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WORK VALUE MANAGEMENT DIMENSIONS AND ORGANIZATIONAL SUSTAINABILITY: A CROSS-SECTIONAL CORRELATIONAL ANALYSIS OF CONSTRUCTION FIRMS IN PORT HARCOURT, NIGERIA.

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ABSTRACT

This study examines the relationship between four dimensions of work value management (goal communication, skills evaluation, collaboration analysis and stakeholders' gain) and two measures of organizational sustainability (profitability and patronage). A cross-sectional descriptive survey was conducted among managerial and supervisory staff of seven leading construction companies in Port Harcourt, Rivers State. A census of 151 staff was attempted and 130 usable questionnaires were retrieved (86.1%). A self-developed, four-point closed-ended instrument was used; internal consistency was assessed with Cronbach's alpha and relationships were tested with the Pearson product-moment correlation coefficient in SPSS 20.0 at the 0.05 level. All four dimensions of work value management were rated to a high extent (construct means 3.39 to 3.62 on a four-point scale). Every dimension correlated strongly and positively with both profitability and patronage ($r = .881$ to $.989$, $p < .001$), and the eight null hypotheses were rejected. Skills evaluation showed the strongest association with profitability ($r = .989$) and collaboration analysis the weakest association with patronage ($r = .881$). The study extends the human-relations and stakeholder literatures to a sector in which firm survival depends on the durability of delivered projects and on repeat patronage. The correlation magnitudes are unusually high and are interpreted with caution, because shared-method variance and scale redundancy may inflate them. Practical implications for construction managers and directions for stronger designs are provided.

Keywords: Work value management; organizational sustainability; goal communication; skills evaluation; stakeholder theory; construction industry.

1. Introduction

Over the last two decades, firms and their stakeholders have paid growing attention to sustainability and to the responsibility of business for creating environmental and social benefits in addition to profit (Hahn, Figge, Aragón-Correa and Sharma, 2017; McWilliams et al., 2016). In the organizational context, the colloquial meaning of sustainability is simply to keep the business going, a notion sometimes described as the future-proofing of the organization (Colbert and Kurucz, 2007). The Chartered Institute of Personnel and Development (CIPD, 2012) frames it as the principle of enhancing the societal, environmental and economic systems within which a business operates, which implies a simultaneous concern for economic, social and environmental performance. Much of the earlier debate treated sustainability as a matter of policy and reporting. A more recent line of argument holds that it is above all a matter of people: it is employees who interpret policies, deliver services and carry the values of the firm into daily practice (CIPD, 2012).

Value management is concerned with creating sustainable value at project, product, process, organizational or societal level, and with sustaining a desirable balance between the needs of stakeholders and the resources needed to satisfy them. Applied to the workforce, it directs attention to the values that individuals bring to work and to the extent to which those values are recognized, aligned with organizational purpose and rewarded. Because each member of an organization arrives with a distinct set of values, conflict between personal and organizational values is common; leaders therefore need deliberate mechanisms that define organizational values while meeting the needs and aspirations of the people who live them out. In this study we call these mechanisms *work value management* and operationalize them through four dimensions: the communication of organizational goals, the evaluation of employee skills, the analysis of collaboration among workers and the attention given to the gain of stakeholders.

The construction sector provides a demanding setting for testing these ideas. It is a service industry whose output, such as roads, bridges and buildings, is visible to the public for decades, so that the quality of workmanship is judged openly and repeatedly. Customers increasingly require services that meet global standards, the environment is turbulent and competition for contracts is intense. In Nigeria, recurrent structural failures and abandoned projects have sharpened public scrutiny of the competence of construction firms and of the people who work for them. In such a setting, the sustainability of a firm is closely tied to its profitability and to its ability to retain the patronage of clients who judge it on past delivery.

Despite the plausibility of the link, three gaps motivate the present work. First, the literature on workplace values has largely examined work values as individual attitudes or as cross-national cultural patterns (Super, 1980; Super and Sverko, 1995; Furnham, 1990), and has seldom treated the *management* of those values as a firm-level capability. Second, studies on the sustainability of firms have concentrated on environmental reporting and corporate social responsibility, with comparatively little evidence on human-resource drivers of survival measured through profitability and customer patronage. Third, empirical studies in the Nigerian construction industry are scarce, and those that exist rarely report their measurement properties or hypothesis tests in sufficient detail for replication.

The study therefore addresses the following research question: to what extent do goal communication, skills evaluation, collaboration analysis and stakeholders' gain relate to the profitability and patronage of construction companies in Port Harcourt, Rivers State, Nigeria? Eight null hypotheses are tested, one for each pairing of a work value management dimension

with a sustainability measure. The remainder of the paper reviews the theoretical and empirical literature and develops the hypotheses (Section 2), describes the methodology (Section 3), presents the data analysis and results (Section 4), discusses the findings (Section 5) and concludes with implications, limitations and directions for future research (Sections 6 and 7).

2. Literature Review

2.1 Theoretical foundation

The study rests on content and process theories of work motivation, because the management of work values is ultimately an attempt to align what employees want from work with what the organization needs from them. Three theories are particularly relevant.

Maslow's hierarchy of needs. Maslow (1943) proposed that human needs are arranged from physiological and safety needs through belonging and esteem to self-actualization, and that unmet lower needs dominate behavior until they are reasonably satisfied. Later commentators stress that the ladder is not strictly sequential and that a person can be partly satisfied at one level while seeking satisfaction at the next. For work value management, the implication is that skills evaluation and goal communication speak to esteem and growth needs, collaboration speaks to belonging, and the fair treatment of stakeholders, including employees, speaks to security. When these needs are unmet, commitment diminishes and the sustainability of the firm is placed at risk.

