

## CREATIVITY: A DRIVING FORCE BEHIND YIELD MANAGEMENT

Muhammad Shahbaz Shabbir, PhD\*  
COMSATS Institute of Information Technology,  
Lahore, Pakistan  
Email: [shahbazgill@gmail.com](mailto:shahbazgill@gmail.com)  
\*Corresponding Author

Amjad Shamim  
MS leading to PhD Scholar  
Faculty of Management Sciences  
International Islamic University  
Islamabad - 44000, Pakistan

### ABSTRACT

*The ultimate focus of an enterprise is to earn handsome revenue for which different strategies are developed and used by the organizations. A big challenge which service organizations are facing is the factor of perishability where on one side they have to keep the customers happy and on the other they have to achieve their targets. Hotel industry is one of the most sensitive industries where customers are more time sensitive giving a good sign to the managers for maximization of revenue. By taking the advantage of the time, creative managers emphasize on the revenue/yield maximization. This study is conducted to explore the impact of creativity on yield management in hotel industry of Pakistan. Quantitative data approach was used and data was gathered through close-ended questionnaire by using stratified sampling technique from 128 professionals (sample size) working in five stars, four stars and three stars hotels in Islamabad and Rawalpindi, Islamic Republic of Pakistan. Findings indicate that the overall creativity has a significant impact on yield management and creativity is likely to be emerged if employees are given a tension free environment, support by the management, rewards against successive creative ideas and opportunity for ideas sharing. Since hotel industry in Pakistan is undergoing a process of increased competition, therefore, the adoption and implementation of yield management is identified as a very essential tool for survival. It has also been observed that, for proper yield management implementation, hotel industry needs to focus on employees' creativity.*

**Keywords:** Yield Management, Creativity, Criticism, Work Pressure

### INTRODUCTION

Perishability is a big challenge for service providers. It is hotels, airlines, ships, train services or rental services, no one can repudiate (Desiraju and Shugan 1999). To overcome this challenge Dr. Matt H. Keller has discovered yield management system in mid-1980s which was initially implemented in airline industry and with the passage of time its direction has been converted towards hotel industry, telecom industry, rental services and transportations etc. (Desiraju and Shugan 1999). This is a system through which service organizations can sell their service at higher rates by examining consumer behavior to increase yield/revenue. This system entails an understanding of market needs and anticipation which can be familiarized and fulfilled

by employees (Jauncey et al., 1995). Employees of the organizations are important facets in implementing yield management since implementation of any system depends on capability, competency, and knowledge which are found in the intelligent employees (Yeoman and Watson 1997). Organization needs such employees who can generate new ideas that can play vital role in innovation process and creativity is the process that helps in generation of these ideas (Roffe, 1999). Question arises why are employees reluctant to communicate the innovative and creative ideas at their workplaces? This study aims to measure the factors affecting creativity and its impact on yield management in hotel industry. Yield Management has been observed since two decades from different angles and in different industries. So far, no study has been found on creativity impact on yield management in hotel industry which is the contribution of this study in existing literature.

## LITERATURE REVIEW

The adoption of new systems and technologies is sluggish in hotel industry giving the competitive edge to other industries and same was the case with yield management adoption (Donaghy *et al.*, 1997), however, after the successful implementation of yield management in airline industry; hotel industry has also converted its direction towards yield management adoption from mid-1990s. Increasing competition and rapidly changing customer preferences also obliged hotels to implement yield management. Now hotels and guests both are enjoying its benefits where hotels are earning more revenue especially in peak seasons and customers are enjoying discounts especially in non-peak seasons.

