



## Management Audit System in Public and Private Sector Companies - A Comparative Study

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### Abstract

The globalisation of economies has resulted in business organisation growing rapidly. In the process of growing, companies are finding it difficult to manage with traditional Operational and Financial audit to assess the overall performance. This specific necessity of evaluating the performance of the organisation has resulted in companies introducing Management Audit System in their organisations along with other types of audits such as Financial Audit, Operational Audit, Social Audit etc. Management Audit is an audit to examine, review and appraise the various policies and actions of the management based on certain objective standards. Management Audit is essentially a review of the performance of various activities or functions. It evaluates the actual performance and compares with the pre-determined targets. Management Audit has wider scope in an emerging country like India. Indian companies are competing with world renowned companies within the country as well as outside. These facts make the Indian companies adopt Management Audit System in their organisations, so that they achieve what they planned. Indian companies need a constructive appraisal of the process of management and its operations. Keeping these facts in mind, it was decided to compare the implementation of Management Audit System in public and private sector companies to know if there are any visible unique features between these types of organisations and also to know which variable contribute for the success or failure of these companies. It is also planned to assess if there is significant difference between public and private sector companies in terms of variables included under Management Audit System.

**Keywords:** Management audit, organisation, management process, functional activities

### 1. Introduction

- To study the existing Management Audit System and to assess the level of implementation by the Indian companies [1-3].
- To compare the implementation of Management Audit System between public and private sector companies [4-7].

### 2. Method

To study the extent to which Management Audit System has been introduced in the sample companies a structured questionnaire was administered to 10 public sector and 10 private sector companies. The questionnaire comprised two parameters Management Process and

Functional activities. Under the Management process, the variables taken are objectives, process of planning, Organisation structure, control and system and procedure. Under the functional areas, the variables included are Production, Marketing, Research and Development, Finance, Human Resource, and Information Technology. For each of the variables, number of statements is included in the questionnaire. For example, under the objectives, there are nine statements, which are included. Under planning twelve statements are covered and same method is followed for other variables. The respondents happen to be Heads of the Departments, General and Deputy General

Managers, and the Chief Information officers of the sample companies. The respondents were explained the parameters and variables coming under each sub-parameter [8]. The respondents were asked to indicate their opinion about the implementation of Management Audit System on the above pattern on a five-point scale. They were asked to indicate number five for strongly agreeing with specific variable indicated. Number four if they just agree, number three, if they are not sure,

number two if they disagree and number one when they strongly disagree with the statement [9-11]. After receiving the filled in questionnaire for each of the variables mean, median and standard deviation has been calculated and later on, for making comparison between public sector and private sector companies T-test, Chi-square test etc., has been calculated followed with specific interpretation.

**Table 1 Classification of Public and Private Sectors on Management Process level**

Management Process Level	Category (Score %)	Classification of Sectors				$\chi^2$ Value
		Public		Private		
		Number	Percent	Number	Percent	
Inadequate	< 67.8	2	20.0	3	30.0	1.87 NS
Moderate	67.8-84.1	6	60.0	3	30.0	
Adequate	>84.1	2	20.0	4	40.0	
Total		10	100.0	10	100.0	

**NS: Non-Significant**

**$\chi^2 (0.05, 2df) = 5.991$**

Table 1 shows the classification of public and private sectors of management process level. It is evident from the finding that 40 percent of the private sector companies establish with adequate management process level as compared to only 20 percent of the public sector companies as adequate level. Further majority of the public sector (60

percent) possess moderate management process level as against only 30 percent of the private sector notice the moderate level [12]. It is evident from the finding that the difference in the management process level between public and private sector companies is non-significant ( $\chi^2 = 1.87$  NS,  $P < 0.05$ )

**Table 2 Overall mean Scores on Management Process of Public and Private Sector**

Sectors	Sample (n)	Max. Score	Respondents				't' Test
			Mean	SD	Mean (%)	SD (%)	
Public	10	395	304.20	43.5	77.0	11.0	0.28 NS
Private	10	395	295.70	82.4	74.9	20.8	
Combined	20	395	299.95	64.2	75.9	16.3	

**NS: Non-Significant**

**t (0.05, 18df) = 2.101**

Table 2 depicts the overall mean scores on management process for both public and private sector companies [13-15]. It is shown that the mean response score on management process is found to be slightly higher in the public sector companies (77 percent) as compared to private sector companies

(74.9 percent). The data subjected for statistical test indicate the difference in the mean response on management process between the public and private sector companies is found to be non-significant ( $t = 0.28$  NS,  $P < 0.05$ ).

