency management, emphasizing its importance and implications for private-sector HR management. A comprehensive research agenda can be developed by identifying important issues and knowledge gaps through a review synthesis of the body of existing research [2]. It sheds light on the complexities and challenges of talent management, highlighting the need for tailored private sector approaches to attract, develop, and retain exceptional employees. It offers three new insights into the field. First, private sector talent and TM are well-defined.

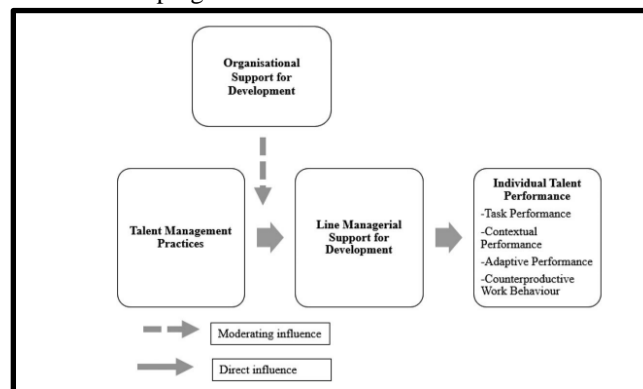


Fig 2: Talent Management Model

Second, given the limitations of the TM application, it adds to the understanding of its applicability in the private sector. In addition, the assessment emphasizes the importance of aligning the company's goals and values with competency programs to improve the effectiveness and efficiency of personnel [2]. The purpose of the review is to provide a solid foundation for future research by delving into theoretical frameworks and empirical studies. It helps researchers and practitioners find creative solutions to talent management problems in the private sector. It can assess

the applicability of this HRM approach in the private sector by referring to the global talent management (TM) literature. Despite the scientific focus in the commercial sector, there is still a lack of TM research in the private sector. *C. Performance and talent management in the boardroom: the value of development support for organizations and line managers.*

Talent management (TM) research has been conducted primarily in the context of private multinational corporations (MNCs) in response to demands for expanded TM research. Despite research linking talent management (TM) techniques to both individual and organizational outcomes, little is known about the effectiveness of TM strategies, particularly in the private sector in developing countries.



**Fig 3: Talent Management**

This work addresses a key research gap, adding to the limited knowledge of TM in the private sector and responding to recommendations for further research on the contextual factors influencing TM. Bahrain's public sector has adopted a hybrid talent management strategy which, according to industry research, reflects the government's approach to dealing with labor shortages [3]. Planned employee outcomes may not be achieved, for example, if TM is not compatible with organizational culture or current HR practices.

### III. Methodology

#### A. Data Collection and Preparation

$$Y_{Clean} = f(X_{Raw})$$

- $Y_{Clean}$  represents the cleaned data.
- $X_{Raw}$  represents the raw data.
- $f$  stands for the function that is used to clean up data, which includes resolving missing numbers, finding outliers, and converting data.

Data collection is an elaborate process used in this study which involves collecting and organizing a data-set relevant to talent management strategies which work in private-sector banking firms. One of the first things is to come up with a dataset that must be used to study variables of these importance: for instance, demographic data, position in an organization and competence assessment tools. In this manner, the process of data collection is augmented with information acquisition from the commercial- sector banking institutions and this is followed by data quality assurance that is relevant to the objective. Post that, the dataset cleaning and formatting are accomplished, and the possible outlier elements among the existing inconsistent features are checked for and fixed. Values that are missed are partially rooted by preventing them affect the results by using suitable approaches. Outliers are spotlighted and controlled because they can give the distorted results. Depending on the study, variables are usually entered as either numbers or words. Then the coded and labeled variables are based on the study framework. The importance of this part in the whole process lies in the fact that the researchers are taking care of the quality and reliability of the dataset, which must be the basis for further data analysis.