Sanchez and Satir (2005) defined yield management as an approach of achieving maximum revenue by fluctuating prices when demand fluctuates and its best practice is to offer the exact item (s) to the target guests at the right time by offering acceptable prices. Three main areas are important in yield management, i.e., demand, capacity and pricing. The nub of yield management is to earn maximum revenue from the available capacity by continuously updating prices based on demands in a specific time slot against a projection of demand for each time slot (Berman, 2005). To do so, yield managers forecasts demand for each selected target market by observing demand trends, market share, competitors' rates and other environmental factors which is an essential activity in implementation of yield management system in hotel industry (Emeksiza, Gursoyb and Icozc, 2006). Yield management can be a simple yield management system (YMS) or computerized yield management systems (CYMS). Forecasting demand is easier in CYMS than simple YMS. Emeksiza *et al.*, (2006) findings suggests that hotels without CYMS rely in forecasting on upper managers and sales force as well as on forecasting techniques like regression analysis, times series and moving average methods etc. However it needs a lot of employees' efforts, time and energy.

Since business organizations always struggles for achieving maximum revenue form minimum input where yield management can be one of the best solution to achieve said objective. It can not be ignored that implementation of yield management is complicated especially without CYMS. Organizations had to consider lot of factors while planning to implement yield management. Certain factors claimed by Jauncey *et al.*, (1995) are demand forecasting on the basis of historical demand analysis, market segmentation, no-shows and cancellation analysis and advice to the yield management team about rates and restrictions.

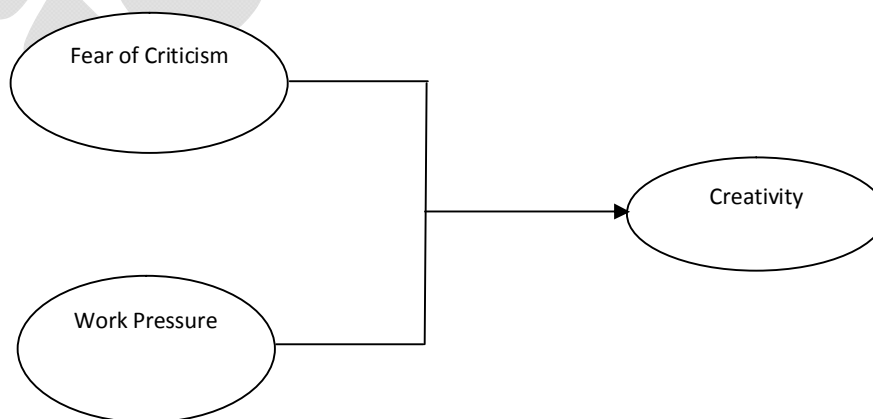
No doubt these factors are equally important but human element is one of the most important factors in adoption and successful implementation of yield management. This is also evidenced by Yeoman and Watson (1997) who described 'Yield Management is a human activity system'. They further divided human activity system into three subcategories forecasting, people and strategy. People who work for the organization often involve in forecasting of market demands and supplies, development of business, marketing plans and other organization's policies and strategies to face future challenges. They work together, share creative ideas, carry out their responsibilities and perform different roles to achieve the maximum revenue for the hotels, therefore, hotels always look for competent and creative people, who often bring innovation, develop new methods, markets and opportunities to achieve maximum output (Pitta *et al.*, 2008).

The discovery of new ideas, innovation in products/services and development of new methods, markets and opportunities are basically the dimensions of creativity which is defined by Roffe, (1999) as a thinking process of discovering ideas. How employees discover creative ideas either in pressurized situations or in a calm environment? That is a question needs to be investigated. Wong, C.S. and Pang, (2003) identified pressure of work as a barrier of creativity. Another barrier noticed by Wong and Pang (2003) is fear of criticism i.e., employees at their work are reluctant to express their inner feelings due to criticism by their colleagues, management and even customers. This study investigates the impact of work pressure and fear of criticism on creativity first and then creativity impact of yield management.

## CREATIVITY AND YIELD MANAGEMENT: A THEORETICAL FRAMEWORK

Although the main focus of this study is to determine the impact of creativity on yield management (as shown in model-2), however, impact of *fear of criticism* and *work pressure* on creativity has also been observed (shown in model-1) in hotel industry of Pakistan which was initially identified by Wong and Pang (2003) as barriers of creativity in China hotel industry.

