An Analysis of the Methodology Adopted by Hotel Industry for Measuring Employee Productivity and the Challenges Faced therein with Special Reference to Pune, Hyderabad & Bangalore Cities

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Abstract

Productivity management is a big challenge to organizations especially when the product is in the form of a service. The characteristics of service industry make productivity management in such industries more difficult and challenging. Hotel industry being a part of such a service industry faces a similar problem.

This study is aimed at analyzing the challenges faced by hotels in measuring employee productivity and to suggest the most suitable method of measuring employee productivity in hotel industry. In an effort to do so, a survey in the form of a questionnaire and interviews was conducted from the sample comprising of 365 hotel employees from the management and the associates categories to understand their views on the entire process.

The findings of his research state that 'Intangible Product' is the biggest challenge in measuring employee productivity in hotels and "Number of guest praises / positive feedbacks received per department / person" and "Percentage of repeat guests generated" are the most suitable methods to measure employee productivity in hotels. However, a significant difference has been observed in the comparative study of hotel industry of Pune, Hyderabad & Bangalore cities.

Keywords: Hotel Industry, Employee Productivity, Measurement of Productivity

Introduction

"**Productivity** is an average measure of the efficiency of production. Productivity is a ratio of production output to what is required to produce it (inputs of capital, labor, land, energy, materials, etc.). The measure of productivity is defined as a total output per one unit of a total input." (Source-Wikipedia)

Although it looks simple from the face of it, productivity management is a big challenge to organizations especially when the product is in the form of a service. The characteristics of service industry make productivity management in such industries more difficult and challenging. Hotel industry being a part of such a service industry faces a similar problem. However, the industry cannot just sit over the problem and thus have to find a gateway to deal with the issues of productivity management in hotels.

Although there are various inputs that needs to be studied under productivity management, this study concentrates on labor as a parameter of measurement of productivity. Thus we are indeed talking of labor productivity or employee productivity or workforce productivity.

Employee Productivity Management is series of inter-linked activities or tasks right from formulating a productivity management model to suit the organization to taking measures in enhancing the employee productivity. This study aims at analyzing the challenges faced by hotels in measuring employee productivity and to suggest the most suitable method of measuring employee productivity in hotel industry.

Literature Review

1. Rajashree Gujarathi, (2013) aimed at analyzing

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the Productivity Management System adopted and implemented by the hospitality industry with an objective to identify the challenges in measuring productivity in the Hotels and to identify various methods adopted by the them to measure the employee productivity and concluded that, the major reasons contributing to the ineffectiveness of the system are lack of management will, lack of common parameters of productivity measurement and intangible nature of the product of the industry i.e. "Service".

2. Juan Gabrie, (2010) used time-series techniques to estimate the long-run relationship between real wages and labour productivity in the Mexican tourism. The finding shows that the average labour productivity depends positively on real wage, and are weakly exogenous and causes labour productivity. Moreover, the impulse-response function shows that a positive shock in real wages produces a small negative effect in productivity for two years followed by a large positive one.

3. Christine A. Witt, (2010) discussed problems of measuring productivity, together with specific reasons for low productivity in the hotel sector. It is suggested that increased usage of operations management techniques by hotel management is likely to result in improved productivity, and various examples are presented of situations in which these techniques can be successfully employed.

4. Peter Jones, (2009) examining the level of productivity in the housekeeping departments in a chain of 45 hotels. The paper reviews the concept of productivity and the issues relating to its measurement, before reviewing previous studies of productivity in the hotel sector. A number of factors are identified that appear to affect productivity performance. The paper concludes that there is no significant difference in productivity levels according to the size, location, demand variability or age of the hotel, thereby refuting evidence from some prior studies.

5. Osman M. Karatepe, (2008) examined the effects of negative affectivity (NA) and positive affectivity (PA) on work–family conflict and family–work conflict and the effects of both directions of conflict on marital satisfaction and turnover intentions. The findings of the study indicated that family–work conflict has a detrimental impact on marital satisfaction. However, this study provided no empirical support for the relationship between work–family conflict and marital satisfaction.

6. Ching-Fu Chen, (2007) analyzed the cost efficiency of Taiwan's international tourist hotel sector. A stochastic cost frontier function with three inputs (i.e. labor, food and beverage, and materials) and one output as the total revenue is specified and used to estimate hotel efficiency. The results reveal that hotels in Taiwan are on average operating at 80% efficiency.