*B. Structural Equation Modeling (SEM) with AMOS in SPSS*

$$Y = \lambda X + \epsilon$$

The dataset is prepared next, then an SEM is constructed using AMOS software that integrates with SPSS. Clarifying the associations between latent factors and specific variables that define talent management policies and tools is the main goal of this modelling. The general concepts that are reflected in the talent acquisition, development, and retention steps are represented by the latent variables and the indicators that reflect the specific metrics and behaviors as well. Path diagrams are created to visually present the expected relations between those variables following their hypothesis. The SEM model is designed by using engaged statistical means, such as the maximum likelihood estimation (MLE), to estimate the level and significance of such relationships [5]. Data gathered during SEM contribute to the domain knowledge that is gained about how many and what different factors represent talent management, and how these factors have an impact on organizational outcomes in the private-sector banking environment.

*C. Model Evaluation and Interpretation*

$$RMSEA = \sqrt{\frac{\sum((O_{ij} - E_{ij}))}{df \times (df - 1)}}$$

In this stage, the research builds the SEM model from the data and then estimates and fits the model. Consequently, they examine its fit and run the proper interpretation of results. Fits's indices are comprised of "**Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR)**" that is applied to a model to determine how well the model actually does. These researchers estimate the parameters (path coefficients) including their standard errors and significance levels, then they draw conclusions about the extent to which talent management strategies influence the organization's performance. The sensitivity analysis can quantify the potential changes in the model including its modification, re-estimation of the modified model, and its evaluation [6]. Through this evaluating and interpreting process, this study must be able to arrive at conclusions that help identify the efficiency of talent management strategies in private-sector banking activities, thereby shaping future strategic decision-making.

**IV. Result and Analysis**

Research concerning talent management strategies that are utilized within the private banking industry applications involves, to a very great extent, the use of statistical tools, e.g., descriptive statistics and regression analysis, to draw meaningful and detailed conclusions. Descriptive statistics give an account of the sample behaviorological characteristics by showing a summary of measures that include central tendency (mean) and dispersion (standard deviation) which helps to interpret talent managing metrics distribution and variability. On the contrary, regression analysis is focused on discovering the relationships between the various variables, in order then to unravel the causes or predictors of the outcomes, of the education change.

Then the production of these statistical models will give us an opportunity to truly evaluate and understand the complicated movements in banking talent management. Through the analysis of the statistically based results, scientists are able to see the patterns, correlations, and possible causes between variables susceptible to the formation of talented workers. The consideration of such diverse factors in talent management understanding serve to provide the necessary insights behind the makeup of different banking strategies and outcomes.

Such as regression analysis may reveal dominant factors in employee performance or stopping them to stop early, such as training programs or compensation plans. Descriptive statistics can be used as the complement because it will give the context of predictors such as distribution of employees' demographics or organizational units.

Finally, the conclusion of the analysis uses statistical sementors to develop strategic insights that can be adopted by organizational management. It provides deep insights on the best strategies in talent management, unearths the weak spots, and the roadmap for key initiatives to streamline talent acquisition, development, and retention in the banks.