### Model 1: *Fear of criticism and work pressure impact on creativity*



### **H<sub>1</sub> : Fear of criticism and work pressure has significant impact on creativity**

It is observed that employees working in hotel industry are always remains busy since they have to complete their assigned work within specified time which is nine hours standard in Pakistan. Right after specified time, they have to handover the charge to next shift and have to leave the hotel (especially customersø services departments). Therefore, every shift is facing an excessive work load. In these complex circumstances, creativity of the employees who have the ability to work under pressure may be enhanced and vice versa. Another aspect needs attention in measuring creativity is fear of criticism. Most of the people would like to express creative suggestions but fear about the management ignorance, organizationø stiff policies, fear of failure of the ideas, supervisorø non-support and criticism he/she may face if ideas couldnø succeed are always keep the employee in a silent mood for expressing the ideas or the case may be opposite. This model aims to measure the impact of work pressure and fear of criticism on creativity of the employees.

It is apparent that the ultimate goal of an enterprise is to earn handsome profit. To achieve this goal, they have to consider lot of factors especially in this rapidly growing and competitive market. To face current market challenges in the globe, organization started re-engineering, restructuring and implementing total quality management. Although these factors are very important but human element is one of the most important elements for the survival in the market since their efforts results all these outputs. This is the time where organizations should invest on their employees by all means for their development so that they can be able to modify the systems, in a position to bring innovation, to make strategies, to compete in the market and to achieve the targets. Model-2 aims to measure the impact of creativity of the employees on yield management.

### **Model 2: Creativity impact on yield management**



### **H<sub>2</sub> : Creativity has significant impact on Yield Management**

## **METHODOLOGY**

### ***Sample and data collection***

A total six hotels of categories five stars, four stars and three stars were chosen for this study. Only those employees were selected who are directly involved in guests dealing and whose efforts can results yield management. The departments include front office, reservation, sales and marketing, food and beverages and revenue/yield management teams. A total of 170 questionnaires distributed among the selected departments, 132 completed questionnaires were returned (representing a response rate of 77.64 percent) but only 128 were usable for data analysis.

### ***Measures***

In the first model, fear of criticism was measured using the instruments of Wong and Pang (2003). The instrument on fear of criticism comprised of 3 items. A high score on hesitation on creative ideas and its failure, management criticism and less support of management for creativity possessed fear of criticism. A five-point interval scale was employed to measure each of the responses. The respondents were asked to indicate their responses ranging from 1 (strongly disagree) to 5 (strongly agree). Work pressure was measured using the Wong and Pang, (2003) instruments comprises on 3 items. A high score on heavy work load, tight time schedule and lot of work within limited time allotted possessed work pressure. A five-point interval scale was employed to measure each of the responses. The respondents were asked to indicate their responses ranging from 1 (strongly disagree) to 5 (strongly agree). Walton (2003) articulated that there are different ways to measure creativity depends upon the nature of problem. He elaborated it with an example the "creativity instrument used for one area say, advertising may not predict product design etcö. Since this research is measuring creativity impact on yield management for which no instrument could be found, therefore, own instrument was developed. For reliability, Cronbach's alpha coefficient was checked which is 0.720 of 4 items for creativity and 0.72 of 10 items for yield management.

## **DATA ANALYSIS**

To find the strength of the relationship between several variables, "Pearson Product Moment Correlation Co-efficient" is used where variables are treated symmetrically, i.e. there is no strangeness between dependent and independent variables. If variables vary in the same direction at the same time, they are said to be correlated. The variables are said to be positively correlated or directly correlated if they tends to increase or decrease together and when one variable tends to increase and the other tends to decrease, the correlation is said to be negative or inverse.