Herzberg's two-factor theory. Herzberg, Mausner and Snyderman (1959) distinguished hygiene factors, such as pay, working conditions and policies, whose absence causes dissatisfaction, from motivators, such as recognition, achievement, responsibility and advancement, whose presence produces satisfaction. The central message is that removing dissatisfaction is not the same as creating motivation. Applied here, a firm that merely pays adequately and provides safe sites has met hygiene requirements, but it is the recognition of skills and the clear communication of purpose that act as motivators and sustain higher effort over time.

Expectancy theory. Vroom (1964) argued that effort depends on the perceived probability that effort will lead to performance, the probability that performance will lead to rewards, and the value attached to those rewards. Goal communication clarifies the first link, skills evaluation clarifies the second, and the fair distribution of gains among stakeholders determines the attractiveness of the third (Armstrong, 2006). Taken together, the three theories suggest that when firms manage work values deliberately, employee effort and quality of service improve, and these in turn feed profitability and customer patronage.

In addition, stakeholder theory (Freeman, 1984) supplies the logic for the fourth dimension. A company is a system of stakeholder groups whose continued participation depends on managers creating sufficient value for each of them (Clarkson, 1995). Failure to retain the participation of a stakeholder group threatens the viability of the corporate system, which links the treatment of employees, customers, suppliers and investors directly to sustainability.

2.2 Work value management

Work has attracted more research attention to values than other life domains such as family or leisure, because it is a primary source of income and a base for social participation and status (Super, 1980; Super and Sverko, 1995). Earlier studies interpreted work-related values as expressions of broader life values and cultural patterns, and some examined their link with

national economic performance following Weber's thesis on the Protestant ethic (Furnham, 1990). At the level of the organization, however, what matters is how leaders recognize, communicate, assess and reward the value that employees bring. We conceptualize work value management as the set of managerial practices through which an organization (i) communicates its goals to its workforce, (ii) evaluates the skills of its workers, (iii) analyses and structures collaboration among them, and (iv) takes account of the gains of its stakeholders.

2.3 Dimensions of work value management

Goal communication. Goals provide a conceptual framework for planning, benchmarks for monitoring progress and tools for evaluating results at the end of implementation (Mullins, 1999). Locke and Latham (2002) show that goals are most effective when they are specific, difficult but attainable, accepted by the pursuer and accompanied by feedback. Goals do nothing, however, unless they are understood: communication does not occur until information and understanding have passed between sender and receiver, and a memorandum that has been sent is not evidence that a message has been received (Keyton, 2011). We therefore define goal communication as the process of transmitting the aims and objectives of the organization to its members in a way that enables them to understand and pursue them. Where it is weak, goals suffer ambiguity and members may pull in different directions.

Skills evaluation. Evaluation serves diagnosis, prediction, placement, selection, guidance and administration (Lamprianou and Athanasou, 2009) and provides feedback on how effective training has been (Biggs, 1999). Involving workers in assessing their own skills increases motivation and responsibility for learning (Boud, 1995; McMillan and Hearn, 2008), and well-designed assessments cover the range of cognitive levels described in Bloom's taxonomy (Anderson and Krathwohl, 2001; Scott, 2003). In construction, where tasks vary widely in complexity and errors can be costly or dangerous, the systematic evaluation of workmen's skills informs deployment, training and promotion. A skills assessment reveals what a person can actually do, which education, references and interviews alone cannot.

Collaboration analysis. Collaboration is the mutual engagement of participants in a coordinated effort to solve a problem together, and is distinguished from cooperation, in which work is divided into independent sub-tasks (Dillenbourg, 1999; Roschelle and Teasley, 1995). Truly collaborative interaction is characterized by symmetry of action, knowledge, status and goals, and by a high degree of interactivity and negotiability. In an industry that brings together engineers, designers, financial managers, procurement officers and site supervisors on the same project, the analysis of how well these groups work together reveals strengths and weaknesses of the organization and provides room for corrective action. Outi, Nina and Marja-Leena (2016) found, among 457 employees in Finnish municipalities, that effective collaboration management in multidisciplinary environments was associated with more positive views of work and wider skills.

Stakeholders' gain. Freeman (1984) defines a stakeholder as any group or individual who can affect or is affected by the achievement of the organization's objectives. The stakeholder perspective emphasizes a responsibility broader than profit: profit is an important way of creating value but one of several points to be considered, and the firm is seen as a coalition of suppliers and interest groups rather than an instrument for its shareholders. Jensen (2001) and Friedman and Miles (2002) argue that managers who want to maximize long-run value for shareholders must also represent the interests of employees, clients and suppliers. We use stakeholders' gain to denote the extent to which the firm attends to the benefits received by

those groups, and in particular the extent to which stakeholder support is seen to improve performance.

2.4 Organizational sustainability: profitability and patronage

Organizational sustainability means continuation: the organization has the elements necessary to carry on and constantly enhance its activities in pursuit of a defined mission. Sustainable organizations are not necessarily financially self-sufficient, but they are financially self-reliant and they know what resources are available and how to pursue them. Sustainability is an ongoing process and not a state of perfection; like a body, an organization whose parts fail in quick succession cannot continue. Two measures are used here.

Profitability is the ability of a firm to generate earnings (Gibson, 1998) and is the net result of managerial policies and decisions (Brigham, 1999). It is commonly regarded as the main index of business performance and a survival indicator for the firm. *Patronage* refers to the willingness of customers to continue to buy from or contract with an organization. It is closely related to loyalty and is shaped by perceived service quality, the treatment received and the consistency of delivery with expectations. In construction, the quality of service is seen in the durability of executed projects, so patronage depends heavily on the reputation that firms earn from past work. Repeat patronage in turn raises service volume and profitability. The two measures are therefore related but distinct, and a firm may be profitable in the short term without securing durable patronage.