**Table 3 Variable wise Mean Scores on Management Process of Public and Private Sector**

No.	Variable	Respondents scores (%)						't' Test
		Public (n=10)		Private (n=10)		Combined (n=20)		
		Mean	SD	Mean	SD	Mean	SD	
I	Objectives	85.6	10.2	80.7	19.4	83.1	15.3	0.71 <sup>NS</sup>
II	Planning	81.5	15.4	78.7	23.6	80.1	19.5	0.31 <sup>NS</sup>
III	Organization	76.7	11.3	73.9	21.3	75.3	16.7	0.37 <sup>NS</sup>
IV	Control	73.1	10.4	73.9	23.3	73.5	17.6	0.10 <sup>NS</sup>
V	Systems & procedures	74.3	12.5	71.9	19.6	73.1	16.0	0.33 <sup>NS</sup>
	Combined	77.0	11.0	74.9	20.8	75.9	16.3	0.28 <sup>NS</sup>

NS: Non-Significant

t (0.05, 18df) = 2.101

Table 3 reveals variable wise mean scores on management process of public and private sector companies [16]. It shows that when public and private sector companies are compared, in public sector the objectives, planning, organisation and systems and procedures are 85.6 percent, 81.5 percent, 76.7 percent and 74.3 percent respectively which are greater than the private sector companies.

In private sector control which is 73.9 percent is grater compared to public sector with 73.1 percent [17]. It is evident from the statistical results that the mean response on management process between public and private sector companies for all the five different aspects of study are found to be non-significant (P<0.05).

**Table 4 Mean Response scores on Functional Activity of Public and Private Sectors**

No.	Sectors	Sample (n)	Statements	Max. Score	Respondents Knowledge				't' Test
					Mean	SD	Mean (%)	SD (%)	
I	Public	10	149	745	581.60	75.1	78.1	10.1	0.66 NS
II	Private	10	149	745	548.20	140.9	73.6	18.9	
	Combined	20	149	745	564.90	111.2	75.8	14.9	

NS: Non-Significant

t (0.05, 18df) = 2.101

Table 4 indicates the overall mean scores on Functional Activities both public and private sector companies. It is shown that the mean response score on Functional Activity is found to be higher in the public sector companies (78.1 percent) as compared

to private sector companies (73.6 percent). The data subjected for statistical test indicate the difference in the mean response on Functional Activity between the public and private sector companies is found to be non-significant (t=0.66 NS,P<0.05).

**Table 5 Classification of Public and Private Sectors on Functional Area Level**

Functional Activity Level	Category (Score %)	Classification of Sectors				$\chi^2$ Value
		Public		Private		
		Number	Percent	Number	Percent	
Inadequate	< 68.4	2	20.0	3	30.0	3.49 <sup>NS</sup>
Moderate	68.4-83.3	6	60.0	2	20.0	
Adequate	>83.3	2	20.0	5	50.0	
Total		10	100.0	10	100.0	

NS: Non-Significant

$\chi^2 (0.05, 2df) = 5.991$

Table 5 shows the classification of public and private sectors of Functional Activity. It is evident from the finding that 50 percent of the private sector companies establish Functional Activity level compared to only 20 percent of the public sector as adequate. Further majority of the public sector (60

percent) possess moderate Functional Activity level as against only 20 percent of the private sector notice the moderate level. It is evident from the finding that the difference in the Functional Activity level between public and private sector companies is non-significant ( $\chi^2 = 3.49$  NS,  $< 0.05$ ).

**Table 6 Mean Response scores on Management Functional Area of Public and Private Sectors**

N o.	sectors	Sample (n)	State ments	Max Score	Respondents Knowledge				't' Test
					Mean	SD	Mean(%)	SD(%)	
I	Public	10	149	745	581.60	75.1	78.1	10.1	0.66 NS
II	Private	10	149	745	548.20	140.9	73.6	18.9	
	Combined	20	149	745	564.90	111.2	75.8	14.9	

NS: Non-Significant

$t (0.05, 18df) = 2.101$

Table 6 indicates the overall mean scores on functional activity for both public and private sector companies. It is shown that the mean response score on functional activities is found to be slightly higher in the public sector companies (78.10 percent) as compared to private sector companies (73.6

percent) [18-20]. The data subjected for statistical test indicate the difference in the mean response on management audit system between the public and private sector companies is found to be non-significant ( $t = 0.66$  NS,  $P < 0.05$ ).

**Table 7 Classification of Public and Private Sectors on Functional Activity Level**

Functional Activity Level	Category (Score %)	Classification of Sectors				$\chi^2$ Value
		Public		Private		
		Number	Percent	Number	Percent	
Inadequate	< 68.4	2	20.0	3	30.0	3.49 <sup>NS</sup>
Moderate	68.4-83.3	6	60.0	2	20.0	
Adequate	>83.3	2	20.0	5	50.0	
Total		10	100.0	10	100.0	

NS: Non-Significant

$\chi^2 (0.05, 2df) = 5.991$

Table 7 shows the classification of public and private sectors on management audit system level [21]. It is evident from the finding that 50 percent of the private sector companies establish management audit system level compared to only 20 percent of the public sector as adequate. Further majority of the public sector (60 percent) possess

moderate management audit system level as against only 20 percent of the private sector notice the moderate level [22]. It is evident from the finding that the difference in the management audit system level between public and private sector companies is non-significant ( $\chi^2 = 3.49$  NS,  $P < 0.05$ ).