The correlation for all variables is shown in Table 1.1 and descriptive statistics is shown in Table 1.2 which covers cover values of means, standard deviations and range. Positive correlation amongst the independent and dependent variables, especially between creativity and yield management whose correlation is (0.38). Mean of creativity is (3.75) standard deviation is (0.62). This means that the creativity played a vital role in yield management.

**Table 1.1** Pearson Correlation Analysis

	<i>Yield Management</i>	<i>Creativity</i>	<i>Work Pressure</i>	<i>Fear of Criticism</i>
Yield Management	1			
Creativity	0.38	1		
Work Pressure	0.20	0.25	1	
Fear of Criticism	0.28	0.23	0.60	1

Correlation between fear of criticism and creativity is 0.23 where as with yield management is 0.28 which shows a positive correlation with these two variables and intensity with yield management is higher than creativity. Mean of fear of criticism is 3.47 whereas standard deviation is 0.98 which reveals that it played an imperative in creativity and yield management. Correlation of work pressure with creativity and yield management is also observed, i.e., 0.25 and 0.20 respectively. Mean of work pressure is 3.61 and standard deviation is 0.83 which indicate that it also has decisive role in both creativity and yield management. Interestingly, highest correlation is observed between work pressure and fear of criticism and value of correlation is 0.60.

**Table 1.2** Descriptive Statistics

	<i>Mean</i>	<i>Standard Deviation</i>	<i>Range</i>
Fear of Criticism	3.47	0.98	4.00
Work Pressure	3.61	0.83	3.67
Creativity	3.75	0.62	3.25
Yield Management	3.61	0.43	2.40

Sample mean is computed where highest mean of creativity (3.75) is specifying that it is the main factor behind yield management. Rest of the variables, i.e., work pressure and fear of criticism shows 3.61 and 3.47 means respectively.

**Model-1: Fear of Criticism and Work Pressure Impact on Creativity**

For calculating the contribution of independent variable towards dependent variable, Multiple Regression Analysis is used in Microsoft Excel 2003. Table 1.3 confers the regression conclusions for model-1. Table shows that by increasing 1 unit of work pressure will increase creativity by (0.12) units. It means this variable is having sturdy impact on creativity. This result is significant at 12%. If 1 unit of fear of criticism is increased, creativity will be increased by 0.09 units. It shows this variable is having affirmative impact on creativity with significant at 21%. Adjusted R Square shows that independent variables are contributing 06% towards creativity and in cross sectional data, normally the value of R Square is low.

**Table 1.3** Regression analysis

	<i>Coefficients</i>	<i>Standard Error</i>	<i>P-value</i>
Adjusted R Square			
			0.06
Intercept	3.01	0.25	0.00
Fear of Criticism	0.09	0.07	0.21
Work Pressure	0.12	0.08	0.12

**Model-2: Creativity impact on Yield Management**

Same methodology is used in the second model to calculate impact of creativity on yield management. Results are shown in table 1.4 which reveals that by increasing 1 unit of creativity will increase yield management by (0.26) units at 0% significant level. It indicates that creativity has a highly significant impact on yield management. Adjusted R Square indicates that creativity is contributing 13% towards yield management.

**Table 1.4** Regression analysis

	<i>Coefficients</i>	<i>Standard Error</i>	<i>P-value</i>
Adjusted R Square			
			0.13
Intercept	2.63	0.22	0.00
Creativity	0.26	0.06	0.00

Finally, impact of creativity on yield management in five star, four star and three star hotels are checked and values are compared in table 1.5. Results indicate that by increasing 1 unit of creativity will increase yield management by 0.33 units and results are significant at 0% which reveals the significant impact of creativity on yield management in five star hotels. In case of four star hotels, results indicate that by increasing 1 unit of creativity will increase 0 units yield management at 98% significant level and by increasing 1 unit of creativity in three star hotels will increase 0.03 units of yield management at 90% significant level. Results are more significant in five star hotels as compared to four and three star hotels which may be due to more standardized services in five star hotels.

