ROLE OF HR METRICS IN ENHANCING FIRM PERFORMANCE OF SELECTED UAE AIRLINE COMPANIES

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ABSTRACT

The present study has been conducted to evaluate the role of HR Metrics in enhancing revenue and carried passengers of selected airline companies in UAE because of changing role of HR from administrative to strategic and advisory role. The study has statistically proved that HR Metrics have financial implications and can improve performance in a business organization. HR Metrics help evaluating past performance and HR Analytics help in generating information about Human Capital in an organization.

Keywords: HR Metrics, HR Analytics, Employee Strength, Employee Revenue.

INTRODUCTION

With the growing importance of human resources accounting during the digital age, transparency and reliability of information is the key to the success of every business organization (Schläfke et al., 2013). The aviation industry has not only supported tourism and trade but has also been a major contributor to the growth of world economy as it facilitates 35 percent of global trade and supports 60 million jobs worldwide (Source: ATAG, Al Masah Capital Research).

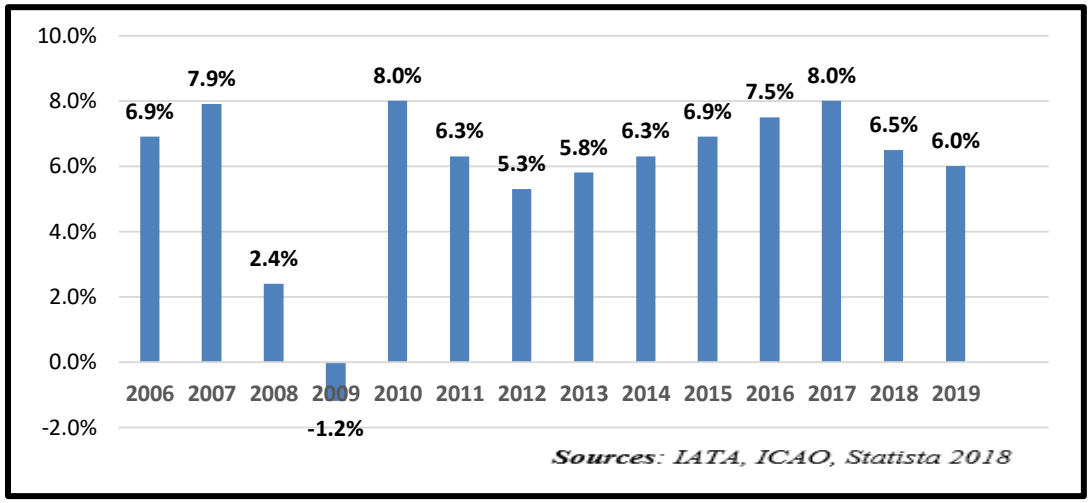

FIGURE 1
ANNUAL GROWTH RATE IN GLOBAL AIR TRAFFIC PASSENGER DEMAND

When crude oil prices plummeted low since the second half of 2014, airline companies have posted a collective profit of USD19.9 billion in 2014, up from USD10.6 billion in 2013 and USD6.1 billion in 2012. Between 2009 and 2017, revenue in the global aviation industry grew at a compound annual growth rate of around 5.9 percent, reaching 754 billion U.S. dollars in 2017.

By 2019 global air traffic passenger demand is expected to grow by 6 percent (Figure 1) and revenue from Commercial Airlines worldwide is expected to reach 855 billion US Dollars in 2019 (Figure 2).