7. Gunjan M. Sanjeev, (2007) provided exploratory insights on measurement of efficiency of the hotel and restaurant companies operating in India. The study also explores whether there is a relationship between the efficiency and size of the hotel and restaurant companies. The study identifies the top performers in this sector. Also, managers get important insights for their strategic and operational decisions to improve performance.

8. Carlos Pestana Barros, (2005) discusses, by means of data envelopment analysis, the efficiency of individual hotels belonging to the Portuguese state-owned chain, Pousadas de Portugal, which is managed by the enterprise, ENATUR. By identifying the efficient hotels in a sample, the slacks in inputs and outputs of the inefficient hotels and the peer group of efficient hotels, the data envelopment analysis stands out as one of the most promising techniques to aid the improvement of efficiency. Managerial implications arising from this study are also considered.

9. Hasan Kilic, (2005) report on an empirical research study which investigated the factors influencing productivity in hotels in Northern Cyprus. According to the research findings staff recruitment, staff training, meeting guest expectations, and service quality are the main productivity factors in hotels; while crises, technology, marketing, and forecasting are ranked relatively low.

10. Robert Johnston (2005) provides a structure for analyzing productivity in service organizations by distinguishing between operational and customer productivity. The authors also identified some of the problems in measuring productivity, especially in a service setting, and then use a few examples to illustrate the sometimes counterintuitive relationship between operational and customer productivity.

Objectives of the study

1. To identify the challenges in measuring employee productivity in the Hotel Industry.

2. To identify methods adopted by the hotels to measure the employee productivity.

3. To compare the challenges faced and the methods adopted to measure employee productivity between the Hotel Industry of Pune, Hyderabad & Bangalore cities.

Limitations of the study

1. This study is purely based on the information given by the associates and management of sample hotels.

2. The study is conducted in the current scenario and the opinions, perception and expectations of the respondents may differ with time.

3. The study does not differentiate respondents on basis of their demographic factors which may have an influence of their perception thereby identifying scope for further research.

Research Methodology

Collection of Data:

The data required for the research was collected using the following techniques:

- Personal Interviews:

  The researcher conducted personal interviews with employees and Human Resource managers of reputed hotel brands to get an insight on the problem under study.

- Questionnaire:

  A questionnaire bearing straight forward and relevant questions was drafted and handed over to the sample to obtain their responses.

Sampling Techniques

The population being "employees of hotels" is more of less homogeneous in nature since the characteristics and service conditions of the hotel industry are almost similar in nature throughout the population. With due consideration to this fact, a sample comprising of 365 employees representing various hotels from five star to serviced apartments was selected on random basis to conduct the study. The said sample was collected from Pune, Hyderabad & Bangalore cities due to the similarity of the nature of hotel industry in these cities.

Apart from the above mentioned tools the relevant secondary data for the research was collected from journals, books & internet.

Discussions and Findings

Discussions

Challenges faced by the hotel industry in measuring employee productivity:

Hospitality industry is a part of service industry and is characterized by certain features that create challenges in designing and implementation of employee productivity management system. These features or characteristics needs to be studied in detail for the effective development of a productivity management system. These features are briefly discussed below:

i. Intangible Product (Characteristics of Service Industry):

While the term productivity is most often associated with the goods-producing-industries, it is critically important to monitor and manage this aspect of performance in the hospitality sector as well. Productivity is a ratio between input and output at a given quality level. The inputs in the hospitality industry may be in the form of man, money material & machine. All these components can be quantified or measured but this is just half done because the second aspect in productivity management is the output or the product itself and their lies the major challenge for the hospitality industry because its product is intangible in nature which cannot be monitored or easily measured. The product of this industry is service and its measurement is hidden in the perception of its end users that is the customers which in the hotel language are termed as "Guests" Thus intangibility of the product of the hospitality industry is the biggest hurdle in the productivity management process in this industry. Service as an output product cannot be quantified or mathematically measured and thus as per the above mentioned formula of productivity measurement, the ratio of input and output cannot be easily established. The only way to make

measurement of productivity in the hospitality industry possible is to make its output measurable and this is the major challenge in front of the industry.

ii.   Lack of Knowledge about Productivity Management:

The management of hotel industry basically posses expertise in the technical area of hotel operations. They are the masters in the field of hospitality. However, they lack the scientific and technical knowledge required for implementation of productivity management system in their hotel. Moreover, due the hectic and busy schedule of the managers, they are discouraged to acquire any professional training in the area of productivity management. Even if a person who posses the required knowledge is hired, due to his varied duties he is not able to devote sufficient attention towards the said issue.

iii.   Lack of common parameters of measuring productivity.