**Table 8 Mean Response Scores on Management Audit system of Public and Private Sector**  
N=10

No.	Sectors	Statements	Max. Score	Respondents Knowledge			
				Mean	SD	Mean (%)	SD (%)
I	Public	341	1705	1328.20	196.3	77.90	11.5
II	Private	341	1705	1270.40	335.5	74.51	19.7
	Combined	341	1705	1299.30	269.2	76.21	15.8

Table 8 indicates the sector wise mean response scores on Management Audit System of Public and private sector companies. It reveals that the overall mean response score for Management Audit System in Public sector companies is 77.90 percent with standard deviation of 11.5 percent and private

sector companies is 74.51 percent with standard deviation of 19.7 percent [23]. Further the t mean response score on management audit system is noticed combining both public and private sector companies is 76.21 percent with standard deviation of 15.8 percent.

**Table 9 Classification of Public and Private Sectors on Management Audit System Level**

Management Audit System	Category (Score %)	Classification of Sectors				$\chi^2$ Value
		Public		Private		
		Number	Percent	Number	Percent	
Inadequate	< 68.3	2	20.0	4	40.0	3.83 <sup>NS</sup>
Moderate	68.3-84.1	5	50.0	1	10.0	
Adequate	> 84.1	3	30.0	5	50.0	
Total		10	100.0	10	100.0	

**NS: Non-Significant**

**$\chi^2 (0.05, 2df) = 5.991$**

Table 9 shows the classification of public and private sectors on management audit system level. It is evident from the finding that 50 percent of the private sector companies establish management audit system level compared to only 30 percent of the public sector as adequate. Further majority of the public sector (50 percent) possess moderate

management audit system level as against only 10 percent of the private sector notice the moderate level [24]. It is evident from the finding that the difference in the management audit system level between public and private sector companies is non-significant ( $\chi^2 = 3.83$  NS,  $P < 0.05$ ).

**Table 10 Overall mean Scores on Management Audit system of Public and Private Sectors**

Sectors	Sample (n)	Max. Score	Respondents				't' Test
			Mean	SD	Mean (%)	SD (%)	
Public	10	1705	1328.20	196.3	77.90	11.5	0.47 <sup>NS</sup>
Private	10	1705	1270.40	335.5	74.51	19.7	
Combined	20	1705	1299.30	269.2	76.21	15.8	

**NS: Non-Significant**

**t (0.05, 18df) = 2.101**

Table 10 indicates the overall mean scores on management audit system for both public and private sector companies. It is shown that the mean response score on management audit system is found to be slightly higher in the public sector companies (77.90 percent) as compared to private

sector companies (74.51 percent). The data subjected for statistical test indicate the difference in the mean response on management audit system between the public and private sector companies is found to be non-significant (t=0.47NS, P<0.05).

**Table 11 Overall Mean Response scores of Management Audit system**

Variables	Mean scores (%)						't' Test
	Public sector (n=10)		Private Sector (n=10)		Combined (n=20)		
	Mean	SD	Mean	SD	Mean	SD	
Management Process	77.02	11.0	74.86	20.8	75.94	16.3	0.29 <sup>NS</sup>
Production	80.10	8.5	74.30	17.9	77.20	13.9	0.93 <sup>NS</sup>
Marketing	75.76	12.7	72.76	20.8	74.26	16.8	0.36 <sup>NS</sup>
Research & Development	71.13	22.0	74.00	17.0	72.57	19.2	0.33 <sup>NS</sup>
Financial Accounting	79.02	15.7	76.10	21.9	77.56	18.6	0.34 <sup>NS</sup>
Human Resource	79.38	15.3	73.06	19.7	76.22	17.4	0.80 <sup>NS</sup>
Information Technology	80.51	16.4	80.34	23.1	80.42	19.5	0.02 <sup>NS</sup>
Total	77.90	11.5	74.51	19.1	76.21	15.8	0.47 <sup>NS</sup>
F-Value	0.48 NS		0.16 NS		0.41 NS		

**NS: Non-Significant**

Table 11 reveals overall aspect wise mean scores on management audit system of public and private sector companies. It shows that when public and private sector companies are compared, in public sector management process production, marketing, financial accounting, human resource, and information technology are 77.02 percent, 80.10 percent, 75.76 percent, 79.02 percent, 89.38 percent and 80.51 percent respectively, which are greater than the private sector companies. In private sector research and development which is 74 percent is greater compared to public sector with 71.13 percent. It is evident from the statistical results that the mean response on management audit system

between public and private sector companies for all the seven different aspects of study are found to be non-significant (P<0.05). It further reveals the data subjected for statistical test indicate the mean response under different variable of Management Audit for the Public sector (F=0.48 NS), private sector (F=0.16 NS) and combined (F=0.41NS).