2.5 Empirical evidence and hypotheses

Evidence on the separate dimensions is encouraging although fragmented. Locke and Latham (2002) report that goals with commitment, specificity, difficulty and feedback are more likely to be achieved. Reports on skills show that employers place at least as much emphasis on employability skills as on technical skills (Department of Employment, 2017) and that skills contribute to economic growth both directly, through productivity, and indirectly, through the capacity of workers and firms to adopt new technologies. Studies on collaboration management indicate that it is linked to positive employee views of work and to versatile skills (Outi, Nina and Marja-Leena, 2016). Work on stakeholders suggests that satisfying employees, clients and suppliers underpins the maximization of long-term firm value (Jensen, 2001; Friedman and Miles, 2002). Few studies, however, test all four dimensions together against both profitability and patronage in a single sector. Based on the preceding arguments, the following hypotheses are stated in null form, as they were tested:

H01: There is no significant relationship between goal communication and profitability of construction companies in Port Harcourt.
H02: There is no significant relationship between goal communication and patronage of construction companies in Port Harcourt.
H03: There is no significant relationship between skills evaluation and profitability of construction companies in Port Harcourt.
H04: There is no significant relationship between skills evaluation and patronage of construction companies in Port Harcourt.
H05: There is no significant relationship between collaboration analysis and profitability of construction companies in Port Harcourt.
H06: There is no significant relationship between collaboration analysis and patronage of construction companies in Port Harcourt.
H07: There is no significant relationship between stakeholders' gain and profitability of construction companies in Port Harcourt.

H08: There is no significant relationship between stakeholders' gain and patronage of construction companies in Port Harcourt.

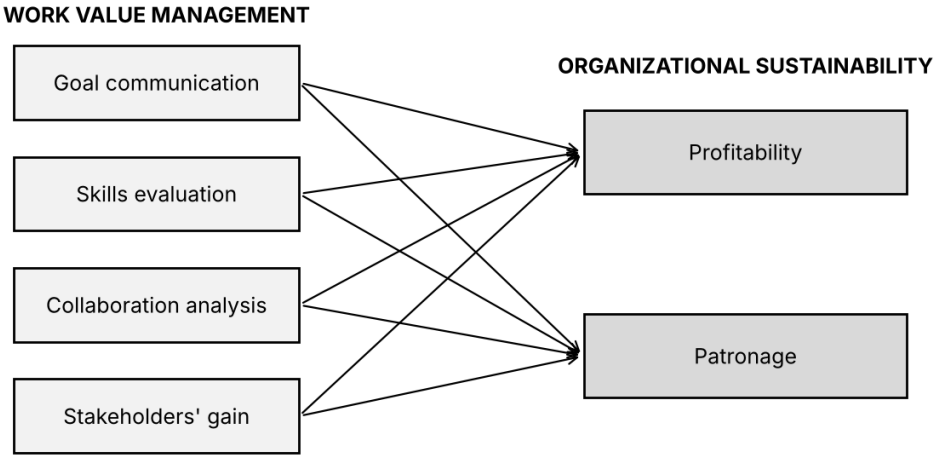


Figure 1: Conceptual framework: dimensions of work value management and measures of organizational sustainability

3. Methodology

3.1 Research philosophy and design

The study adopts a realist philosophy. Realism holds that entities exist independently of our perception of them and that the aim of scientific work is to uncover the underlying causal mechanisms that bring about observable regularities (Bhaskar, 1999). Guided by scientific criteria such as systematic collection of evidence, reliability and transparency, a realist can use quantitative survey evidence to describe regularities while acknowledging that some aspects of reality remain hidden beneath the surface of what can be observed. A cross-sectional descriptive survey design was adopted. The design allows the researchers to describe the characteristics of managerial practice in the construction industry at one point in time and to estimate relationships among variables using data from a large number of respondents. Its principal limitation, which is discussed in Section 6, is that it cannot establish the temporal order required for causal inference.

3.2 Study setting and population

The study was carried out in Port Harcourt, Rivers State, Nigeria, an industrial and commercial centre of the Niger Delta with continuous demand for roads, bridges, industrial facilities and residential and commercial buildings. The target population comprised seven construction companies identified as leading firms in the city according to a business listing and a Nigerian directory search engine: Setraco Nigeria Ltd, LCC, MCC, Julius Berger, CCECC, RCC and Rivigo. Within each company, managerial heads, supervisory staff and their assistants in the administrative, operations and logistics departments were targeted, because their positions give them authority to enforce the administrative procedures that govern the management of the work value of the workforce. The accessible population was 151 staff (92 in the managerial unit and 59 in the supervisory unit), distributed as shown in **Table 1.**

Table 1: Distribution of the study population by company and organizational unit

Company	Managerial unit	Supervisory unit	Total
Setraco Nigeria Ltd	12	5	17
LCC	13	7	20
MCC	11	9	20
Julius Berger	15	13	28
CCECC	13	10	23
RCC	14	8	22
Rivigo	14	7	21
Total	92	59	151

Source: Researchers' compilation from the sampling frame (2021).

3.3 Sample size and sampling technique

Because the population was small and accessible, a census was adopted: all 151 staff were included. A census removes sampling error and permits firmer conclusions than would be possible if the population were reduced to a sample. It does not, however, remove non-response error, which is considered in Section 4.1.

3.4 Data collection and instrument

Primary data were collected through a self-administered questionnaire, since the information required, namely the views of respondents on the practices of their organizations, could not be obtained from secondary sources. The instrument had four sections: respondent demographics; the four dimensions of work value management; the two measures of organizational sustainability; and a section on organizational culture, which was recorded for a related analysis. Each substantive construct was measured by four items on a four-point scale: very high extent (4), high extent (3), low extent (2) and very low extent (1). A four-point scale was used to avoid a neutral midpoint and to shorten completion time for busy managers. Illustrative items include: *The achievement of organizational goal depends on the perceived communication between management and employee* (goal communication); *Skill evaluations enable the organization to know the quality and the tasks its workforce can perform* (skills evaluation); *The collaboration of workers in an organization enhances organizational profitability* (collaboration analysis); *The organization's stakeholders play a significant role in the organization's profit making* (stakeholders' gain); *Does goal communication in your organization influence profitability?* (profitability); and *Customers' patronage depends on the service quality of your organization* (patronage). A cover letter from the Postgraduate School of Rivers State University assured respondents of confidentiality and academic use only. Completed questionnaires were dropped at each company's reception and later collected.