As mentioned earlier, measurement of productivity in the hospitality industry is a challenging task. However, experts have suggested a few parameters on which the employee productivity can be measured in hotels. These parameters differ from each other and different parameters have to be used for measurement of productivity in different operational areas of hotels depending upon its suitability. Thus to measure the productivity of the entire hotel a combination of all the parameters have to be used thereby making the process more complex. Thus lack of common parameters of measurement of productivity is a big challenge for the hotel managers.

iv.   Lack of scientific approach towards labour management.

Hotel managers being originated from the operations, tend to be more inclined towards operational issues. Thus labor management is a lower priority to these operational driven managers. Moreover, their limited knowledge and scientific approach towards labor management becomes a biggest hurdle in productivity management.

v.   Lack of management initiative.

Although productivity management is an important management task, hotel managers are not very keen on the same. As discussed earlier, due to the various challenges in implementing the same, managers tend to tackle the issue halfheartedly. Thus lack of management initiative is another challenge of the hospitality industry with regards to productivity management.

vi.   Difficulties in measuring customer satisfaction.

The most suitable parameter to measure employee productivity in the hospitality industry revolves around the output of satisfied customers. Thus before calculating the productivity, one has to measure the satisfaction level of the hotel customers. This itself is a very complex task since every customer has a different perception of being satisfied and measuring the comparative satisfaction level of all the customers is a very difficult task thereby creating a challenge in productivity management.

vii.   Diverse operations.

The operations of the hospitality industry are diverse in nature. Thus every department is operationally different from each other. Since the nature of work, skill sets required, manpower requirement is different for every department, one cannot have uniform parameters of measuring employee productivity thereby making productivity management in hotels more difficult.

Methodology adopted to measure employee productivity in Hotels.

In an effort to track the productivity of its employees, hotels have adopted various methods of measuring the employee productivity. However, the suitability and effectiveness of these methods needs to be tested. The following are the widely used methods to measure employee productivity by hotels.

i.   Basis of Revenue generation:

a.   Total revenue generated per employee.

b.   Total food revenue generated per Food production staff.

c.   Total food & beverage revenue generated per Food & Beverage service staff.

d.   Total room revenue generated per Front Office / Sales & Mktg. staff.

ii.   Basis of Time frame:

a.   Average number of covers served per worked hours. (Food Production & F & B Service staff)

b.   Average number of check-ins / check-outs handled per worked hours (Front office staff)

c.   Average number of rooms serviced per worked hours (Housekeeping staff)

iii.   Basis of guest satisfaction:

a. Average number of guest satisfaction points generated per department.

b. Number of guest praises / positive feedbacks received per department / person.

c. Number of guest complaints / negative feedbacks received per department / person.

iv. Basis of repeat business:

a. Percentage of repeat guests generated.

Findings

Challenges faced by the hotel industry in measuring employee productivity

Observation No.1.

(Table No.1)

Challenges in measurement of productivity difficult in hotels	Points Awarded as per importance (%) *(Where 1 = Least important & 7 = Most important)*						
	1	*2*	*3*	*4*	*5*	*6*	*7*
Intangible Product (Characteristics of Service Industry)	2.5	1.9	6.9	17.0	35.2	19.5	17.0
Lack of Knowledge about Productivity Management.	2.5	2.5	10.7	23.9	35.8	17.0	7.5
Lack of common parameters of measuring productivity.	3.8	4.4	8.2	16.4	30.8	29.6	6.9
Lack of scientific approach towards labour management.	5.0	4.4	11.9	17.0	34.0	22.6	5.0
Lack of management initiative.	4.4	8.8	7.5	21.4	30.8	21.4	5.7
Difficulties in measuring customer satisfaction.	8.2	7.5	7.5	19.5	21.4	29.6	6.3
Diverse operations.	5.0	5.0	5.7	19.5	30.2	28.3	6.3

On the basis of importance, the highest rated factor for making measurement of productivity difficult in hotels is "Intangible Product (Characteristics of Service Industry)".