**Conclusion**

The comparative analysis relating to implementation of Management Audit System between public and Private sector companies reveals that:

- **Management Process-** 60 percent of public sector companies i.e. six out of ten



companies have implemented Management Audit System moderately, twenty percent adequately and remaining twenty percent inadequately. As against this, forty percent of private sector companies have implemented adequate and thirty percent each inadequately and moderately. On comparison, the public sector industries are comparatively better than private sector companies in implementation of Management Audit System in Management Process with 60 percent moderately, 20 percent each adequately and inadequately. However, there is no significant difference between public sector and private sector companies in implementation of Management Audit System in Management Process as disclosed by Chi-square test. ( $\chi^2 = 1.87NS$ ).

- **Functional Activities Production-** The private sector companies have implemented Management Audit System 50 percent adequately, 10 percent moderately and 40 percent inadequately. On comparison the public sector companies have implemented Management Audit System in Production function 30 percent each adequately and moderately. However, there is no significant difference between public and private sector companies as revealed by Chi-square test ( $\chi^2 = 1.50NS$ ) in the implementation of Management Audit System in Production.
- **Marketing-** comparison between public and private sector companies with regard to the implementation of Management Audit System reveals that private sector implement 50 percent adequately, 10 percent moderately and 40 percent inadequately. Where as in the case of public sector companies 30 percent adequately, 50 percent moderately and 20 percent inadequately, which indicate that there is no significant difference in the implementation of Management Audit System in Marketing

Function as indicated by Chi-square test ( $\chi^2 = 3.83NS$ ).

- **Research and Development-** 30 percent of public sector companies i.e. three out of ten companies have implemented Management Audit System adequately, 40 percent moderately and remaining 30 percent inadequately. As against this, thirty percent of private sector companies have implemented adequate and 30 and 40 percent moderately and inadequately respectively. On comparison, however, there is no significant difference between public sector and private sector companies in implementation of Management Audit System in Research and Development as disclosed by Chi-square test ( $\chi^2 = 0.29NS$ ).
- **Accounting and Finance-** The private sector companies have implemented Management Audit System 50 percent adequately, 10 percent moderately and 40 percent inadequately. On comparison the public sector companies have implemented Management Audit System in Production function 40 percent each adequately and 50 percent moderately. However, there is no significant difference between public and private sector companies as revealed by Chi-square test ( $\chi^2 = 4.58NS$ ) in the implementation of Management Audit System in Accounting and Finance.
- **Human Resource Management-** comparison between public and private sector companies with regard to the implementation of Management Audit System reveals that private sector implement 40 percent adequately, 40 percent moderately and 20 percent inadequately. Where as in the case of public sector companies 40 percent adequately, 20 percent moderately and 40 percent inadequately, which indicate that there is no significant difference in the implementation of Management Audit System in Human Resource Management as indicated by Chi-



square test( $\chi^2 = 1.33$ NS).

- **Information Technology-** 30 percent of public sector companies i.e. three out of ten companies have implemented Management Audit System adequately, 40 percent moderately and remaining 30 percent inadequately. As against this, 50 percent of private sector companies have implemented adequate and 20 and 30 percent moderately and inadequately respectively. On comparison, however, there is no significant difference between public sector and private sector companies in implementation of Management Audit System in Information Technology as disclosed by Chi-square test( $\chi^2 = 1.17$ NS).
- **Functional Activity-** the level of Functional Activities implemented is compared between public and private sector companies reveals that private sector companies implement 50 percent adequately, 20 percent moderately and 30 percent inadequately. Where as in the case of public sector companies 20 percent adequately, 60 percent moderately and 20 percent inadequately, which indicate that there is no significant difference in the implementation of Management Audit System in Functional Activities as indicated by Chi-square test( $\chi^2 = 3.49$ NS).

The comparative analysis of overall implementation of Management Audit System between public sector and private sector companies reveal that fifty percent of public sector companies have implemented Management Audit System which is at moderate level, thirty percent adequately and twenty percent inadequately. As against this, fifty percent of private sector companies have implemented adequately, forty percent inadequately and ten percent moderately. When we club moderate and adequate level, eighty percent of the public sector companies have implemented more than 68.3 percent. Only 60 percent of the private sector companies have implemented Management Audit System more than

68.3 percent. This leads to conclude that public sector companies are more interested in implementation of Management Audit System compared private sector companies.

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