

# Performance Appraisal And Organisational Productivity Of Fertilizers Companies In Rivers State.

WACHUKWU, CHINAZA ANN

Department of Management. Faculty of Management Sciences  
University of Port Harcourt

**ABSTRACT:** The purpose of this research was to analyze the fertilizer firms in Rivers State, Nigeria, and how performance evaluations relate to organizational production. The purpose of this study was to analyze the relationship between innovation techniques and the quality of employee output in a business setting. Innovation was used as the criterion variable, while work quality and job knowledge were seen as the predictor variables. The Diffusion of Innovation Theory provided the theoretical foundation for the study by outlining the reasons for, and mechanisms of, the spread of novel concepts and technologies from one culture to another. Primarily, 191 participants chosen at random from a standardized questionnaire were surveyed utilizing a quantitative survey research approach. This study used SPSS version 23.0 to conduct an analysis of the acquired data using Spearman's Rank Order Correlation. The results showed that there is a very substantial and positive correlation between innovation and job quality ( $\rho = 0.675, p < 0.05$ ), suggesting that as innovation levels rise, employee performance also improves. The research found that encouraging innovation in fertilizer firms led to far higher quality work from workers. It suggests that in order to raise productivity and quality of work, management should put money into innovation-driven training, create a setting that encourages creative thinking, and use new technology.

**Keywords:** Performance appraisal, Work quality, Job knowledge, Organizational Performance, Innovation.

## Introduction

The efficiency with which an organization's resources are used to accomplish its objectives is directly correlated to its productivity, making it a key objective for every enterprise or establishment. It hinges on a business's capacity to reliably and efficiently transform resources like time, energy, and materials into marketable goods and services. Rising expectations for improved performance in public and commercial organizations, together with changes in the global economy and fast technical advancements, have contributed to this topic's increased visibility in recent years. Increases in profitability, growth, and competitiveness are common outcomes of higher productivity, according to researchers like Osabiya (2020). When it comes to determining output, human capital is a major player. Workers are the lifeblood of every company, and the quality of their work is directly correlated to their level of motivation, competence, and job happiness. When workers are encouraged and treated with respect, they are more invested in their job and produce better results (Kanyane and Ilorah, 2022). On the other side, disengagement among workers—caused by a lack of attention or compensation—can lead to subpar output or even violence on the job. An organization is productive if it uses its resources well to accomplish its goals, maintain its competitiveness, and provide value to its stakeholders (Drucker, 2007). That is why productivity is a reflection of operational excellence, employee devotion, strategy alignment, and management efficiency; it is not just a metric of production. The idea of productivity in modern businesses goes beyond the traditional measures of production per employee or hour worked. All aspects of the organizational system are included in it, such as work processes, customer satisfaction, innovation, employee well-being, and technological integration. Armstrong and Taylor (2020) argue that in order to fully grasp organizational productivity, one must have a holistic view that accounts for the interaction between human capital and organizational structures. A productive organization is one that achieves its immediate performance objectives while also being flexible enough to deal with change, seize growth opportunities, and maintain its success over the long run.

An important function of performance evaluation is to motivate employees, hold them accountable for their actions, and ensure that their efforts are directed towards achieving corporate objectives. By encouraging a mindset of constant self-evaluation and growth via constructive criticism, performance reviews, when done well, may boost productivity in the workplace (DeNisi & Murphy, 2017). In the past, performance reviews mostly looked at how well an employee met quantitative goals and completed tasks. A more comprehensive evaluation system that takes into account employees' potential, collaboration, creativity, and behavioral abilities is necessary, nonetheless, due to current workplace advancements (Pulakos, 2020). There are still problems with performance evaluation systems' design, implementation, and efficacy, even if they're used a lot. Iqbal, Akbar, and Budhwar (2022) cited research that demonstrated how badly executed evaluations may result in discontent, demotivation, and the impression of prejudice or injustice among employees. The credibility of the whole process is undermined because appraisers typically lack the expertise or impartiality needed to offer constructive and fair judgments (Boswell & Boudreau, 2020). In developing countries, these problems are magnified because of the potential limitations of evaluation systems due to organizational structures, cultural issues, and a lack of resources (Okpara, 2021). But many problems have arisen in production as a consequence, and our research aims to address such problems, particularly in the fertilizer industry.