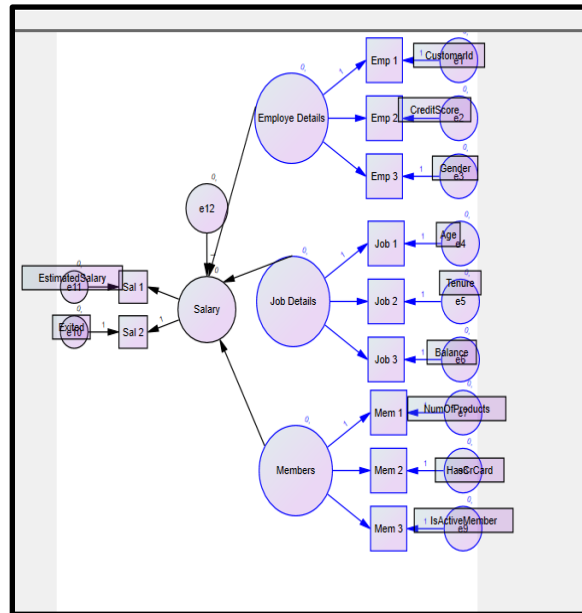


Fig 4: SEM model using Amos

The SEM sourced from AMOS in SPSS explains the underlying complex relation of latent variables and indicator/observed variables within the private sector banking space. This visualization enables the idea of the imaginary relationships of key concepts as in human resource planning, development and retention. Style an ingenious path diagram and the model of SEM provides insights into the direct or indirect effects of these latent variables on organizational outcomes aiding to an understanding of talent management strategies in banking [7]. Through SEM applications, knowledgeable researchers and practitioners must be able to unravel the mysteries of the why behind the practices that businesses use to manage talent, with these discoveries guiding them toward evidence-based decision-making methods oriented towards optimization of human capital and making organizations successful in highly dynamic banking contexts.

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
EstimatedSalary	10000	11.5000	199992.4800	100090.2399	575.1049383	.002	.024	-1.182	.049
CreditScore	10000	350	850	650.53	.967	.96.653	-.072	.024	-.426
Valid N (listwise)	10000								

Fig 5: Descriptive Statistics

Descriptive Statistics analysis is an important tool revealing the background as well as benchmark indicators which are typical of talent management in private sector banks. The statistics examined include the mean, the standard deviation, the skewness, the kurtosis, which, in turn, can show the central of measure, the characteristics of the distribution as well as the variances [8]. The present study is going to play a key role in shedding the light on the causal relationship between credit scores and income because it may use such tools as graphs and quantitative summaries. The additional part of these data s to know what patterns, abnormalities and differences are in this set of data [4]. By applying descriptive statistics, researchers can identify the best method of data analysis and correctly interpret results that help to provide overall solutions to talent management issues and their impact on the economic growth of the banking sector.

Descriptive Statistics			
	Mean	Std. Deviation	N
CreditScore	650.53	96.653	10000
EstimatedSalary	100090.2399	57510.49282	10000

Correlations			
		CreditScore	EstimatedSalary
Pearson Correlation	CreditScore	1.000	-.001
	EstimatedSalary	-.001	1.000
Sig. (1-tailed)	CreditScore	.	.445
	EstimatedSalary	.445	.
N	CreditScore	10000	10000
	EstimatedSalary	10000	10000

Variables Entered/Removed <sup>a</sup>			
Model	Variables Entered	Variables Removed	Method
1	EstimatedSalary <sup>b</sup>	.	Enter

a. Dependent Variable: CreditScore  
b. All requested variables entered.

Fig 6: Descriptive Statistics of regression model

Regression's descriptive Statistics give a thorough understanding of the relationship between the implementable variables of the strategic private-sector bank organization. These degrees represent metrics, such as the Pearson correlation coefficient, to reveal the strength and direction of association between variables including credit score and expected income. Through data analysis, especially through descriptive statistics, this study can better identify the statistical relationship between the independent variables and the dependent variable [9]. This is highly important for the development of strong models that can predict talent management decisions in banks.

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.001 <sup>a</sup>	.000	.000	96.658

