

The Impact Of Reward System On The Productivity Of Construction Employees: A Study Of Selected Construction Projects In Port Harcourt

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Abstract: The primary aim of every organization manufacturing or construction oriented is profit making for its shareholders. In trying to achieve this goal, management of firms have continued to reinvent the wheel of how to minimize the cost of production or at least increase the productivity levels of the entire workforce from top to bottom and still maintain a balanced and peaceful management-employee relationship. This paper is aimed establishing the extent to which monetary rewards such as increase in wage will trigger higher employee performance in selected construction firms. The results show that there is a positive relationship between monetary rewards system and the performance of construction employees, particularly the semi-skilled and unskilled categories. It is therefore recommended that managers of constructions should develop appropriate monetary reward systems to drive higher productivity and growth in this competitive construction environment.

I. INTRODUCTION

The success of any organization largely depends on the productivity of its employees, which in turn depends on several other factors such as salaries, wages, welfare and rewards, particularly when they do well in their assignments. As postulated by Andawei (2002), Akanwa (1997) and Nwachukwu (2000), the building-up and efficiency of an organization, whether private or public depends to a large extent on how effectively human resources are utilized. For an organization to attain its desired objectives, it must seek and obtain the willing cooperation of the people who perform various assignments in the organization. Management must work with the employees and must develop programmes and policies that will enable it to obtain the best result from the employees. The desire of the employers is to increase the competencies of its work-force so as to achieve higher productivity from its employees.

One of the unique features of human resources, that make it different from other factors of production, is that employee needs are unique and may be different from others and the organization itself. Each employee reports to work with his personal aspirations or needs, biases and preferences. In order for management to encourage them to put in their best,

conscious effort must be made by management to first understand and address their personal individual needs.

Most often than not, the needs of the employees are different from the organizational goal, which create goal conflict between the employee and the organization they work for. The top management of every organization must deliberately develop a reward system that enhances the employee productivity that will help to narrow the goal gap between the employee and the organization. This will improve employee earnings and eventually triggers organizational productivity. In agreeing the above assertion Von and Linderman (1971) further posited that the introduction of incentives will result to a remarkable increase in productivity.

One of the key objectives of the reward system is to motivate the employees by creating a psychological force within the employees that determines the direction of behaviour, level of effort and persistency in the face of obstacles. According to the equity theory, an employee will be motivated to perform at a high level if they perceive that they are receiving outcomes that are proportional to inputs to their jobs and to the organization. Organizational reward system influences a variety of behaviour which impacts on the employee intrinsically and extrinsically. Lawler (1997) contended that good performance leads to rewards which invariably lead to increased productivity.

A. STATEMENT OF PROBLEM

Employees are vital ingredients in achieving organizational goals, particularly in the construction sector. As humans they are faced with psychological, health, finance, mental challenges alongside with their personal goals. All these challenges significantly affect their performance. In many organizations, especially in the construction industry, employers are complaining of the drop in the productivity level of their employees. On the other hand employees are expressing dissatisfaction in the behaviour of top management towards their personal and needs, which eventually generates internal frustration on both sides which ultimately translate to low productivity, avoidable employee-employer conflict and drop in organizational profitability. Against this backdrop, this paper is aimed at identifying the reward systems in selected construction firms and the extent the reward system affects the employee performance.

II. LITERATURE REVIEW

Reward system is a technique for changing employee organizational interest, which results to the achievement of employee needs as well as the attainment of organizational goals. It is a pay, benefit or compensation accruable to an individual employee that is capable of altering behaviour and performance. Reward may take the form of personal praise, public recognition, promotions, improvement in status or corporate gift or pay rise. In order to achieve its purpose, the reward system should provide for competitive level of remuneration and ensure that it is explicitly inclined towards employee contribution, performance and potentials. It should provide direct incentive for extra effort for adopting the expected behaviour and be based on remuneration strategies integrated into the corporate strategic plans of the organization.

Folks (1983) defines organizational reward system as a total array of rewards available from the organization for the individual and collective efforts of the members. It could therefore mean an organizational incentive measure which is the benefit that accrues to every employee. Cunningham (1997) sees reward as anything that entices or motivates a person to work harder. Ivancevich (1977) asserted that the main motive of a reward system is to enhance the productivity of the employee. In this light, the organizational goals cannot be achieved if the workforce is not rewarded. Reward can be intrinsic or extrinsic in nature. Intrinsic rewards are outcomes that personally satisfy the employee. They include achievement, self-recognition, personal growth. Employees who desired to be challenged, develop new skills and knowledge, make important contribution and reach their potentials on the job, have intrinsic work value. While extrinsic rewards are values that are related to the consequences of the work.