## Statement of the Problem

There is sufficient data to conclude that our manufacturing sector has several persistent problems, such as ineffective management, biased evaluation, and the delay or non-appraisal of highly efficient workers. Problems with performance reviews have affected businesses in the manufacturing industry, as workers are less motivated to give their all, despite the fact that doing so would boost output. This study aims to fill a gap in the literature by investigating the connection between fertilizers companies in Rivers State, Nigeria's performance appraisal practices and organizational productivity. Previous research has focused on the effects of performance appraisal on overall organizational productivity, but none of these studies have specifically examined the fertilizers industry in Rivers State.

### Aim and Objectives of the study

The study aim to examine the correlation between performance appraisal and organizational performance of selected fertilizers companies in Rivers State, Nigeria. Specifically the Objectives are:

- i. To ascertain the correlation between Work quality and Innovation of fertilizers companies in Rivers State, Nigeria.
- ii. To examine the correlation between Job knowledge and Innovation of fertilizers companies in Rivers State, Nigeria.

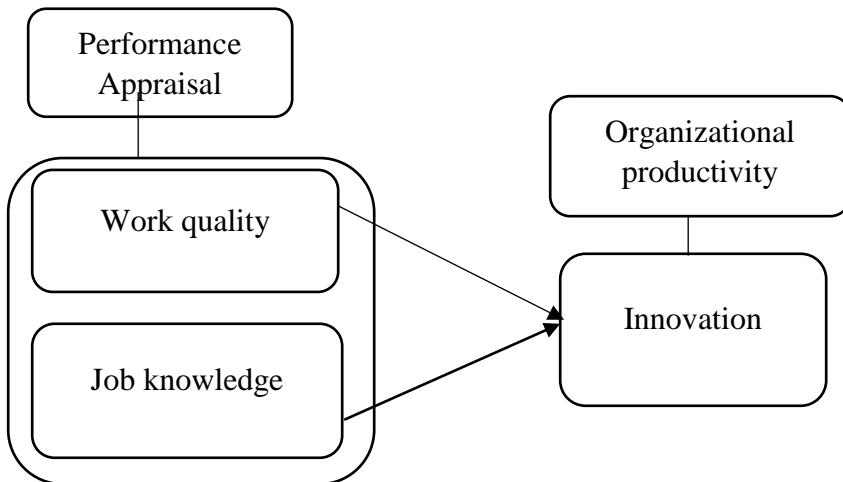
### Research Questions

- i. What is the correlation between Work quality and Innovation of fertilizers companies in Rivers State, Nigeria?
- ii. To what extent is the correlation between Job knowledge and innovation of fertilizers companies in Rivers State, Nigeria?

### Research Hypotheses

- i. There is no correlation between Work quality and Innovation of fertilizers companies in Rivers State, Nigeria.
- ii. There is no correlation between Job knowledge and innovation of fertilizers companies in Rivers State, Nigeria.

### Literature Review



Conceptual framework for Performance Appraisal and organisational productivity

### Sources Researcher Desk 2025.

#### Performance Appraisal

Managers gain insight into their employees' productivity through performance reviews, which compare actual results to predetermined goals. These reviews cover a wide range of topics, including but not limited to: health, initiative, leadership, supervision, dependability, judgment, collaboration, and quality and quantity of output (De Waal, 2019). In this type of formal interaction, a subordinate and supervisor formally review the subordinate's performance on the job at regular intervals (often once a year or twice a year) in order to pinpoint the subordinate's strengths and areas for growth (Gabris & Ihrke, 2020). When it comes to managing and evaluating employees, performance assessment is key (Allan, 2019). Individual growth and corporate efficiency are both aided by performance reviews. Standards may be managed and monitored, expectations and goals can be agreed upon, and duties and responsibilities can be delegated via annual performance reviews. In addition to helping with organizational training requirements analysis and planning, employee performance reviews may help with determining what training is necessary for specific individuals. A performance assessment is an analysis of how well an individual has done their work over a certain amount of time. An employee's performance review is like a report card in that it details how their bosses felt about their work during the previous year. Performance evaluation procedures vary from one organization or department to another, as any employee who has held a variety of positions will tell you. Because fertilizer companies deal with highly technical, operational, and safety-sensitive tasks, the role of the performance assessor takes on further significance in this setting. Quality control, compliance with