a. Predictors: (Constant), EstimatedSalary  
b. Dependent Variable: CreditScore

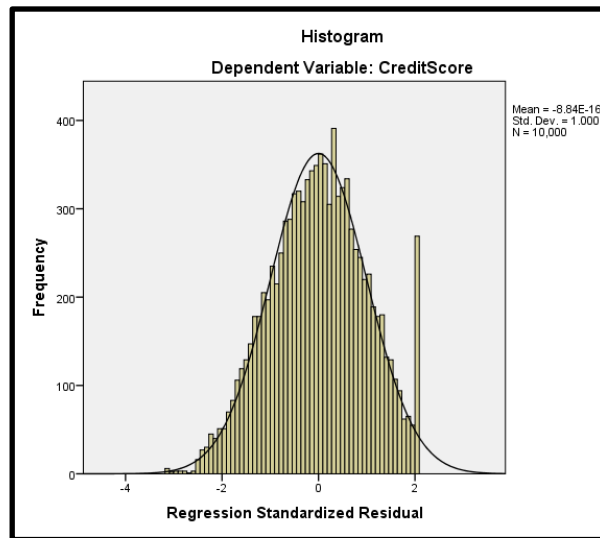
Fig 7: Model Summary

The model summary is witnessed to cope with major points of the Regression analysis made on the data. The R-squared reported value represents the relative proportion of the dependent variable(s) explained by the independent variable(s) and is equal to 0.000. The low R-squared of the regression model having a R-squared of 0.05 indicates that the independent variables utilized are unable to predict any notable changes in the dependent variable. Therefore, it can be said that this model could not be claimed to have adequately captured the dynamics of the variables.

Moreover, the standard of error of the estimation; i.e., about 96.658, is considered to be an approximate mean of the deviations of the actual observed values from the regression line. This term describes how far the real data points bend from the line which the regression equation gives prediction [10]. A wider standard error indicates the existence of greater characteristics of variation in the data that should be aligned around a regression line, hence the limited confidence in the clear-cut prediction of the model.

This statement, as a whole, has indicated major weaknesses in the model, as its predictive accuracy remains low for the given context. The low R-squared value is an indication of the low explanatory power of the model which is restrained by the unexplained factors beyond those included in the model that can influence the dependent variable

[11]. Hence, the findings suggest to interpreted it with reservations, and to be hesitant when it comes to making conclusions and predictions based on just a current model. The expansion of the research, improve the variables, or include other factors as well, therefore, may be required for achieving a clear picture about the cause-and-effect relationship under study. Initially, the model provides important insights into the connections between the variables but there is still underlying complexity in the dynamics that remind us to look for more testing and improvement of it.



**Fig 8:** Histogram of credit score

The histogram of the employee's credit scores within the bank displays the extent to which this peculiar distribution of credit scores affects the bank credit population. The histogram helps to know the distribution of credit on different categories. The complexity in the workforce is also demonstrated which involves the number of people who are good and average [12]. Histogram each bar represents a credit score range; the level of a bar is in their frequency.

The diagram backed visual aid is of great value for management to detect patterns and detail. It facilitates identifying the roles of the present trends as well as challenges upon human capital management [13]. For instance, credit scores can be used to check whether there exists a trend that the scores cluster around some of the ranges, meaning that most employees have similar levels of credit scores. Succeeding in harnessing the power of data, such knowledge can be applied to strategic measures addressing talent acquisition, retention and learning.

In addition, histogram offers a precise picture of the credit scoring distribution among employees and hence that can help them to analyze the overall creditworthiness of the workforce [14]. Through grasping the range of ways, a credit score differs and the factors that influence it, managers can more accurately match a talent management strategy to challenge and utilize the capabilities of people in the workforce.

The histogram facilitates the task of anticipating problems for the managers by building a picture that helps to pinpoint the possible gapped credit score groups or remaining differences in the employee groups. A good example is the situation when particular departments or specific jobs positions exhibit lower credit scores at par with other departments or occupations, this may imply a serious issue in the work staff stress or a poor financial literacy among workforce staff [15]. While being armed with such knowledge, managers can actually implement the purposeful activities designed with the aim of reducing the occurrence of risks and boosting employees' well-being.

## V. Conclusion

This study highlights that the efficient implementation of talent management strategies is a key factor in the success of private-sector banking. While the regression analysis by itself does not appear to give much explanatory power, the “*structural equation model (SEM)*” provides deeper insights into the association between these latent variables,

which in turn contributes towards the execution of strategic decisions. Descriptive analytics in talent management provide for a fine-tuned level of analytics. The above findings indicate that it is critically important to use the evidence-based approach to optimize the effectiveness of talent management techniques. Through the use of SEM and descriptive statistics, companies can strengthen their employee recruitment, development, and retention in the banking industry which is evolving fast. Consequently, organizations must be able to meet their goals of effectiveness in the banking market.

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