Methodology adopted to measure employee productivity in Hotels:

(Table No.2)

Methodology adopted to measure employee productivity in Hotels	Whether used in your hotels (%)		Points awarded as per the suitability (%) *(Where 1 = Least suitable & 7 = Highest suitable)*						
	Yes	*No*	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1. Basis of Revenue generation:									
Total revenue generated per employee.	77	23	7.7	4.7	9.0	23.3	22.7	20.0	12.6
Total food revenue generated per Food production staff.	75	25	8.2	4.9	10.1	20.0	25.5	20.0	11.2
Total food & beverage revenue generated per Food & Beverage service staff.	85	15	6.0	4.9	9.3	18.6	27.1	21.9	12.1
Total room revenue generated per Front Office / Sales & Mktg. staff.	84	16	5.2	4.4	12.3	20.5	23.8	21.1	12.6
2. Basis of Time frame:									
Average number of covers served per worked hours. (Food Production & F & B Service staff)	80	20	4.9	6.6	9.6	14.5	24.9	28.8	10.7

Methodology adopted to measure employee productivity in Hotels	Whether used in your hotels (%)		Points awarded as per the suitability (%) *(Where 1 = Least suitable & 7 = Highest suitable)*						
	Yes	No	1	2	3	4	5	6	7
Average number of check-ins / check-outs handled per worked hours (Front office staff)	84	16	4.1	5.8	6.3	12.9	26.0	20.4	14.5
Average number of rooms serviced per worked hours (Housekeeping staff)	82	18	4.4	6.3	7.7	17.8	23.8	26.8	13.2
3. Basis of guest satisfaction:									
Average number of guest satisfaction points generated per department.	89	11	0.8	1.1	2.2	17.3	19.5	37.5	21.6
Number of guest praises / positive feedbacks received per department / person.	93	7	0.0	1.1	2.7	9.9	20.8	43.6	21.9
Number of guest complaints / negative feedbacks received per department / person.	86	14	1.4	7.7	4.1	13.7	24.4	27.7	21.1
4. Basis of repeat business:									
Percentage of repeat guests generated.	81	19	0.8	1.1	1.1	10.7	29.6	33.4	23.3

Observation No.1.

"Average number of guest satisfaction points generated per department" and "Number of guest praises / positive feedbacks received per department / person" are the most widely used methods to measure employee productivity in hotels.
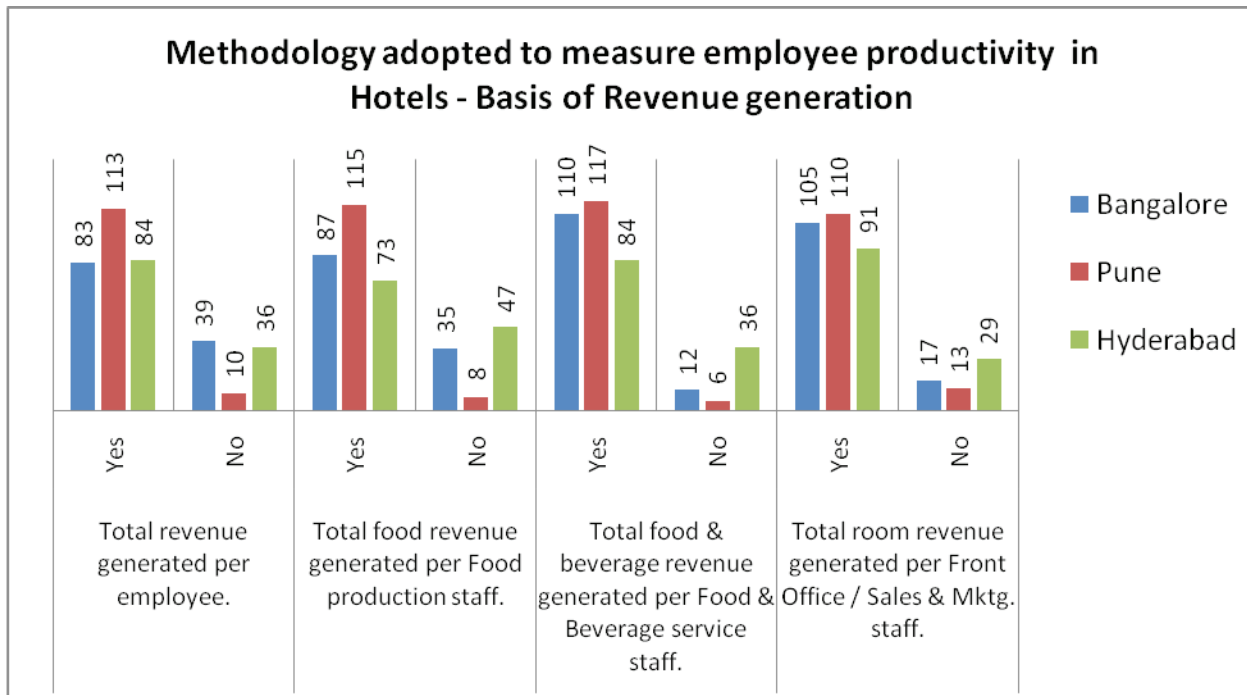
Observation No.1.