3.5 Validity and reliability

Face and content validity were established by submitting the draft questionnaire to the research supervisor and to experts in the field, whose comments led to corrections and reframing before administration. Reliability was assessed with a test-retest pilot on a portion of the chosen sample, with the instrument re-administered after two months, and with Cronbach's alpha as an index of the degree to which items in a set are positively correlated (Cronbach, 1951). A threshold of .72 was adopted, in line with the criterion adopted in the original study design, and constructs returning lower values would have been regarded as unreliable. The reliability results are reported in Section 4.3.

3.6 Operationalization of variables

Table 2: Operationalization of study variables

Variable	Role	Indicators	Items
Goal communication	Predictor dimension	Communication structure, management-employee communication, closed communication systems, road map to goals	4
Skills evaluation	Predictor dimension	Quality of service delivery, profitability, knowledge of workforce capability, project execution quality	4
Collaboration analysis	Predictor dimension	Goal direction, worker collaboration, mission clarity, synergy between workers and employer	4
Stakeholders' gain	Predictor dimension	Stakeholder role in profit, service quality, stakeholder support, stakeholder acceptability	4
Profitability	Criterion measure	Quality policy, skills evaluation, goal communication, collaboration	4
Patronage	Criterion measure	Service quality, skill evaluation, stakeholder influence, goal communication	4

Source: Researchers' design (2021).

3.7 Methods of data analysis

Analysis proceeded in three stages. First, descriptive statistics (frequencies, percentages, means and standard deviations) summarized the demographic characteristics of respondents and the responses to each item and construct. Because the scale runs from 1 to 4, a mean of 2.50 was treated as the criterion mean: values above 2.50 indicate that the practice is perceived to exist to a substantial extent, and values below it indicate inadequate extent. Second, the Pearson product-moment correlation coefficient was used to test the eight hypotheses, because each hypothesis concerns the association between two interval-scaled variables (Kothari and Garg, 2004). The coefficient is given by

$$r = \Sigma(x - \bar{x})(y - \bar{y}) / \sqrt{[\Sigma(x - \bar{x})^2 \Sigma(y - \bar{y})^2]}$$

and ranges from −1.00 (perfect negative association) through 0.00 (no association) to +1.00 (perfect positive association). Hypotheses were tested at the 0.05 level of significance (two-tailed) with N = 130 and 128 degrees of freedom. For each coefficient we additionally report the coefficient of determination (r^2), the t statistic for the null of zero correlation, $t = r\sqrt{(n-2)}/\sqrt{(1-r^2)}$, and a 95% confidence interval computed through the Fisher z transformation. Following common practice, coefficients of .10, .30 and .50 are read as small, medium and large effects (Cohen, 1988), and values of .80 and above are described as very strong. Third, the findings were interpreted against the literature to derive conclusions and recommendations. All computations were carried out in SPSS version 20.0; the confidence intervals and t statistics were computed from the reported coefficients.

3.8 Ethical considerations

Participation was voluntary. Respondents were told the purpose of the study, were assured that their responses would be confidential and used for academic purposes only, and were not asked to give their names. No company-level performance records were requested, which reduced the risk of commercial sensitivity.

4. Data Analysis and Results

4.1 Response rate

Out of the 151 questionnaires distributed, 130 were returned and found usable, a response rate of 86.1%. The remaining 21 (13.9%) were not returned because of the work schedules of staff relative to the study period. Only the 130 usable copies were analysed. A response rate above 80% is high for managerial surveys, so non-response bias is likely to be limited, although the possibility that non-respondents differ systematically from respondents cannot be excluded.

Table 3: Questionnaire administration and retrieval

Status	Number	Percentage
Administered	151	100.0
Retrieved and used	130	86.1
Not retrieved	21	13.9

Source: Field survey (2021).

4.2 Demographic characteristics of respondents

Table 4: Demographic profile of respondents (N = 130)

Characteristic	Category	Frequency	Percent
Age	30–35 years	15	11.5
	36–40 years	30	23.1
	41–45 years	48	36.9
	46–50 years	22	16.9
	51–60 years	15	11.5
Gender	Male	90	69.2
	Female	40	30.8
Marital status	Single	45	34.6
	Married	85	65.4
Highest qualification	B.Tech	75	57.7
	B.Sc / LL.B	30	23.1
	M.Sc	15	11.5
	Ph.D.	10	7.7

Source: Field survey (2021). Percentages are computed on N = 130 and may differ slightly from rounded figures in the original data tables.

The respondents were mature and highly educated. More than half (53.8%) were aged 41 years or older, and the modal age band was 41–45 years (36.9%). Men constituted 69.2% of the respondents, which is consistent with the male dominance of the construction workforce. Two-thirds (65.4%) were married. In terms of qualification, 57.7% held a B.Tech degree, in keeping with the engineering orientation of the sector, and 42.3% held other first degrees or postgraduate qualifications. The profile suggests that respondents had the experience and education to judge the management practices of their firms.

4.3 Reliability of the measures

Table 5: Reliability coefficients of study variables

Variable	Items	Cases	Cronbach's alpha
Goal communication	4	130	.992
Skills evaluation	4	130	.991
Collaboration analysis	4	130	.993
Stakeholders' gain	4	130	.991
Profitability	4	130	.991
Patronage	4	130	.992

Source: SPSS output, version 20.0 (2021).