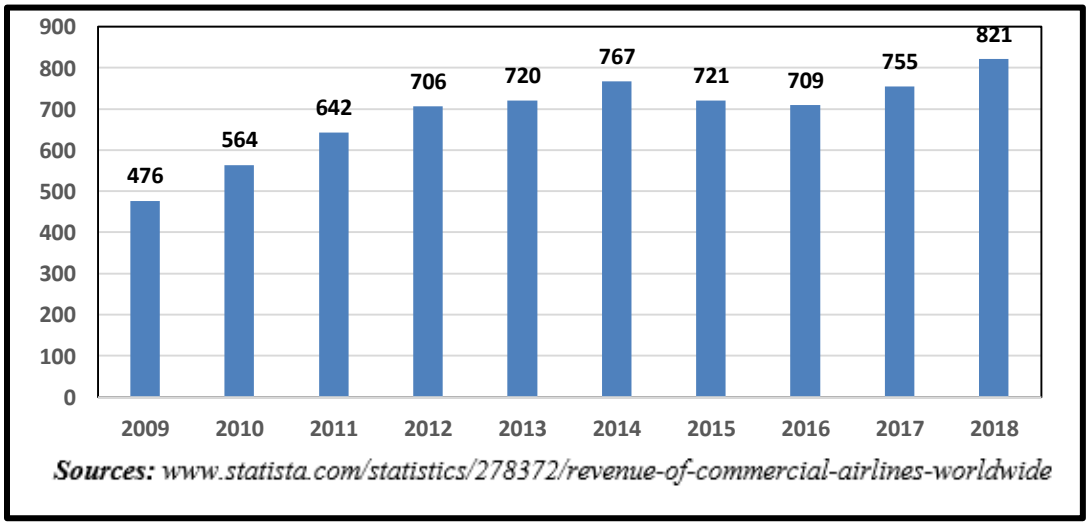

FIGURE 2
REVENUE OF COMMERCIAL AIRLINES WORLD WIDE IN BILLION US DOLLARS FROM 2009-2018

LITERATURE REVIEW

With the advent of metrics and analytics in Human Resource Management, a series of researchers have viewed the HR function as a factor of decision sciences (Boudreau & Ramstad, 2007; Huselid, 1995). A study by IBM (Lesser & Hoffman, 2012) of more than 700 Chief Human Resource Officers highlights the fact that people are given significant importance by CEO's in today's organization. Due to growing importance of human capital in determining organizational effectiveness, HR can play a key role in developing and implementing corporate strategy and become a high-value-added part of organizations (Lawler III et al., 2004; Park & Shaw, 2013). Human resource analytics (HR analytics) is an area in the field of analytics that refers to applying analytic processes to the human resource department of an organization in the hope of improving employee performance and therefore getting a better return on investment (Fred & Kinange, 2015; Rasmussen & Ulrich, 2015).

There are three types of HR metrics which are efficiency, effectiveness, and impact (Boudreau & Ramstad, 2001). In most organizations, HR has the main responsibility to develop and retain talents through specific programs and initiatives. Although these HR metrics help to measure the organization performance, we need to use HR analytics beside these metrics to generate deep understanding and predictive insights (Lawler III, et al., 2004; Rauf et al., 2017; Khan, 2014; Fred & Kinange, 2015).

Lawler III et al. (2004) mentioned number requirements to conduct an accurate examination between specific HR practice and a performance metric. First of all, it requires selecting the right metrics to examine the desired HR policy or practice. Secondly, it requires using a good HR analytics model as well as valid organization performance. This process should generate conclusions beyond how the company can reduce administrative cost and improve service quality. Measuring the impact of HR on bottom line performance is the crux of HR analytics (Lawler III et al., 2004). In other words, the HR metrics and HR analytics should be aligned to the business strategy to generate the desired business outcomes (Weiss & Finn, 2005; Trivedi, 2015; Madsen & Slåtten, 2017; Chhinzer & Ghatehorde, 2009). In this study, we examine the role of Employee strength in enhancing revenue and customers travelled in selected UAE Airline Companies.

Research Objective

The present study has been undertaken to gauge the impact of employee strength on financial implications and its role in enhancing revenue and carried passengers of selected airline companies in UAE because of changing role of HR from administrative to strategic and advisory role.

Research Problem

GCC-based airlines have major expansion plans to meet the growing demand for air travel and the region is likely to face a shortage of skilled labor in the coming years. The regional aviation industry would require more than 35,000 new pilots and 50,000 new technical personnel over the next two decades. The basic business objective is to increase revenue and customer satisfaction, as it has an impact on financial implications and human capital. In the present study customer satisfaction has been measured in terms of number of passengers carried. Retention of employees, one of the key components of HR metrics, has been considered on the basis of employee strength. However the paper gives a scope of further research to analyze components of HR metrics on the basis of retention rate per manager and turnover rate.

Research Methodology

The study is based on the financial performance of top 2 airline companies in the UAE: Emirates Airlines and Etihad Airways. The proposed study has evaluated the financial performance based on revenue per employee and customer satisfaction in terms of passengers carried by the respective airline companies with reference to HR parameters which has been measured by employee strength for a period of 10 years from 2009 to 2018.

Research Questions

The research questions addressed in the present study are enumerated below:

- Whether employee strength has an impact on operating revenue?
- Whether employee strength has an impact on the number of passengers travelled?

Sample Design and Data Collection

The present study is based on secondary data, and financial data of the airline companies that has been collected from the company websites and annual reports.