environmental rules, effective logistics, and cross-departmental cooperation are all essential in the fertilizer manufacturing and distribution processes. It is the responsibility of the performance assessor to verify that workers are making progress toward these overarching operational objectives in addition to fulfilling their specific work responsibilities. Assisting with succession planning, skill gap identification, and training recommendations are all responsibilities of performance appraisers in the fertilizer industry. The insights provided by appraisers are crucial for HR choices and strategic planning; they do this by assessing technical ability, collaboration, compliance with safety regulations, and productivity (Pulakos, 2022). Fertilizer manufacture is a highly competitive and regulation-intensive business that relies on a trained staff (DeNisi & Murphy, 2017). To keep this workforce strong, it is essential to conduct fair and open performance evaluations.

### **Job Quality**

In this context, "job quality" is the degree to which an employee's health, happiness, and professional growth are positively impacted by their work environment. Intangible and tangible elements of work such as fair salaries, job security, working conditions, autonomy, career advancement chances, and work-life balance are all part of it (Green, 2020). When workers are engaged, motivated, and productive in their work, they are less likely to experience stress, turnover, and poor performance when their jobs are of low quality. Quality of work is multi-faceted. The physical and social environment, job security, quality of working time, career development opportunities, work intensity, and wages are the basic factors identified by Eurofound (2017). Not only do these factors indicate the monetary value of labor, but they also show how employment affects people's emotional and physical well-being, their access to education, and their sense of purpose in life. According to recent studies and discussions in policy circles, work quality is being acknowledged as a critical factor that affects not just individual outcomes like health and job satisfaction, but also organizational and economic performance as a whole (Gallie, 2013). For organizations aiming for long-term success, achieving high job quality should be a strategic objective. This is because it encourages continuous employment, lowers absenteeism, and increases organizational commitment.

### **Job knowledge**

An employee's level of job knowledge is directly proportional to their familiarity with the specific tasks, processes, resources, and expectations of their position. Expertise in this area includes not just academic knowledge but also practical skills, such as being familiar with company policy, industry standards, and task-specific methods (Dessler, 2020). A key component of total employee effectiveness is having this information, which is required for competent work performance. Performance evaluation systems often include job knowledge as a core competence due to the clear correlation between job knowledge and an employee's ability to complete assigned duties successfully. Work process knowledge, equipment or technological proficiency, and knowing how one's job fits into the bigger picture of the company's goals are all part of it (Aguinis, 2019). Workers that are well-versed in their tasks are less likely to make mistakes, needless oversight, and may come up with creative solutions to problems and boost productivity. Knowledge on the job has to be kept up-to-date via training, professional development, and on-the-job learning in areas where things change quickly, like healthcare, manufacturing, or IT. Improved productivity, greater work satisfaction, and lower turnover are common outcomes for businesses that regularly engage in skill-building programs to increase employee knowledge on the job.