"Number of guest praises / positive feedbacks received per department / person" and "Percentage of repeat guests generated" are the most suitable methods to measure employee productivity in hotels.

Comparative study of methodology adopted to measure employee productivity between the Hotel Industry of Pune, Hyderabad & Bangalore cities
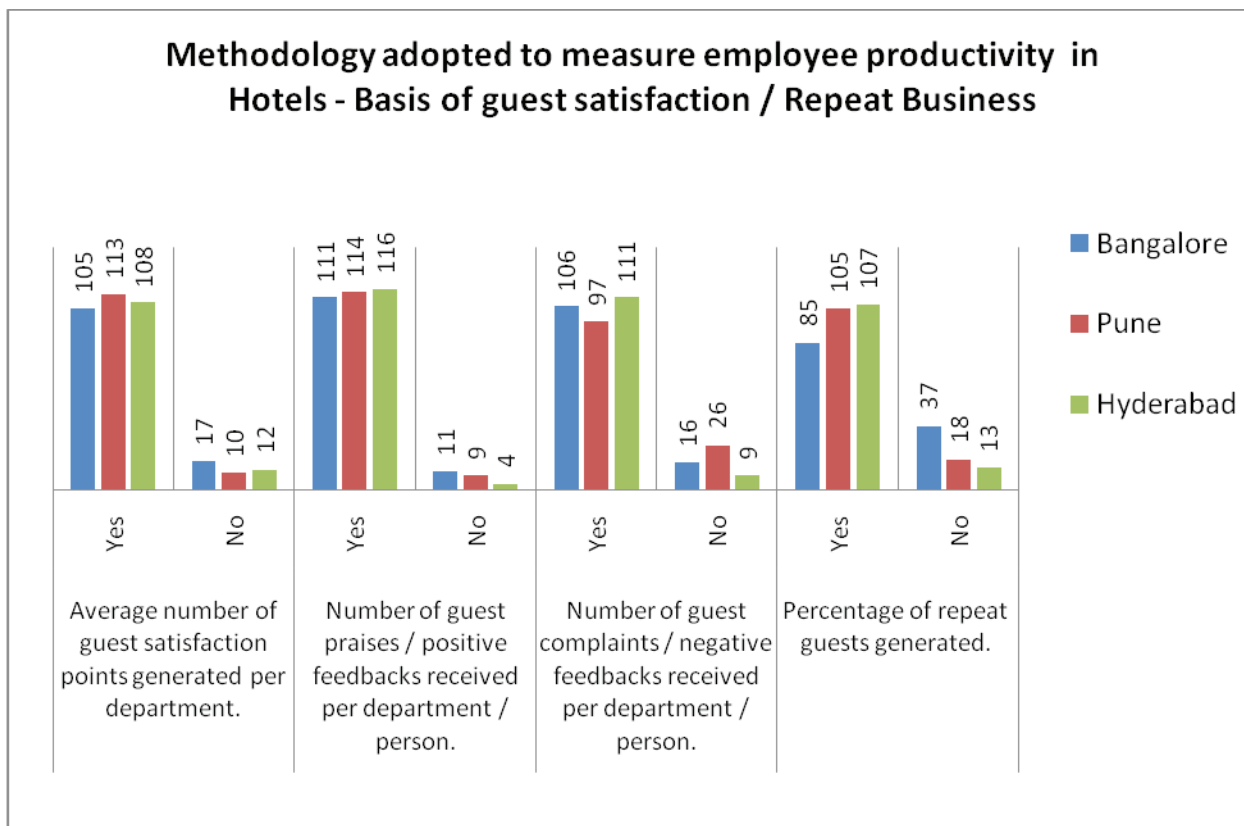
(Table No.3)