Data Analysis

The financial data of the selected UAE airline companies Emirates and Etihad has been tested to find out the robustness of the research model. The independent variable: Employee strength has been regressed against passengers travelled and operating revenue. The financial data of the airline companies are analyzed with the help of Data Analysis in Excel using Significance F and R square in simple regression analysis. The independent variable is the employee strength; and customer satisfaction in terms of number of passengers travelled and financial performance indicators are dependent variables. The following model is repeatedly used for the study to establish the relation between the dependent variables and single independent variable for the ten observations in the UAE airline companies. Equation is

$$Y = \alpha + \beta_1 X_1 + \varepsilon$$

Where, α: The intercept and independent variable

X: The average employee strength and dependent variable

Y: Represents the financial indicators & customer satisfaction in terms of passengers travelled

ε: Represent the estimated standard deviation of the error term.

Emirates is the largest airline in the Middle East operating over 1,800 flights to more than 150 cities in 84 countries across six continents (Sources; Website of Emirates Airlines). Etihad Airways is the second largest airline in the UAE which operates more than 1,000 flights per week to over 120 passenger and cargo destinations as of February 2018. The below Figure 3 highlights the number of passengers travelled by Emirates Airlines and Etihad from the financial year 2009 to 2018.

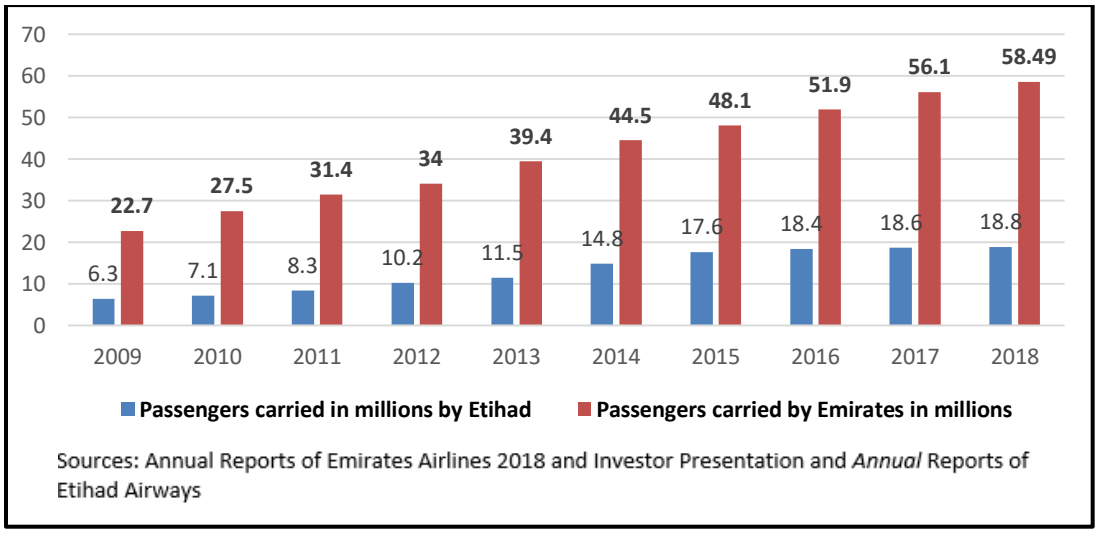

FIGURE 3
NUMBER OF PASSENGERS TRAVELLED BY MAJOR UAE BASED AIRLINES 2009-2018

Revenue per employee is calculated by dividing a firm's revenue by its total number of workers (Revenue/Number of Employees): Figure 4.