All alpha coefficients exceeded the .72 threshold by a wide margin. Coefficients between .70 and .90 are generally regarded as satisfactory, and values above about .90 can indicate that items are redundant and measure essentially the same thing (Tavakol and Dennick, 2011). The very high values observed here (.991 to .993) therefore indicate excellent internal consistency but also suggest that the items within each construct may have been answered in an almost identical pattern. This point is taken up in the discussion of limitations.

4.4 Descriptive analysis of work value management

Tables 6 to 9 summarize responses to the four items of each dimension of work value management. Percentages combine the *very high extent* and *high extent* categories. Item means and standard deviations were recomputed from the response frequencies for internal consistency.

Table 6: Responses on goal communication

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
GC1. Success depends on the communication structure of the organization	70	35	20	5	3.31	0.87	80.8
GC2. Goal achievement depends on perceived management-employee communication	85	25	5	15	3.38	1.01	84.6
GC3. Sustainability is attained by reducing closed systems of communication	75	40	10	5	3.42	0.80	88.5
GC4. Plans or road maps to goals are a communication issue among workmen	90	20	7	13	3.44	0.98	84.6

VHE = very high extent; HE = high extent; LE = low extent; VLE = very low extent. Source: Field survey (2021).

Table 7: Responses on skills evaluation

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
SE1. Evaluation of skills enhances quality service delivery	80	30	11	9	3.39	0.91	84.6
SE2. Evaluation of workmen's skills enhances profitability	75	40	10	5	3.42	0.80	88.5
SE3. Evaluation shows quality and tasks the workforce can perform	95	20	5	10	3.54	0.89	88.5
SE4. Level of skill evaluation determines project execution quality	88	25	10	7	3.49	0.86	86.9

Source: Field survey (2021).

Table 8: Responses on collaboration analysis

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
CA1. Goal direction is the end toward which all managerial functions aim	90	20	15	5	3.50	0.85	84.6
CA2. Worker collaboration enhances organizational profitability	110	15	5	0	3.81	0.48	96.2
CA3. Mission and objectives are key to good workplace collaboration	79	45	4	2	3.55	0.64	95.4
CA4. Effective collaboration creates synergy leading to patronage	89	30	6	5	3.56	0.76	91.5

Source: Field survey (2021).

Table 9: Responses on stakeholders' gain

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
SG1. Stakeholders play a significant role in profit making	95	30	5	0	3.69	0.54	96.2
SG2. Quality of services determines level of patronage	87	25	10	8	3.47	0.88	86.2
SG3. Stakeholder support enhances effective customer patronage	100	20	9	1	3.68	0.64	92.3
SG4. Stakeholder acceptability determines organizational sustainability	99	18	7	6	3.62	0.79	90.0

Source: Field survey (2021).

Every item was endorsed to a high extent. Between 80.8% and 96.2% of respondents chose the two highest categories, and every item mean was well above the criterion mean of 2.50. The strongest endorsement was for the statement that worker collaboration enhances profitability (CA2: M = 3.81; 96.2% VHE+HE) and for the role of stakeholders in profit making (SG1: M = 3.69). The lowest endorsement, although still high, concerned the claim that success depends on the communication structure of the organization (GC1: M = 3.31; 80.8%). Goal communication items also show the largest dispersion (SD up to 1.01 for GC2), reflecting a visible minority of respondents, mostly in the *very low extent* category, who did not see communication between management and employees as decisive. This pattern suggests that goal communication is the dimension on which firms differ most in practice.

4.5 Descriptive analysis of organizational sustainability

Table 10: Responses on profitability

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
PR1. A quality policy direction enhances business profitability	86	35	6	3	3.57	0.69	93.1
PR2. Skill evaluation influences organizational service patronage	77	40	9	4	3.46	0.76	90.0
PR3. Goal communication influences profitability	95	30	0	5	3.65	0.68	96.2
PR4. Organizational collaboration creates effective customer patronage	105	15	5	5	3.69	0.72	92.3

Source: Field survey (2021).

Table 11: Responses on patronage

Item	VHE	HE	LE	VLE	Mean	SD	% VHE+HE
PA1. Customers' patronage depends on service quality	66	56	5	3	3.42	0.68	93.8
PA2. Skill evaluation determines quality of work performance	76	45	4	5	3.48	0.74	93.1
PA3. Stakeholders determine the profitability margin	82	25	13	10	3.38	0.95	82.3
PA4. Goal communication determines organizational performance	95	19	10	6	3.56	0.83	87.7

Source: Field survey (2021).

Table 12: Construct-level mean scores (N = 130)

Construct	Mean	Interpretation (criterion = 2.50)
Goal communication	3.39	High extent
Skills evaluation	3.46	High extent
Collaboration analysis	3.60	High extent
Stakeholders' gain	3.62	High extent
Profitability	3.59	High extent
Patronage	3.46	High extent

Construct means are the averages of the four-item means. Source: Field survey (2021).

Table 12 shows that the four dimensions of work value management obtained means between 3.39 and 3.62, with goal communication the lowest and stakeholders' gain the highest. The measures of sustainability also scored highly, with profitability (M = 3.59) slightly above patronage (M = 3.46). Overall, respondents perceived that their firms manage the work values of employees to a high extent and that these practices relate positively to the survival of the firm.