Methodology adopted to measure employee productivity in Hotels	Pearson Chi-Square		
	Value	df	Asymp. Sig. (2-sided)
1. Basis of Revenue generation:			
Total revenue generated per employee.	23.990[a]	2	.000
Total food revenue generated per Food production staff.	36.484[a]	2	.000
Total food & beverage revenue generated per Food & Beverage service staff.	33.984[a]	2	.000
Total room revenue generated per Front Office / Sales & Mktg. staff.	8.960[a]	2	.011
2. Basis of Time frame:			
Average number of covers served per worked hours. (Food Production & F & B Service staff)	32.334[a]	2	.000
Average number of check-ins / check-outs handled per worked hours (Front office staff)	33.437[a]	2	.000
Average number of rooms serviced per worked hours (Housekeeping staff)	25.123[a]	2	.000
3. Basis of guest satisfaction:			
Average number of guest satisfaction points generated per department.	2.250[a]	2	.325
Number of guest praises / positive feedbacks received per department / person.	3.347[a]	2	.188
Number of guest complaints / negative feedbacks received per department / person.	9.511[a]	2	.009
4. Basis of repeat business:			
Percentage of repeat guests generated.	17.120[a]	2	.000

(Chart No. 1)
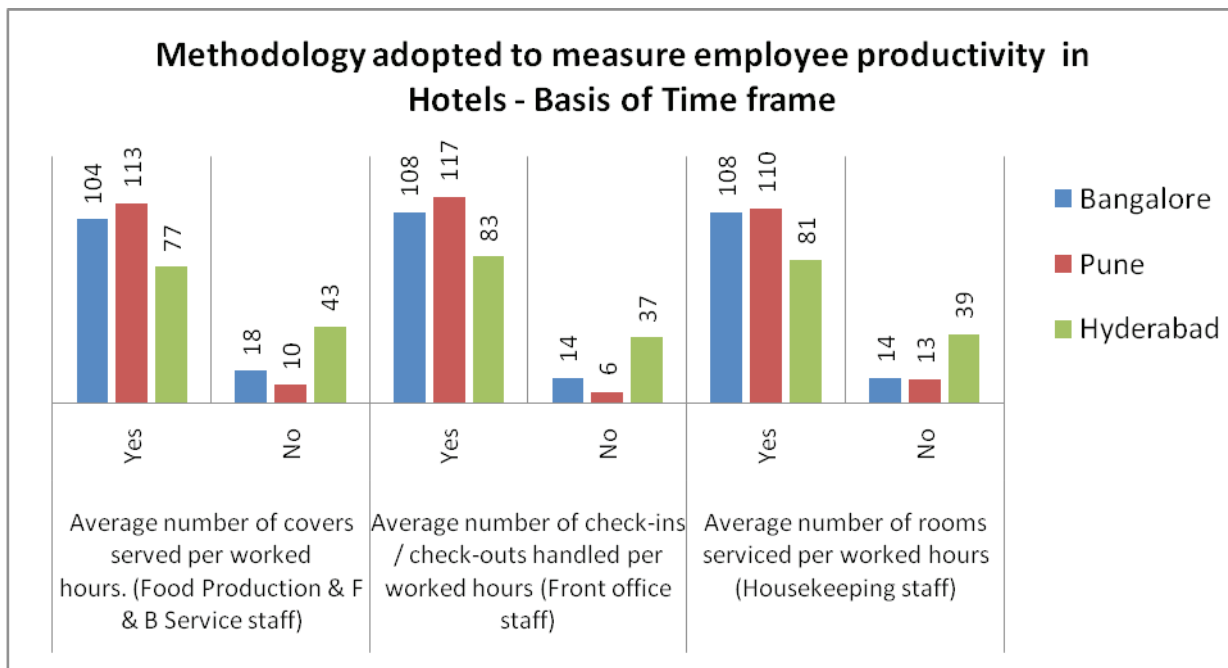
(Chart No. 2)

(Chart No. 3)

Parameters on which no significant differences were observed between the three cities.