A. THE EXPECTANCY THEORY

The expectancy theory which was proposed by Vroom and Lawler is focused on how employees decide which behaviour to perform and how much effort to exert. It is concerned with how employees make choices among alternative behaviours, level of effort and their perceptions. The expectancy therefore provides top management valuable insights on how to get employees to perform organizational functions at a high level. Vroom's theory assumes that employees are essentially pleasure-seekers and that, they are driven towards positive outcomes such as weekly bonus and awards and avoid negative outcomes like fired, demoted or reprimanded. Secondly, it is assumed that the employees are rational and careful possessors of information and use the information about their jobs, abilities and desires to decide what they will do in their job and how hard they will do it.

Expectancy theory identifies valence, instrumentality and expectancy as the three major factors that determine employee motivation.

Valence is the desirability of an outcome to an individual employee. Employees can obtain a variety of outcomes from their jobs like: pay, job security, benefits, feeling of accomplishment, the opportunity to do interesting work and promotion. The valence of an individual employee can be positive or negative and can vary in magnitude. While employees are generally attracted to outcomes that have positive valence, they always avoid outcome that has negative valence. The factor of instrumentality poses the question between the connection of job performance and reward. It refers to the perception of the employee about the extent to which performing certain behaviour at a certain level will lead to the attainment of a particular outcome. In organization, employees are going to be engaged in desired behaviour and be motivated to perform at a high level only if they perceive that high performance will lead to positive valiant outcomes such as pay rise and promotion.

Expectancy is the employee's perception about the extent to which his or her effort will result to certain level of job performance. It varies from 0 to 1 and reflects the chances that pulling forth of a certain level of performance of effort will result to certain level of performance. A zero level of expectancy means that workers believes that there is no chances that the employee's effort will result to any level of performance, while expectancy of 1 signifies that an employee is absolutely certain that his effort will lead to a certain level of performance.

B. THE EQUITY THEORY

This theory which was developed in the 1960s by J. Stacy Adams is based on the premise that an employee perceives the relationship between the reward, what the employee gets from the job and organization and the inputs, what the employee contributes to the job and organization. The proponent of this theory does not consider the outcomes and input as most critical, but the perception of the employee about the outcome/input ratio compared to the outcome/input ratio of another employee commonly referred to as the referent employee. Regardless of the referent an employee chooses, it is the employee's perception of the referent outcome and input

that are compared and not the objective measure of the actual outcome or input.

III. METHODOLOGY

The products of the construction industry are unique and often produced by diverse groups of skilled, semi-skilled and unskilled employees that utilize materials and machine in the production process. For the purposes of this paper two categories of semi-skilled and unskilled employees involve directly in the production of concrete-work and block-work will be considered. The concrete-work is usually undertaken by concrete gangs consisting of mason(semi-skilled employee), operator(semi-skilled employee) and general labour(unskilled employees), while the block-work consists of mason(semi-skilled employee) and general labour(unskilled employees) working for eight hours daily. Records of output of these work groups were obtained by direct observation for five days each from five construction project sites randomly selected in the city of Port Harcourt.

A. DATA PRESENTATION AND ANALYSIS

The data collated for concrete works were based on eight working hours each day with a composite labour charge of three thousand five hundred naira(=N= 3,500) an equivalent of \$17 for all categories of employees involved in the production of 1m³ of grade 25 concrete using concrete mixer with the right proportion of cement, sand and aggregate. The unit charge per m³ of concrete was increased by 10%, 15% and 20% respectively as shown in table 4.1. The increase in output of the production for each increment of composite labour charge is also tabulated in tables 4.2, 4.3 and 4.4. The result in these tables show that 10% increase in the labour charge led to 22.20% increase in the production output on the average, 15% increase in the labour charge resulted to an average of 53.40% increase in the production output and 20% increase in the labour charge amounted to a whopping average increase of 88.40%. The data collated for concrete works were based on eight working hours each day with a composite labour charge of six thousand naira(=N= 6,000) an equivalent of \$30 for all categories of employees involved in the laying of 1m² of 225mm thick hollow sandcrete block with mortar of cement sand ratio of 1:4. The charge for laying 1m² of 225mm block was increased by 10%, 15% and 20% respectively as shown in table 4.5. The increase in output of the production for each increment of composite labour charge is also tabulated in tables 4.6, 4.7 and 4.8. The result in these tables show that 10% increase in the labour charge led to 40.40% increase in the production output on the average, 15% increase in the labour charge resulted to an average of 73.60% increase in the production output and 20% increase in the labour charge amounted to a whopping average increase of 105.20% . The relationship between increase in wage and the average percentage output for the concrete and block works are shown graphical in figures 4.1 and 4.2.