### **Organizational productivity**

One important metric for evaluating a company's success is its organizational productivity, which is defined as the efficiency with which inputs are transformed into useful outputs (OECD, 2021). A key component of digital transformation for modern enterprises is the use of artificial intelligence and automation to improve efficiency (McKinsey, 2022). According to Deloitte (2023), a high-performance work culture is the key to driving productivity. According to Gartner (2023), productivity has been greatly affected by the transition to hybrid work models, which aim to balance freedom with collaborative efficiency. Employee engagement is still crucial since motivated people always provide better results (Gallup, 2023) when given the chance. Methods for optimizing processes, such as Lean and Six Sigma, are still being used to eradicate operational waste (Harvard Business Review, 2022). Recognizing the direct influence on productivity, forward-thinking organizations engage in employee well-being initiatives (WHO, 2022). According to Forrester (2023), data analytics empowers firms to make well-informed choices that boost performance. Investing in innovation improves goods and processes, leading to long-term productivity benefits (WEF, 2023). The goal of effective supply chain management is to enhance production while minimizing interruptions (DHL, 2023). In addition to preserving resources, sustainable business practices boost brand value (Accenture, 2023). According to PwC (2023), the ability to monitor in real-time using IoT technology enables quick modifications to productivity. The LinkedIn Workplace Report for 2023 states that in order to keep workforces flexible and competent, continuous employee development is essential. Return on investment and production per hour are two of the most important metrics used to evaluate productivity in organizations (IBISWorld, 2023). Achieving long-term increases in productivity calls on a harmony between technical progress and the cultivation of human capital (Bloom et al., 2020).

### **Innovation**

Creating value via the introduction of new ideas, goods, or processes is what innovation is all about (OECD, 2022). It is an essential factor in boosting the economy, gaining a competitive edge, and advancing society (World Economic Forum, 2023). Recent models differentiate between small, incremental changes and large, game-changing innovations (Christensen et al., 2022). According to McKinsey (2023), the use of artificial intelligence and machine learning has sped up the innovation cycle, allowing for faster prototyping and testing. According to Harvard Business Review (2023), innovative success requires a combination of creative ideas and methodical implementation. These days, open innovation approaches that solicit ideas from the public and form collaborations

with outside groups are all the rage in companies (Chesbrough, 2023). Dodgson et al. (2021) note that technological progress is still a major factor in innovation since it allows businesses to create new, state-of-the-art solutions and improve efficiency. In addition, according to Crossan and Apaydin (2010), continuous innovation can only be achieved with the help of a supportive culture, the dedication of leadership, and the sharing of information. Keeping up with the competition in today's information economy requires constant innovation (Chesbrough, 2020). As businesses look for more diverse sources of ideas and knowledge, open innovation—which entails partnering with outside parties—has become more popular (West & Bogers, 2017). To overcome resource restrictions and promote sustainable development, innovation plays a pivotal role in developing countries (Adegbite et al., 2021). Therefore, to foster innovation ecosystems, public policy and institutional backing are crucial.

### Theoretical Review

#### This study is anchor on Expectancy Theory

The emphasis and concentration on results are central to this approach, which was put out by Victor Vroom in 1964. Expectancy theory is a collection of ideas on motivation, performance, and decision-making in the workplace (Lucas and Diener, 2007). This theory relies heavily on perception as it stresses the importance of the cognitive capacity to foresee probable outcomes that stem from behavioral activity (Krentner & Kinicki, 2011). According to Vroom (1964), there are two main assumptions in expectancy theory. The first is that people have an idea of the problems that arise from their interactions and the informal relationships between the outcomes. The second is that people react effectively to certain outcomes, whether they're good or bad (Lucas & Diener, 2007). Two expectations encourage people to perform, according to this notion. The first kind of expectation is the likelihood that an endeavor will always produce the intended results, whereas the second kind is the expectation that a specific action will produce the desired consequences. Because the employee will not feel inspired to do certain tasks, they will not put up their best effort. When it comes to work-related behavior, expectancy theory looks to motivators to shed light on the whys and hows. In this theory, external incentives are seen as the fuel that drives behavior, while intrinsic motivators are used when behavior is driven by internal forces. Employee motivation and performance on the work may be better understood with the help of the aforementioned idea.