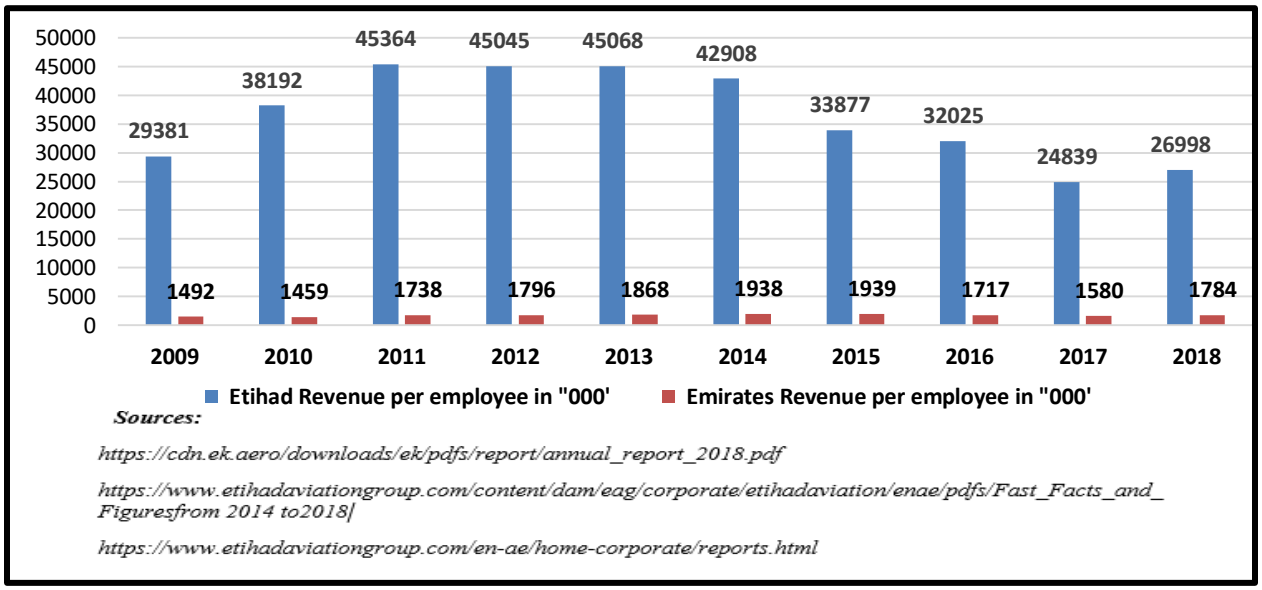

FIGURE 4
REVENUE PER EMPLOYEE OF EMIRATES AND ETIHAD AIRWAYS FROM 2009-2018

Employee Strength in terms of qualities and skills an employee possess of two major airlines in UAE in Figure 5.

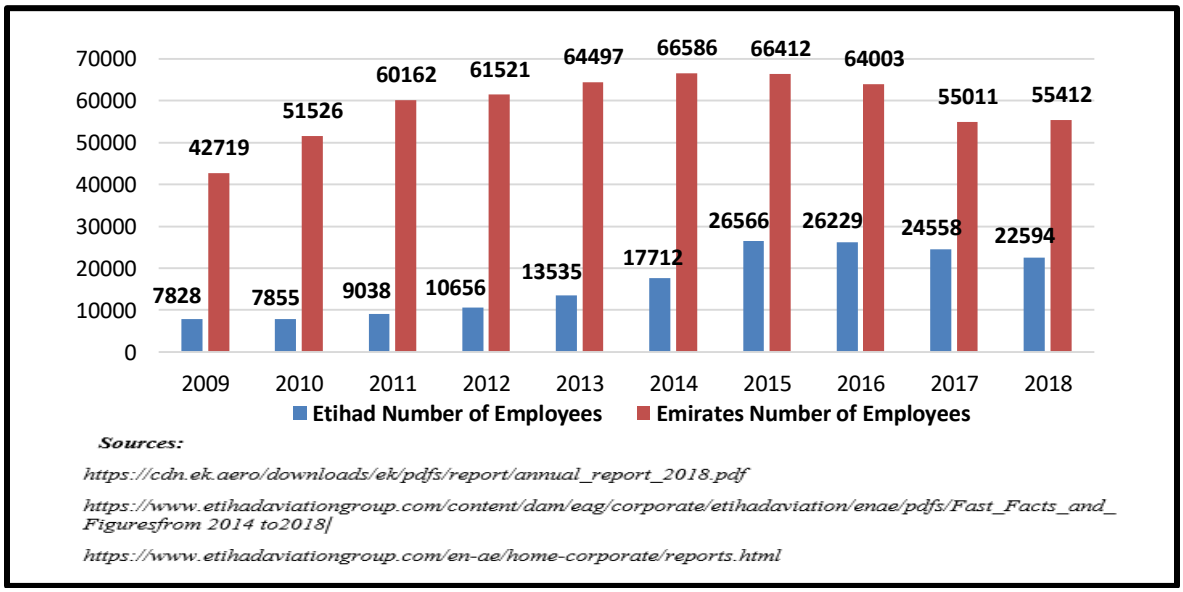

FIGURE 5
EMPLOYEE STRENGTH OF EMIRATES AND ETIHAD AIRWAYS FROM 2009-2018

RESULTS OF THE RESEARCH

We tried to identify the robustness of the model which had been suggested in this research.