**Table 1.4** Regression Analysis (Comparison of five star, four star and three star hotels)

	<i>Adjusted R Square</i>	<i>Coefficients</i>	<i>P-value</i>	
Intercept	0.20	2.35	0.00	} Five Star Hotels
Creativity		0.33	0.00	
Intercept	-0.04	3.61	0.00	} Four Star Hotels
Creativity		0.00	0.98	
Intercept	-0.04	3.69	0.00	} Three Star Hotels
Creativity		0.03	0.90	

## FINDINGS AND CONCLUSIONS

Yield Management has a vast potential to increase the financial performance of hotel industry but lot of factors need more consideration by the management which are not yet been considered important. First, there are no separate yield managers for paying intense focus on the yield management. Second, Computerized Yield Management System is not being used by the hotels yet. Managers are known to the concept of yield management by supervisor and below employees are not aware about this system. They are practicing yield management but don't know the concept which has been observed and informed by the middle and higher managers while conducting research. Findings indicate that like many other factors, one of the important factors behind yield management is employees' creativity especially where computerized yield management system (CYMS) is not used. Creative employees bring new ideas to maximize revenue, they study consumers (guests) behavior and offer them services accordingly to enhance



the revenue of the hotels. Highest impact has been observed in Four Star Hotels and Three Star Hotels, whereas, marginal impact is noticed in Five Star Hotels. On the basis of overall results, this study concludes that higher the creativity more will be the revenue. Creativity needs tension free environment, support by the management, team work, reward against successive creative ideas and opportunity for ideas sharing. If these opportunities provided to the employees, more creativity is likely to be emerged and yield management will be high. It is also observed that there is no emphasize on the employees training for implementation of yield management. It is very necessary to build conceptual understanding of yield management at all organizational levels and to provide proper training to the employees to implement it successfully which will apparently bring long term fruitful results for the organizations.

## REFERENCES

- Berman, B. (2005) "Applying yield management pricing to your service business", *Business Horizons*, 48, pp. 169-170.
- Desiraju, R. and Shugan, S.M (1999) "Strategic Service Pricing and Yield Management", *Journal of Marketing*, Vol. 63 pp. 44-56
- Donaghy *et al.*, (1997) "Implementing yield management: lessons from the hotel sector", *International Journal of Contemporary Hospitality Management*, pp. 50-54
- Emeksiza, M., Gursoyb, D, and Icozc, O (2006) "A yield management model for five-star hotels: Computerized and non-computerized implementation", *Hospitality Management*, pp. 544.
- Jauncey, S. and Mitchell, I. and Slamet, P. (1995) "The meaning and management of yield in Hotels", *International Journal of Contemporary Hospitality Management*, Vol. 7 No. 4, 1995, pp. 23-26
- Pitta, D.A. and Wood, V.R. and Franzak, F.J. (2008) "Nurturing an effective creative culture within a marketing organization", *Journal of Consumer Marketing*, 25/3, pp. 137-148.
- Roffe, I. (1999) "Innovation and creativity in organizations: a review of the implications for training and development", *Journal of European Industrial Training*, pp. 224-237.
- Sanchez, J. and Ahmet Satir, A. (2005) "Hotel yield management using different reservation modes", *International Journal of Contemporary Hospitality Management*, Vol. 17 No. 2, pp. 136-146.
- Walton, A.P. (2003) "The impact of interpersonal factors on creativity", *International Journal of Entrepreneurial Behaviour & Research*, Vol. 9 No. 4, pp. 146-162.
- Wong, C.S. and Pang, W.L. (2003) "Barriers to creativity in the hotel industry - perspectives of managers and supervisors", *International Journal of Contemporary Hospitality Management*, pp. 29-37.
- Yeoman, I. and Watson, S. (1997) "Yield management: a human activity system", *International Journal of Contemporary Hospitality Management*, pp. 80-83.