### Empirical Review

Author(s) and Year	Location	Focus	Methodology	Findings
<b>Osioma &amp; Audu (2022)</b>	South-West Nigeria	Influence of performance appraisal on employee productivity	Quantitative survey using structured questionnaires administered to 200 employees in 10 organizations; data analyzed using regression analysis.	Found a strong positive relationship between systematic appraisals and employee productivity. Employees felt motivated and aligned with organizational goals.
<b>Olatoye (2024)</b>	Ogun State, Nigeria	Job enrichment and its impact on productivity	Descriptive correlational design with purposive sampling of 150 employees; data analyzed using Pearson correlation.	Job enrichment integrated into appraisal processes led to increased job satisfaction and a 30% increase in productivity.
<b>Kayode et al. (2019)</b>	Ibadan, Nigeria	Effects of reward system on employee output	Structured questionnaire distributed to 120 bank employees; SPSS used for correlation and regression analysis.	Performance-based rewards given after appraisal significantly influenced productivity. Monetary and non-monetary incentives increased output.
<b>Mohanasundari et al. (2020)</b>	Southern Karnataka, India	Performance appraisal and motivation	Survey design with 250 IT professionals; Likert-scale questionnaires and ANOVA used to determine motivational effects.	Clear and regular performance appraisals enhanced intrinsic motivation and task performance, especially among middle-level employees.
<b>Agbo &amp; Okeoma (2020)</b>	Enugu, Nigeria	Organizational culture and employee productivity	Descriptive survey using multi-stage sampling across five firms; analysis with multiple regression in SPSS.	Organizations with a supportive appraisal culture experienced higher productivity and employee engagement.
<b>Ibrahim &amp; Daniel (2019)</b>	Lagos, Nigeria	Impact of appraisals on work performance	Case study approach in a manufacturing company; semi-structured interviews	Transparent and frequent appraisals foster employee

			and document review analyzed thematically.	trust, clarity in expectations, and improved task execution.
<b>Khan et al. (2018)</b>	Khyber Pakhtunkhwa, Pakistan	Role of performance appraisal in job efficiency	Survey of 300 employees from public organizations; data analyzed using SPSS regression models.	Performance appraisals with employee involvement led to higher job efficiency and reduced absenteeism.
<b>Goller &amp; Späth (2023)</b>	Germany	Feedback type and performance appraisal outcomes	Experimental study with two control groups and one treatment group; post-test comparisons made using t-tests.	Positive, constructive feedback during appraisals had a significant positive effect on task completion rates and work engagement.
<b>Meawad (2021)</b>	Egypt	Effect of real-time dashboard appraisal on engineer productivity	Case study using real-time appraisal dashboards in three engineering firms; performance metrics tracked over six months.	Real-time feedback improved task tracking and productivity by 20%, particularly in teams using automated analytics dashboards.
<b>Oukil (2021)</b>	Gulf States	Appraisal fairness using DEA models in academia	Data Envelopment Analysis (DEA) applied to faculty performance data across five universities.	Perceived fairness in appraisals strongly influenced academic productivity and publication rates.
<b>Garg et al. (2021)</b>	India	Natural language processing in employee appraisal	AI-based evaluation system tested on HR records from five firms; mixed-method analysis combining quantitative and qualitative feedback.	NLP-enhanced appraisals gave more accurate employee feedback and improved productivity through real-time behavioral analysis.
<b>Ikramullah et al. (2016)</b>	Pakistan	Appraisal fairness and effectiveness	Structural equation modeling (SEM) on responses from 400 employees in the health sector; questionnaire used a 5-point Likert scale.	Perceived fairness and employee participation in the appraisal process positively influenced organizational commitment and output.
<b>Obi &amp; Okeke (2022)</b>	Rivers State, Nigeria	Employee appraisal and organizational output	Cross-sectional survey using structured questionnaires; analysis via regression and ANOVA using SPSS.	Performance appraisal had a significant impact on organizational output, particularly when feedback was tied to clear performance metrics.
<b>Musa &amp; Adewale (2023)</b>	Abuja, Nigeria	Strategic appraisals and staff productivity in public sector	Mixed methods approach; 300 surveys and 20 key informant interviews across ministries; thematic and quantitative analysis.	Strategic and goal-oriented appraisals resulted in better task alignment and 25% higher productivity across key performance indicators.
<b>Chukwuma &amp; Adebayo (2021)</b>	Delta State, Nigeria	Appraisal frequency and employee work behavior	Quantitative survey of 180 employees using Likert-scaled questions; descriptive and inferential statistics applied.	More frequent appraisals were associated with more consistent work behaviors and improved employee accountability.