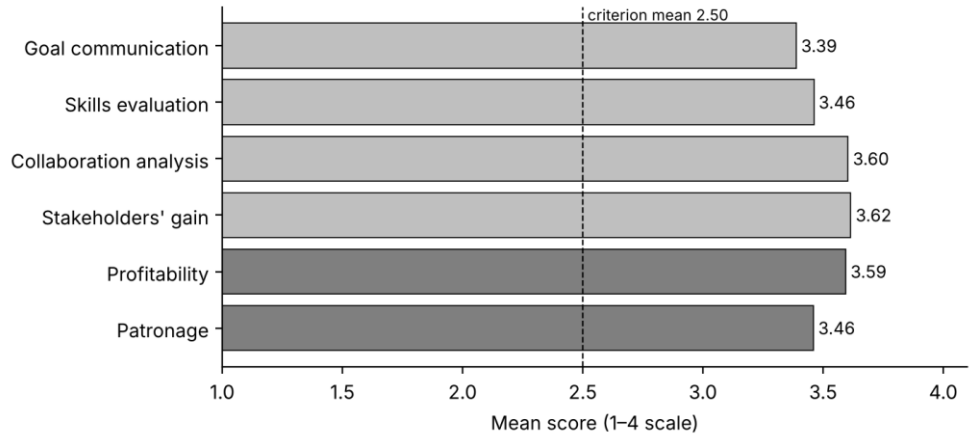


Figure 2: Mean scores of work value management dimensions and sustainability measures

4.6 Test of hypotheses

The correlation coefficients for each pairing are presented in Table 13, together with effect sizes and confidence intervals. In every case the exact two-tailed probability was reported by SPSS as .000, which is interpreted as $p < .001$. Decision rule: reject the null hypothesis if $p < .05$.

Table 13: Pearson correlations between dimensions of work value management and measures of organizational sustainability (N = 130, df = 128)

Hyp.	Pair	r	r^2	t	95% CI	p	Decision
H01	Goal communication – Profitability	.964	0.929	41.0	[0.949, 0.974]	< .001	Reject
H02	Goal communication – Patronage	.945	0.893	32.7	[0.923, 0.961]	< .001	Reject
H03	Skills evaluation – Profitability	.989	0.978	75.6	[0.984, 0.992]	< .001	Reject
H04	Skills evaluation – Patronage	.957	0.916	37.3	[0.940, 0.969]	< .001	Reject
H05	Collaboration analysis – Profitability	.932	0.869	29.1	[0.905, 0.951]	< .001	Reject
H06	Collaboration analysis – Patronage	.881	0.776	21.1	[0.836, 0.914]	< .001	Reject
H07	Stakeholders' gain – Profitability	.979	0.958	54.3	[0.970, 0.985]	< .001	Reject
H08	Stakeholders' gain – Patronage	.946	0.895	33.0	[0.924, 0.962]	< .001	Reject

Two-tailed tests. Confidence intervals computed with the Fisher z transformation. Source: SPSS output (2021) and authors' computations.

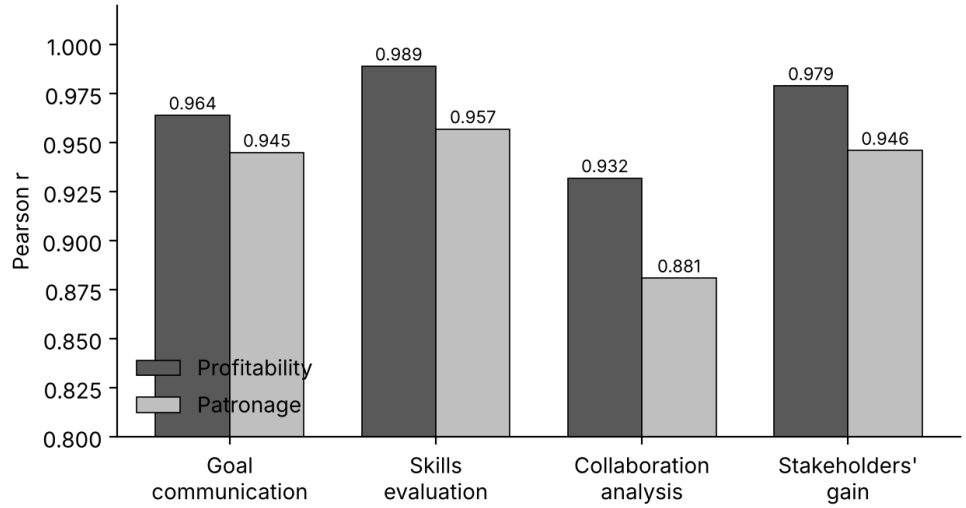


Figure 3: Correlation of each work value management dimension with profitability and patronage

Goal communication (H01 and H02). Goal communication correlated positively and very strongly with profitability ($r = .964$, $p < .001$) and with patronage ($r = .945$, $p < .001$). The coefficients of determination (.929 and .893) imply that the two variables share more than 89% of their variance in these data. Both null hypotheses are rejected.

Skills evaluation (H03 and H04). Skills evaluation recorded the highest coefficient with profitability of all pairings ($r = .989$, $p < .001$) and a very strong coefficient with patronage ($r = .957$, $p < .001$). Both null hypotheses are rejected.

Collaboration analysis (H05 and H06). Collaboration analysis correlated with profitability at $r = .932$ and with patronage at $r = .881$ (both $p < .001$). Although these are the lowest coefficients in the set, they still represent very strong associations, and both null hypotheses are rejected.

Stakeholders' gain (H07 and H08). Stakeholders' gain correlated with profitability at $r = .979$ and with patronage at $r = .946$ (both $p < .001$), so both null hypotheses are rejected.

Two regularities stand out. First, for every dimension the association with profitability is somewhat larger than with patronage, which is consistent with the interpretation that profitability responds more directly to internal management practices, while patronage depends additionally on the judgements of external customers formed over time. Second, the profitability and patronage measures are themselves very strongly correlated ($r = .965$), which indicates that they behave as two facets of one underlying sustainability construct in this sample.