Table 1
MODEL SUMMARY

Airlines	Dependent variables	*R*	R^2	*Adj.* R^2	Significance *F*
EMIRATES	Revenue	0.947	0.898	0.885	0.000
	Passengers Carried	0.987	0.974	0.971	0.000
ETIHAD	Revenue	0.873	0.762	0.732	0.001
	Passengers Carried	0.975	0.951	0.944	0.000
Total	Revenue	0.962	0.925	0.921	0.000
	Passengers Carried	0.988	0.976	0.974	0.000

Table 1 shows that strong correlation coefficients between the independent variable and defendant variables which are greater than 0.873. Also, the coefficients of determination are higher than 0.762 which means that at least 76.2% of the variation in the dependent variables could be explained by the variation in independent variable across the hypotheses. Theses phenomena also supported by the adjusted R^2. Overall, the significances for *F-distribution* were less than 0.001, which support that the suggested research models were robust.

Hypothesis Testing

The significance level for a given hypothesis test is a value for which *p*-value less than equal is considered statistically significant. The hypothesis on the impact of Employee Strength on Operating Revenue and Passengers travelled was tested through regression analysis and the results are summarized below in Table 2.

Hypothesis #1

The hypothesis is created to determine the impact of employee strength on operating revenues. Since the *p*-value is greater than the 0.05 level of significance it implies failure to reject null hypothesis. The results for the regression coefficient had been verified as being meaningful for cases. The slope of Emirate Airlines (1.603) has been considered as being steeper than Etihad Airways (0.249).

Table 2
HYPOTHESIS TESTING

Airlines	Hypothesis Testing		Variables		Coefficient			
			Independent	Dependent	Intercept(α)	*p-value*	*β*	*p-value*
Emirates Airlines	H_1	Yes	Employee Strength	Revenue	- 8,946.195	0.386	1.603	0.000
	H_2	Yes		Passengers	- 13,241.730	0.003	1.095	0.000
Etihad Airways	H_1	Yes	Employee Strength	Revenue	1,608.466	0.110	0.249	0.001
	H_2	Yes		Passengers	2,632.708	0.022	0.632	0.000
Total	H_1	Yes	Employee Strength	Revenue	- 20,748.067	0.000	1.777	0.000
	H_2	Yes		Passengers	- 1,711.669	0.186	0.871	0.000

Hypothesis # 2

This hypothesis is created to determine that there is an impact of employee strength on passengers travelled. Since the *p-value* is less than 0.05 the results are statistically significant and

we reject the null hypothesis. We found the higher regression coefficient in Emirates Airlines (1.095) than Etihad Airways (0.632)

Findings and Discussions

H_1 Employee Strength has a significant impact on Operating Revenue.

In case of Emirates airlines as well as Etihad Airlines the *p-value* was more than 0.050. It indicates that there is less evidence that employee strength can impact operating revenue. However when *p-value* is more, then one can check the slope and its *p-value*. It is found that Slope for Emirates is 1.603 which is quite significant with *p-value* 0. In a layman's language it would indicate that is one unit of employee strength is added (in present case 1 employee) it would step up the revenue by 1.6 times. In case of Etihad, the slope is 0.249 which means 1 employee strength unit would increase the revenue by 0.249 times. Similarly, with the same number of employee strength units, Emirates will have more capacity to generate revenue as compared to Etihad. When the researcher observed individual *p-values* for Emirates and Etihad for H_1, it was found both of them were insignificant. It shows that they need more evidence to reach to conclusion. However when the *p-value* of combined sample is taken it was significant. It shows that the researcher were unable to reach to conclusion when they were studying individual companies. Thus if the same model is used for the whole airlines industry, there would be a higher probability of getting the conclusive evidence supporting/rejecting the null hypothesis.

H_2 Employee Strength has a significant impact on Passengers travelled

In case of H_2, the *p-values* of intercept as well as *p-values* of slope were significant. It shows that employee strength positively impacts the number of passengers travelled. In case of Emirates the capacity of employees to attract and retain is more (slope 1.095) as compared to capacity of Etihad (slope 0.632), however the difference between the two was not very high as that one observed in hypothesis one in case of revenue generation. In case of H_2, also intercept of Emirates was negative whereas that of Etihad was positive, indicating the similar finding as that of H_1, that Emirates would certain minimum units of employee strength to start earning the profits whereas the Etihad would be earning their profits at an earlier stage but at a slower rate.

CONCLUSION

As HR metrics are the starting point for HR Analytics, UAE aviation sector should analyze the impact of Employee Strength on financial performance and carried passengers of airline companies. Moreover every organization should emphasize the role of HR and develop and shape human capital especially in the service sector where human capital adds value to the core business strategy.

Areas of Further Research

1. The model can be enhanced with qualitative factors affecting Employee strength. Thus a study can be made for quantitative and qualitative factors
2. The model can be tested with more number of companies from airlines industries as the results were contradictory for individual records vis a vis combined results
3. The model can be expanded considering the financial indicators along with the investment in HR Metrics

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