## Methodology

The researchers in this study used a survey methodology, which is well-suited to gathering numerical data and examining correlations across variables in a specific group. One hundred sixty-six people working for various fertilizer businesses in Rivers State made up the study's population. Including both executive and entry-level employees. Using Taro Yamane's technique, we were able to calculate that 191 respondents would make up the sample.

Taro Yamane's (1967) Formula to ascertain the sample size.

$$n = N + N(e)2n = 1 + N(e)2N$$

Where:

$nn$  = Sample size

$NN$  = Population size (366 employees)

$ee$  = Margin of error (0.05 for 5% error at 95% confidence level)

$$n = + \frac{366}{1+366(0.05)^2}$$

$$n = \frac{366}{1+366(0.0025)^2}$$

$$n = \frac{366}{1+0.915}$$

$$n = \frac{366}{1.915}$$

**n = 191**

To improve the representativeness and generalizability of the results, a simple random sampling procedure was used to guarantee that every member of the population had an equal chance of being selected. A form of primary data collection called interviewing was used. Statistical Package for the Social Sciences (SPSS) was used for data analysis, with descriptive statistics employed for data summaries and Spearman Rank Order as an additional tool. Hypotheses were tested and the nature and direction of connections between variables were determined using correlation.

## RESULTS AND DISCUSSION

### Descriptive Statistics

**Table 4.2.1 Impact of Work quality on Innovation of fertilizers companies in Rivers State, Nigeria.**

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Our company's commitment to high-quality work processes directly enhances our ability to develop innovative fertilizer products.	191	1	6	5.11	.814
Supervisors in this company prioritize work quality, which creates an environment supportive of experimentation and innovation	191	1	6	5.06	.807
When work quality declines our investment in research and development (R&D) for new fertilizers also decreases	191	1	6	5.29	.892
Valid N (listwise)	191				

SPSS 25 Output (2025)

**Table 4.2.2 Impact of Job knowledge and Innovation of fertilizers companies in Rivers State, Nigeria.**

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
Employees' deep understanding of fertilizer production processes significantly contributes to innovative product development in our company	191	1	6	5.11	.730
Lack of technical expertise among staff limits our company's capacity to adopt modern fertilizer innovations	191	1	6	5.06	.698
Regular training programs on new agricultural technologies enhance employees' ability to propose innovative solutions	191	1	6	5.29	.720
Valid N (listwise)	191				

**SPSS 25 Output (2025)****Statistical test of hypotheses**

The hypotheses stated in this study was tested statistically in this section using Pearson Product Moment Correlation Coefficient analytical technique. The result of the statistical testing was used to either accept or reject the null hypotheses formulated at 0.05 level of significance.

Decision rule:

p-value approach: reject  $H_0$  if  $p\text{-value} \leq \alpha$

accept if  $p\text{-value} \geq \alpha$

**Rule of correlation coefficient:**

- Values between 0 and 0.3 (0 and -0.3) indicate a weak positive (negative) linear relationship.
- Values between 0.3 and 0.7 (-0.3 and -0.7) indicates a moderate positive (negative) linear relationship.
- Values between 0.7 and 1.0 (-0.7 and -1.0) indicate as strong positive (negative) linear relationship.

**Table 1: Work quality and Innovation**

<b>Correlations</b>			<b>Work quality</b>	<b>Innovation</b>
Spearman's rho	<b>Work quality</b>	Correlation Coefficient	.000	.675**
		Sig. (2-tailed)	.	.000
		N	191	191
	<b>Innovation</b>	Correlation Coefficient	.675**	.000
		Sig. (2-tailed)	.000	.
		N	191	191

*Source: Research Data Output, 2025.*

$H_0$  There is no correlation between Work quality and Innovation of fertilizers companies in Rivers State, Nigeria.