Table 14: Summary of hypothesis decisions

Hypothesis	Basis for decision	Decision	Strength
H01: Goal communication and Profitability	r = 0.964; p < .001	Null rejected	Very strong
H02: Goal communication and Patronage	r = 0.945; p < .001	Null rejected	Very strong
H03: Skills evaluation and Profitability	r = 0.989; p < .001	Null rejected	Very strong
H04: Skills evaluation and Patronage	r = 0.957; p < .001	Null rejected	Very strong
H05: Collaboration analysis and Profitability	r = 0.932; p < .001	Null rejected	Very strong
H06: Collaboration analysis and Patronage	r = 0.881; p < .001	Null rejected	Very strong
H07: Stakeholders' gain and Profitability	r = 0.979; p < .001	Null rejected	Very strong
H08: Stakeholders' gain and Patronage	r = 0.946; p < .001	Null rejected	Very strong

Source: Authors' computations (2021).

5. Discussion of Findings

The results show a consistent picture: the four dimensions of work value management are perceived to be present to a high extent in the sampled firms, and each is strongly and significantly associated with both profitability and patronage. All eight null hypotheses were rejected. The findings are in line with the argument that the sustainability of the firm is bound to the way its people are managed (CIPD, 2012), and with the broader proposition that value management creates sustainable value by balancing the needs of stakeholders with the resources available to satisfy them.

5.1 Goal communication

The strong association of goal communication with profitability and patronage supports the view that goals are foundational blocks on which organizations are built, and that they serve as a framework for planning, a benchmark for monitoring and a tool for evaluating outcomes (Mullins, 1999). The goal-setting literature specifies that goals must be accepted and accompanied by feedback if they are to improve performance (Locke and Latham, 2002); these conditions cannot be met unless goals are communicated. In construction, where projects pass through design, procurement and site stages involving many different groups, unclear goals translate into rework, delay and cost overruns, which reduce profit and damage client confidence. The relatively higher dispersion of goal communication responses suggests that practice varies across firms and that improvement here could produce the largest gains in consistency.

5.2 Skills evaluation

The finding that skills evaluation has the strongest association with profitability is consistent with the expectancy logic that clarifying the link between performance and reward directs effort, and with the evaluation literature, which argues that assessment provides information about the effectiveness of training and about the progress of workers (Biggs, 1999; Lamprianou and Athanasou, 2009). In a sector where the quality of a bridge or building is a function of the competence of those who built it, systematic evaluation allows managers to assign tasks to the right people, to detect skill gaps before they become defects and to plan training. It also fits the observation that employers value employability skills at least as much as technical skills (Department of Employment, 2017). Respondents endorsed the statement

that the level of skill evaluation determines the quality of project execution (SE4: M = 3.49), and patronage in this industry is built on the durability of executed work.

5.3 Collaboration analysis

Collaboration analysis showed the weakest, though still very strong, relationship with patronage. A plausible explanation is that collaboration works through internal processes, such as communication of mission and joint problem solving (Roschelle and Teasley, 1995), whose effect on external customers is mediated by project outcomes. This is consistent with the finding of Outi, Nina and Marja-Leena (2016) that collaboration management is related to employees' positive views of work and to versatile skills, which are intermediate outcomes. Respondents were nevertheless unambiguous that collaboration enhances profitability (CA2: M = 3.81), which was the most strongly endorsed item in the study.

5.4 Stakeholders' gain

The strong association for stakeholders' gain supports the stakeholder proposition that the survival of the firm depends on creating sufficient value for each stakeholder group (Clarkson, 1995; Freeman, 1984) and that managers who seek to maximize long-term value must also represent the interests of employees, clients and suppliers (Jensen, 2001; Friedman and Miles, 2002). The very high endorsement of the items on stakeholder support and acceptability indicates that managers regard stakeholder goodwill as a practical resource, for example for access to contracts, finance and cooperation from communities, and not just a matter of social responsibility.

5.5 Theoretical implications

Taken together, the results lend support to the three motivation theories that framed the study. The strong coefficients for skills evaluation and stakeholders' gain are consistent with expectancy theory, in which perceived links between effort, performance and valued outcomes drive effort. The very high endorsement of collaboration is consistent with the importance of belonging and esteem in Maslow's hierarchy. The pattern in which recognition and communication practices correlate with performance more strongly than any other practice is compatible with Herzberg's claim that motivators, and not just hygiene factors, sustain commitment. The study also extends stakeholder theory by showing that stakeholder concerns can be embedded within a people-management construct and related to measurable firm outcomes.

5.6 Practical implications

Managers should translate organizational goals into messages that every level of the workforce can restate, and should verify understanding rather than assume that sent memoranda have been received.

Skills evaluation should be continuous and linked to training and deployment. In view of recurrent building and bridge failures, firms should evaluate competence before assigning safety-critical tasks.

Collaboration among engineering, procurement, finance and site teams should be structured around shared goals and competence, not merely the grouping of people.

Firms should track the gains of employees, clients, suppliers and the community as inputs to strategy, since the satisfaction of these groups raises the benefit that investors eventually receive.

Directors and managers should treat work value management as a standing agenda item, as the evidence indicates that it relates strongly to profitability and patronage.

6. Limitations and Directions for Future Research

Several limitations qualify the conclusions. First, the correlations are exceptionally large (.881 to .989), well beyond the typical range of behavioural research. Such values can arise from common-method variance, because predictor and criterion items were completed by the same respondents at the same time on the same scale (Podsakoff, MacKenzie, Lee and Podsakoff, 2003), from acquiescence in a context where nearly all items are positively worded, and from conceptual overlap between items. For instance, some items in the profitability and patronage sections mention skill evaluation or goal communication directly, so those items partly measure the predictors. The very high alpha values (.991 to .993) point the same way. The coefficients should therefore be read as evidence of a strong perceived association and not as precise estimates of the effect of work value management on performance. Second, the design is cross-sectional, so the direction of influence cannot be determined; profitable firms may be better able to invest in communication and skills evaluation. Third, profitability and patronage were measured by perceptions and not by audited financial data or customer records. Fourth, the study covered seven firms in one city, and the census frame was limited to managerial and supervisory staff; generalization to other regions, other sectors or non-supervisory workers should be cautious. Fifth, bivariate correlations do not control for firm size, age, ownership or project type.