1	8hrs	20	3500	25	27	35
2	8hrs	20	3500	23	28	36
3	8hrs	20	3500	24	19	35
4	8hrs	20	3500	25	29	37
5	8hrs	20	3500	25	30	36
6	8hrs	20	3500	26	32	36
7	8hrs	20	3500	24	31	37
8	8hrs	20	3500	25	33	35
9	8hrs	20	3500	26	29	38
10	8hrs	20	3500	24	29	36
11	8hrs	20	3500	24	30	39
12	8hrs	20	3500	25	35	40
13	8hrs	20	3500	24	32	39
14	8hrs	20	3500	25	31	38
15	8hrs	20	3500	24	30	40
16	8hrs	20	3500	25	29	39
17	8hrs	20	3500	24	28	38
18	8hrs	20	3500	25	32	40
19	8hrs	20	3500	25	31	39
20	8hrs	20	3500	24	32	38
21	8hrs	20	3500	24	32	39
22	8hrs	20	3500	25	32	40
23	8hrs	20	3500	24	32	37
24	8hrs	20	3500	23	32	38
25	8hrs	20	3500	23	32	37

Survey data 2014

Table 4.1: Output records of concrete-work work gangs

S/No	Normal Output(m ³)	Normal Wage per m ³ (=N=)	10% Increase in Wage	Increase in Output (m ³)	% increase in output
1	8hrs	20	350	5	25.00%
2	8hrs	20	350	3	15.00%
3	8hrs	20	350	4	20.00%
4	8hrs	20	350	5	25.00%
5	8hrs	20	350	5	25.00%
6	8hrs	20	350	6	30.00%
7	8hrs	20	350	4	20.00%
8	8hrs	20	350	5	25.00%
9	8hrs	20	350	6	30.00%
10	8hrs	20	350	4	20.00%
11	8hrs	20	350	4	20.00%
12	8hrs	20	350	5	25.00%
13	8hrs	20	350	4	20.00%
14	8hrs	20	350	5	25.00%
15	8hrs	20	350	4	20.00%
16	8hrs	20	350	5	25.00%
17	8hrs	20	350	4	20.00%
18	8hrs	20	350	5	25.00%
19	8hrs	20	350	5	25.00%
20	8hrs	20	350	4	20.00%
21	8hrs	20	350	4	20.00%
22	8hrs	20	350	5	25.00%
23	8hrs	20	350	4	20.00%
24	8hrs	20	350	3	15.00%
25	8hrs	20	350	3	15.00%

S/No	Working Hours	Normal Output(m ³)	Normal Wage per m ³ (=N=)	Output at 10% Increase in wage per m ³	Output at 15% Increase in wage per m ³	Output at 20% Increase in wage per m ³
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Survey data 2014

Table 4.2: Output records of concrete work gangs with 10% increase in wage

S/No	Normal Output(m3)	Normal Wage per m3(=N=)	15% Increase in Wage	Increase in Output (m3)	% increase in output
1	20	3500	525	7	35.00%
2	20	3500	525	8	40.00%
3	20	3500	525	9	45.00%
4	20	3500	525	9	45.00%
5	20	3500	525	10	50.00%
6	20	3500	525	12	60.00%
7	20	3500	525	11	55.00%
8	20	3500	525	13	65.00%
9	20	3500	525	9	45.00%
10	20	3500	525	9	45.00%
11	20	3500	525	10	50.00%
12	20	3500	525	15	75.00%
13	20	3500	525	12	60.00%
14	20	3500	525	11	55.00%
15	20	3500	525	10	50.00%
16	20	3500	525	9	45.00%
17	20	3500	525	8	40.00%
18	20	3500	525	12	60.00%
19	20	3500	525	11	55.00%
20	20	3500	525	12	60.00%
21	20	3500	525	12	60.00%
22	20	3500	525	12	60.00%
23	20	3500	525	12	60.00%
24	20	3500	525	12	60.00%
25	20	3500	525	12	60.00%