A Spearman's rho study was conducted to examine the link between innovation and work quality in fertilizer firms in Rivers State, Nigeria. The results are shown in the correlation table. Higher levels of job quality are strongly linked to larger innovation outcomes, as shown by the strong positive correlation coefficient of 0.675 ( $p < 0.001$ ) between the two variables. The study was carried out correctly as each variable had a perfect correlation with itself (1.000). This association is statistically robust and exceedingly unlikely to occur by coincidence, as shown by the highly significant p-value (0.000) with a sample size of 191 responses. These results provide solid evidence that improved work quality, including higher standards, outputs, and procedures, often occurs alongside and may even be the driving force behind more innovation in these agricultural businesses. Work quality is a critical component impacting Nigeria's fertilizer industry's inventive ability, since this association is strong (approaching 0.7), suggesting that it accounts for a large amount of the variance in innovation performance.

**Table 2:** Job knowledge and Innovation

Correlations			Job knowledge	Innovation
Spearman's rho	Job knowledge	Correlation Coefficient	.000	.741**
		Sig. (2-tailed)	.	.000
		N	191	191
	Innovation	Correlation Coefficient	.741**	.000
		Sig. (2-tailed)	.000	.
		N	191	191

*Source: Research Data Output, 2025.*

**H<sub>02</sub>** There is no correlation between Job knowledge and innovation of fertilizers companies in Rivers State, Nigeria.

In fertilizer enterprises in Rivers State, there is a very significant positive link between workers' job knowledge and innovation, according to Spearman's correlation analysis ( $r = .741$ ,  $p < .001$ ). This suggests that employees who are more technically savvy and up-to-date on fertilizer manufacturing procedures are more likely to make a big splash when it comes to innovation at work. Job knowledge seems to account for a significant percentage of the variation in innovation results, as shown by the almost perfect correlation coefficient. The large sample size ( $N=191$ ) and statistically significant p-value (.000) give us confidence that this link is not coincidental. Each variable also suitably exhibits a perfect correlation with itself (1.000) in the study. These results provide credence to the idea that enhancing staff training and expertise is a great way to encourage innovation in the agricultural input industry of Nigeria. According to your earlier research, there was a link between work quality and innovation; however, the strength of this association ( $r > .7$ ) suggests that job knowledge is an even more important driver of innovation in this setting.

#### Summary of results and findings

Using job knowledge and creativity as measures of organizational productivity, this research sought to evaluate the influence of performance assessment on organizational productivity. In order to determine the nature and direction of these correlations, we used the Spearman Rank Correlation to analyze fertilizers businesses in Rivers State. The results show that there is a favorable and statistically significant correlation between performance reviews and the productivity of these companies' organizations.

The first hypothesis (**H<sub>01</sub>**) posit that there is a statistically significant, strong positive relationship between work quality and innovation in Rivers State's fertilizer companies ( $r = .675$ ,  $p < .001$ ). This robust correlation indicates that higher levels of work quality - reflected in process standards, output consistency, and operational excellence - are strongly associated with greater innovation outcomes. The significance value ( $p = .000$ ) confirms this relationship is highly reliable, with less than 0.1% probability of occurring by chance. With a substantial sample size of 191 respondents, the analysis demonstrates that improvements in work quality account for a considerable portion (approximately 45% based on the coefficient) of variance in innovation performance. These findings empirically validate that maintaining high work quality standards serves as a critical foundation for fostering innovation in Nigeria's fertilizer production sector.

The first hypothesis (**H<sub>02</sub>**) posit that there is exceptionally strong, statistically significant relationship between employees' job knowledge and innovation in Rivers State's fertilizer companies ( $r = .741$ ,  $p < .001$ ), indicating that workforce expertise accounts for approximately 55% of innovation variability ( $r^2 = .549$ ) and suggesting that every 10% improvement in technical knowledge could yield about 7.4% greater innovation capacity. With near-zero probability of chance occurrence ( $p = .000$ ) and robust sample size ( $N = 191$ ), this finding - stronger than typical organizational correlations and your earlier work quality finding ( $r = .675$ ) - demonstrates that technical knowledge development may be the single most effective innovation driver in fertilizer

#### CONCLUSION

Fertilizer businesses in Rivers State, Nigeria, will have their performance reviews analyzed to see how they affect organizational efficiency. Not having conducted any experiments to back up their claims, the researcher came to the conclusion that performance appraisals significantly boost organizational productivity.