Future studies should (i) use multiple sources, pairing employee-reported practices with independent financial and client-retention data; (ii) apply multiple regression or structural equation modelling to estimate the unique effect of each dimension while controlling for firm characteristics and testing discriminant validity among the constructs; (iii) use longitudinal designs to test temporal ordering; (iv) shorten and diversify the measurement scales to reduce redundancy and add reverse-keyed items; and (v) replicate the model in other sectors such as oil and gas, health care, education, hospitality and telecommunications.

7. Conclusion

This study examined the relationship between four dimensions of work value management and two measures of organizational sustainability among construction companies in Port Harcourt, Nigeria. Using data from 130 managerial and supervisory staff of seven firms, it found that goal communication, skills evaluation, collaboration analysis and stakeholders' gain were all rated highly and were strongly, positively and significantly correlated with profitability and patronage ($r = .881$ to $.989$; $p < .001$). All eight null hypotheses were rejected. Skills evaluation was most strongly related to profitability, and collaboration analysis was least strongly (though still very strongly) related to patronage.

The study concludes that the deliberate management of employee work values is associated with the survival of construction firms, and that managers who communicate goals, evaluate skills, structure collaboration and attend to stakeholders' gains are likely to operate firms that are more profitable and more durable in the eyes of their clients. Given the limitations noted above, the evidence should be taken as a strong indication and as a basis for more rigorous, multi-source and longitudinal tests, not as proof of causation.

REFERENCES

Anderson, L. W. and Krathwohl, D. R. (Eds.) (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Armstrong, M. (2006). *A Handbook of Human Resource Management Practice* (10th ed.). London: Kogan Page.

Bhaskar, R. (1999). *A Realist Theory of Science*. London: Routledge.

Biggs, J. (1999). What the student does: Teaching for enhanced learning. *Higher Education Research and Development, 18*(1), 57–75.

Boud, D. (1995). *Enhancing Learning through Self-Assessment*. London: Kogan Page.

Brigham, E. F. (1999). *Intermediate Financial Management* (6th ed.). Orlando, FL: Dryden Press.

Chartered Institute of Personnel and Development (2012). *Sustainability and the Role of HR*. London: CIPD.

Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of Management Review, 20*(1), 92–117.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Colbert, B. A. and Kurucz, E. C. (2007). Three conceptions of triple bottom line business sustainability and the role for HRM. *Human Resource Planning, 30*(1), 21–29.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*(3), 297–334.

Department of Employment (2017). *Australian Jobs 2017*. Canberra: Australian Government.

Dillenbourg, P. (1999). What do you mean by collaborative learning? In P. Dillenbourg (Ed.), *Collaborative Learning: Cognitive and Computational Approaches* (pp. 1–19). Oxford: Elsevier.

Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*. Boston: Pitman.

Friedman, A. L. and Miles, S. (2002). Developing stakeholder theory. *Journal of Management Studies, 39*(1), 1–21.

Furnham, A. (1990). *The Protestant Work Ethic: The Psychology of Work-Related Beliefs and Behaviours*. London: Routledge.

Gibson, C. H. (1998). *Financial Statement Analysis: Using Financial Accounting Information*. Cincinnati, OH: South-Western.

Hahn, T., Figge, F., Aragón-Correa, J. A. and Sharma, S. (2017). Advancing research on corporate sustainability: Off to pastures new or back to the roots? *Business and Society, 56*(2), 155–185.

Herzberg, F., Mausner, B. and Snyderman, B. B. (1959). *The Motivation to Work*. New York: Wiley.

Jensen, M. C. (2001). Value maximization, stakeholder theory, and the corporate objective function. *Journal of Applied Corporate Finance, 14*(3), 8–21.

Keyton, J. (2011). *Communication and Organizational Culture: A Key to Understanding Work Experience* (2nd ed.). Thousand Oaks, CA: Sage.

Kothari, C. R. and Garg, G. (2004). *Research Methodology: Methods and Techniques*. New Delhi: New Age International.

Lamprianou, I. and Athanasou, J. (2009). *A Teacher's Guide to Educational Assessment*. Rotterdam: Sense Publishers.

Locke, E. A. and Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 705–717.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396.

McMillan, J. H. and Hearn, J. (2008). Student self-assessment: The key to stronger student motivation and higher achievement. *Educational Horizons, 87*(1), 40–49.

McWilliams, A., Parhankangas, A., Coupet, J., Welch, E. and Barnum, D. T. (2016). Strategic decision making for the triple bottom line. *Business Strategy and the Environment, 25*(3), 193–204.

Mullins, L. J. (1999). *Management and Organisational Behaviour* (5th ed.). London: Financial Times/Pitman.

Outi, K., Nina, H. and Marja-Leena, P. (2016). The collaboration management and employee views of work and skills. *Nordic Journal of Working Life Studies, 6*(1), 61–81.

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y. and Podsakoff, N. P. (2003). Common method biases in behavioral research. *Journal of Applied Psychology, 88*(5), 879–903.

Roschelle, J. and Teasley, S. D. (1995). The construction of shared knowledge in collaborative problem solving. In C. E. O'Malley (Ed.), *Computer-Supported Collaborative Learning* (pp. 69–97). Berlin: Springer.

Scott, T. (2003). Bloom's taxonomy applied to testing in computer science classes. *Journal of Computing Sciences in Colleges, 19*(1), 267–274.

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282–298.

Super, D. E. and Sverko, B. (Eds.) (1995). *Life Roles, Values, and Careers*. San Francisco: Jossey-Bass.

Tavakol, M. and Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55.

Vroom, V. H. (1964). *Work and Motivation*. New York: Wiley.