Survey data 2014

Table 4.3: Output records of concrete work gangs with 15% increase in wage

S/No	Normal Output(m3)	Normal Wage per m3(=N=)	20% Increase in Wage	Increase in Output (m3)	% increase in output
1	20	3500	700	15	75.00%
2	20	3500	700	16	80.00%
3	20	3500	700	15	75.00%
4	20	3500	700	17	85.00%
5	20	3500	700	16	80.00%
6	20	3500	700	16	80.00%
7	20	3500	700	17	85.00%
8	20	3500	700	15	75.00%
9	20	3500	700	18	90.00%
10	20	3500	700	16	80.00%
11	20	3500	700	19	95.00%

2	20	3500	700	20	100.00%
3	20	3500	700	19	95.00%
4	20	3500	700	18	90.00%
5	20	3500	700	20	100.00%
6	20	3500	700	19	95.00%
7	20	3500	700	18	90.00%
8	20	3500	700	20	100.00%
9	20	3500	700	19	95.00%
0	20	3500	700	18	90.00%
1	20	3500	700	19	95.00%
2	20	3500	700	20	100.00%
3	20	3500	700	17	85.00%
4	20	3500	700	18	90.00%
5	20	3500	700	17	85.00%

Survey data 2014

Table 4.4: Output records of concrete work gangs with 20% increase in the wage

S/No	Working Hours	Normal Output(m2)	Normal Wage per m2(=N=)	Output at 10% increase in wage per m2	Output at 15% increase in wage per m2	Output at 20% increase in wage per m2
1	8hrs	10	6000	15	16	20
2	8hrs	10	6000	15	17	19
3	8hrs	10	6000	15	18	21
4	8hrs	10	6000	15	17	20
5	8hrs	10	6000	14	17	20
6	8hrs	10	6000	13	19	21
7	8hrs	10	6000	14	18	20
8	8hrs	10	6000	13	18	23
9	8hrs	10	6000	13	17	20
10	8hrs	10	6000	14	17	21
11	8hrs	10	6000	12	17	20
12	8hrs	10	6000	14	18	19
13	8hrs	10	6000	15	18	20
14	8hrs	10	6000	15	18	20
15	8hrs	10	6000	13	19	22
16	8hrs	10	6000	13	16	20
17	8hrs	10	6000	14	17	22
18	8hrs	10	6000	15	17	21
19	8hrs	10	6000	15	18	21
20	8hrs	10	6000	15	18	20
21	8hrs	10	6000	14	17	20
22	8hrs	10	6000	15	18	21
23	8hrs	10	6000	13	16	21
24	8hrs	10	6000	13	17	21
25	8hrs	10	6000	14	16	20

Survey data
2014

Table 4.5: Output records of laying 225mm block work gangs

S/No	Working Hours	Normal Output(m2)	10% Increase in Wage (=N=)	Increase in Output (m2)	% increase in output
1	8hrs	10	600	5	50.00%
2	8hrs	10	600	5	50.00%
3	8hrs	10	600	5	50.00%
4	8hrs	10	600	5	50.00%
5	8hrs	10	600	4	40.00%
6	8hrs	10	600	3	30.00%
7	8hrs	10	600	4	40.00%
8	8hrs	10	600	3	30.00%
9	8hrs	10	600	3	30.00%
10	8hrs	10	600	4	40.00%
11	8hrs	10	600	2	20.00%
12	8hrs	10	600	4	40.00%
13	8hrs	10	600	5	50.00%
14	8hrs	10	600	5	50.00%
15	8hrs	10	600	3	30.00%
16	8hrs	10	600	3	30.00%
17	8hrs	10	600	4	40.00%
18	8hrs	10	600	5	50.00%
19	8hrs	10	600	5	50.00%
20	8hrs	10	600	5	50.00%
21	8hrs	10	600	4	40.00%
22	8hrs	10	600	5	50.00%
23	8hrs	10	600	3	30.00%
24	8hrs	10	600	3	30.00%
25	8hrs	10	600	4	40.00%

Survey data
2014

Table 4.6: Output records of laying 225mm block work gangs with 10% increase in wage