(Table No.4)

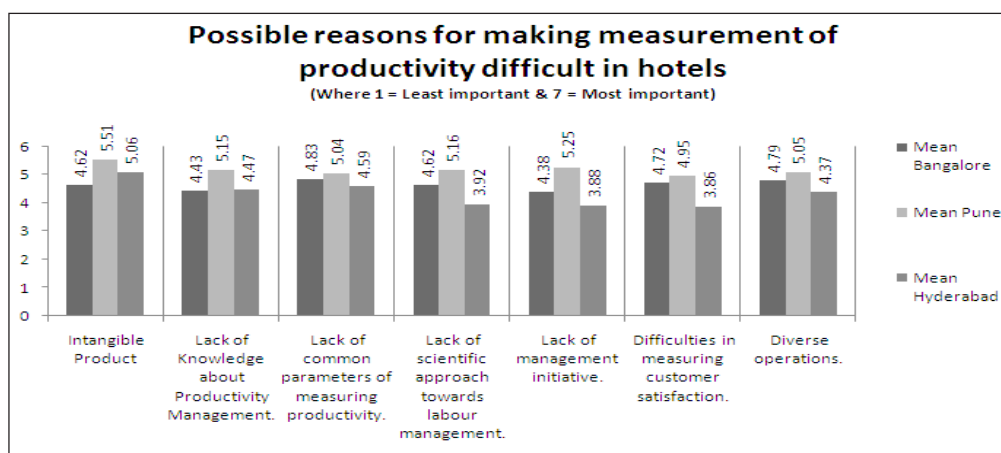| *Methods of measuring employee productivity in hotels*	*Difference in observations between the location of respondents*
Basis of Revenue generation:	
Total room revenue generated per Front Office / Sales & Mktg. staff.	No significant difference
Basis of Guest Satisfaction:	
Average number of guest satisfaction points generated per department.	No significant difference
Number of guest praises / positive feedbacks received per department / person.	No significant difference

Parameters on which significant differences were observed between the three cities.

(Table No.5)

Methods of measuring employee productivity in hotels	*Difference in observations between the location of respondents*
Basis of Revenue generation:	
Total revenue generated per employee.	Significant difference

Methods of measuring employee productivity in hotels	*Difference in observations between the location of respondents*
Total food revenue generated per Food production staff.	Significant difference
Total food & beverage revenue generated per Food & Beverage service staff.	Significant difference
Basis of Time frame:	
Average number of covers served per worked hours. (Food Production & F & B Service staff)	Significant difference
Average number of check-ins / check-outs handled per worked hours (Front office staff)	Significant difference
Average number of rooms serviced per worked hours (Housekeeping staff)	Significant difference
Basis of Guest Satisfaction:	
Number of guest complaints / negative feedbacks received per department / person.	Significant difference
Basis of Repeat Business:	
Percentage of repeat guests generated.	Significant difference

Comparative study of challenges faced while measure employee productivity between the Hotel Industry of Pune, Hyderabad & Bangalore cities:

Possible reasons for making measurement of productivity difficult in hotels
(Where 1 = Least important & 7 = Most important)

(Chart No. 4)

(Table No.6)

ANOVA Table							
Possible reasons for making measurement of productivity difficult in hotels:			*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Intangible Product (Characteristics of Service Industry) * Respondents location	Between Groups		21.217	2	10.609	5.931	.003
	Within Groups		279.022	156	1.789		
	Total		300.239	158			
Lack of Knowledge about Productivity Management. * Respondents location	Between Groups		17.338	2	8.669	5.441	.005
	Within Groups		248.561	156	1.593		
	Total		265.899	158			
Lack of common parameters of measuring productivity. * Respondents location	Between Groups		5.317	2	2.659	1.305	.274
	Within Groups		317.752	156	2.037		
	Total		323.069	158			