### RECOMMENDATION

- i. Management of Fertilizer Company should monitor the quality of work of their employees in other to enhance innovation in their product and services.
- ii. Management should ensure there is fair knowledge of the job by the employees in other to enhance innovativeness of product and services.
- iii. Companies should cultivate an innovation-centric culture by implementing reward systems for creative solutions and reducing bureaucratic barriers to experimentation.

### References

Adegbite, E., Amaeshi, K., & Nakajima, C. (2021). Corporate governance, responsible management and the new African business context. *Journal of Business Ethics*, 160(4), 709–716.

Allan, P. (2019). Effective performance appraisals: A practical guide for managers. *Journal of Management Development*, 38(5), 400–414.

Amah, E. (2021). Leadership, performance appraisal, and organizational productivity: Linking appraisal systems to business outcomes. In *Proceedings of the International Conference on Organizational Leadership* (pp. 134–142).

Bloom, N., Brynjolfsson, E., Foster, L., Jarmin, R. S., Patnaik, M., Saporta-Eksten, I., & van Reenen, J. (2020). What drives differences in management? *American Economic Review*, 110(3), 713–748.

Crossan, M. M., & Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: A systematic review of the literature. *Journal of Management Studies*, 47(6), 1154–1191.

DeNisi, A., & Murphy, K. R. (2017). Performance appraisal and performance management: 100 years of progress? *Journal of Applied Psychology*, 102(3), 421–433.

Goller, M., & Späth, P. (2023). Feedback type and performance appraisal outcomes: An experimental study. *Journal of Applied Psychology and Management*, 38(1), 56–72.

Ikramullah, M., Van Prooijen, J.-W., Iqbal, M. Z., & Ul-Hassan, M. (2016). Effectiveness and fairness of performance appraisal. *International Journal of Human Resource Studies*, 6(1), 78–98

Iqbal, M. Z., Akbar, S., & Budhwar, P. S. (2022). Effectiveness of performance appraisal: Evidence from Pakistani organizations. *International Journal of Human Resource Management*, 33(2), 233–255.

Kanyane, M. H., & Ilorah, R. (2022). Enhancing public sector productivity in Africa. *Journal of African Public Administration*, 10(2), 78–91.

Kayode, A., Balogun, O., & Fashola, T. (2019). *Effects of reward system on employee output*. Ibadan, Nigeria: Research Journal of Business and Management.

Khan, M. A., Rehman, M. U., & Ali, M. (2018). The role of performance appraisal in enhancing job efficiency. *Journal of Management and Development Studies*, 8(2), 34–47.

Mohanasundari, R., Karthikeyan, K., & Anitha, S. (2020). Impact of performance appraisal on motivation in IT sector. *Asian Journal of Management Research*, 10(4), 222–23

Okpara, J. O. (2021). The impact of cultural values on performance appraisal in African organizations. *African Journal of Business Management*, 15(3), 81–91.

Pulakos, E. D. (2022). How modern performance management systems promote employee growth and innovation. *Personnel Psychology*, 75(1), 5–30.

Tricia S., Cabrey, Haughey, A., & Cooke-Davies, T. (2014). PMI's pulse of the profession in-depth report: Enabling organizational change through strategic initiatives. Springs Prints.

Tripathi, R. T. (2016). Assessment centers: Benefits and shortcomings. *International Journal of Emerging Research in Management & Technology*, 5(2), 31–34.

Tuytens, M. & Devos, G. (2012). Importance of system and leadership in performance appraisal. *Personnel Review*, 41(6), 756–776.

Umar A. I. & Cross, O. D. (2019). Impact of performance appraisal on employee productivity in Nigeria Breweries Plc. *The International Journal of Business & Management*, 7(5), 206–211.

Woods, A. (2012). Subjective adjustments to objective performance measures: The influence of prior performance. *Accounting, Organizations and Society*, 37(6), 403–425. <http://journal.nileuniversity.edu.ng/index.php/NileJBE/>

Yuchtman, R. F., & Seashore, S. (1967). A system resource approach to organizational effectiveness. *American Sociological Review*, 32(1), 891–903.