S/No	Working Hours	Normal Output(m2)	15% Increase in Wage (=N=)	Increase in Output (m2)	% increase in output
1	8hrs	10	900	6	60.00%
2	8hrs	10	900	7	70.00%
3	8hrs	10	900	8	80.00%
4	8hrs	10	900	7	70.00%
5	8hrs	10	900	7	70.00%
6	8hrs	10	900	9	90.00%
7	8hrs	10	900	8	80.00%
8	8hrs	10	900	8	80.00%
9	8hrs	10	900	7	70.00%
10	8hrs	10	900	7	70.00%

11	8hrs	10	900	7	70.00%
12	8hrs	10	900	8	80.00%
13	8hrs	10	900	8	80.00%
14	8hrs	10	900	8	80.00%
15	8hrs	10	900	9	90.00%
16	8hrs	10	900	6	60.00%
17	8hrs	10	900	7	70.00%
18	8hrs	10	900	7	70.00%
19	8hrs	10	900	8	80.00%
20	8hrs	10	900	8	80.00%
21	8hrs	10	900	7	70.00%
22	8hrs	10	900	8	80.00%
23	8hrs	10	900	6	60.00%
24	8hrs	10	900	7	70.00%
25	8hrs	10	900	6	60.00%

Survey data
2014

Table 4.7: Output records of laying 225mm block work gangs with 15% increase in wage

S/No	Working Hours	Normal Output(m2)	20% Increase in Wage (=N=)	Increase in Output (m2)	% increase in output
1	8hrs	10	1200	10	100.00%
2	8hrs	10	1200	9	90.00%
3	8hrs	10	1200	11	110.00%
4	8hrs	10	1200	10	100.00%
5	8hrs	10	1200	10	100.00%
6	8hrs	10	1200	11	110.00%
7	8hrs	10	1200	10	100.00%
8	8hrs	10	1200	13	130.00%
9	8hrs	10	1200	10	100.00%
10	8hrs	10	1200	11	110.00%
11	8hrs	10	1200	10	100.00%
12	8hrs	10	1200	9	90.00%
13	8hrs	10	1200	10	100.00%
14	8hrs	10	1200	10	100.00%
15	8hrs	10	1200	12	120.00%
16	8hrs	10	1200	10	100.00%
17	8hrs	10	1200	12	120.00%
18	8hrs	10	1200	11	110.00%
19	8hrs	10	1200	11	110.00%
20	8hrs	10	1200	10	100.00%
21	8hrs	10	1200	10	100.00%
22	8hrs	10	1200	11	110.00%
23	8hrs	10	1200	11	110.00%
24	8hrs	10	1200	11	110.00%
25	8hrs	10	1200	10	100.00%

Survey data
2014

Table 4.8: Output records of laying 225mm block work gangs with 20% increase in wage

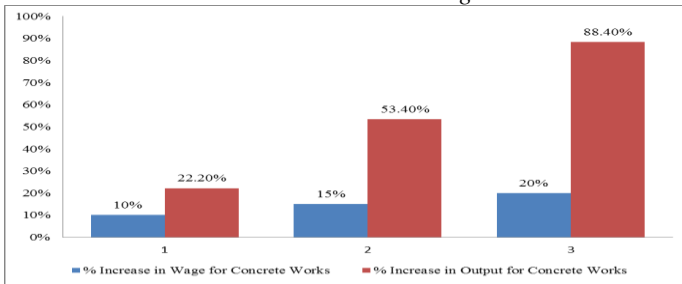


Figure 4.1: Relationship between increase in wage and output of concrete works

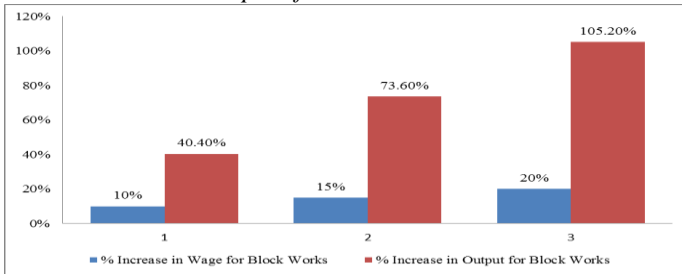


Figure 4.1: Relationship between increase in wage and output of block works

IV. CONCLUSION

From the analysis of the field data, it is clear that monetary reward system such as increase in wage of the semi-skilled and unskilled categories of employees of construction

firms is key driver of higher performance which ultimate increases the productivity of the employees. It is therefore recommended that construction firms should adopt some form of monetary reward systems, particularly for the semi-skilled and unskilled categories who are most artisans to boost their performance on the job. This will automatically accelerate productivity and growth in the firm.

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