| ANOVA Table | | | | | | | |
Possible reasons for making measurement of productivity difficult in hotels:			*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Lack of scientific approach towards labour management. * Respondents location	Between Groups		40.937	2	20.469	10.873	.000
	Within Groups		293.666	156	1.882		
	Total		334.604	158			
Lack of management initiative. * Respondents location	Between Groups		51.490	2	25.745	13.291	.000
	Within Groups		302.183	156	1.937		
	Total		353.673	158			
Difficulties in measuring customer satisfaction. * Respondents location	Between Groups		34.043	2	17.021	6.451	.002
	Within Groups		411.630	156	2.639		
	Total		445.673	158			
Diverse operations. * Respondents location	Between Groups		12.462	2	6.231	2.950	.055
	Within Groups		329.475	156	2.112		
	Total		341.937	158			

Parameters on which no significant differences were observed between the three cities.

(Table No.7)

Challenges in measuring employee productivity in hotels	*Difference in observations between the location of respondents*
Lack of common parameters of measuring productivity	No significant difference
Diverse operations.	No significant difference

Parameters on which significant differences were observed between the three cities.

(Table No.7)

Challenges in measuring employee productivity in hotels	*Difference in observations between the location of respondents*
Intangible Product	Significant difference
Lack of Knowledge about Productivity Management	Significant difference
Lack of scientific approach towards labour management.	Significant difference
Lack of management initiative.	Significant difference
Difficulties in measuring customer satisfaction.	Significant difference

Suggestions & Recommendations

Based on the responses received by the employees of the hotel industry on the issues related to Productivity management in hotels, the following suggestions & recommendations can be made:

1. In the hospitality industry, Employee productivity is measured on a collective basis and methods of measuring individual employee productivity are not in place. The industry should therefore design a system to measure individual productivity of every employee. Moreover, the system so designed, should be uniformly followed in all hotels to make the productivity measures comparable.

2. Although the hotels have a system to measure the performance of various operational departments at a large, it is purely based on the Guest Satisfaction Tracking Survey (GSTS) and it does on comment on individual productivity of the employees. It is thus strongly recommended that a system should be designed to track the individual productivity of its employees.

3. It has been observed that productivity management is a challenging task for the hospitality industry and major reason behind the same is the intangible nature of the product and lack or management expertise. It is thus recommended that the management should introspect on this issue and devise a fool-proof mechanism to measure productivity of its employees on an ongoing basis. This will not only keep the performing employees motivated, but will also help in correctly identifying the areas that requires attention and also the correct root cause of low productive employees so as to take timely remedial action.

Conclusions

The findings of the research can be concluded as under:

1. On the basis of importance, the highest rated factor for making measurement of productivity difficult in hotels is "Intangible Product (Characteristics of Service Industry)".

2. "Average number of guest satisfaction points generated per department" and "Number of guest praises / positive feedbacks received per department / person" are the most widely used methods to measure employee productivity in hotels.

3. "Number of guest praises / positive feedbacks received per department / person" and "Percentage of repeat guests generated" are the most suitable methods to measure employee productivity in hotels.

4. 'Total room revenue generated per Front Office / Sales & Mktg. staff', 'Average number of guest satisfaction points generated per department' and 'Number of guest praises / positive feedbacks received per department / person' are methods of measuring employee productivity on which no significant difference was observed between Pune, Hyderabad & Bangalore cities.

5. 'Total revenue generated per employee', 'Total food revenue generated per Food production staff', 'Total food & beverage revenue generated per Food & Beverage service staff', 'Average number of covers served per worked hours. (Food Production & F & B Service staff)', 'Average number of check-ins / check-outs handled per worked hours (Front office staff)', 'Average number of rooms serviced per worked hours (Housekeeping staff)', 'Number

of guest complaints / negative feedbacks received per department / person', 'Percentage of repeat guests generated' person' are methods of measuring employee productivity on which significant difference was observed between Pune, Hyderabad & Bangalore cities.

6. 'Lack of common parameters of measuring productivity' and 'Diverse operations' are challenges of measuring employee productivity on which no significant difference was observed between Pune, Hyderabad & Bangalore cities.

7. 'Intangible Product', 'Lack of Knowledge about Productivity Management', 'Lack of scientific approach towards labour management', 'Lack of management initiative' and 'Difficulties in measuring customer satisfaction' are challenges of measuring employee productivity on which significant difference was observed between Pune, Hyderabad & Bangalore cities.

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