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Definition, Operationalisation, and Measurement of Leadership Strategy: Application in the Banking Sector in Kenya

Eltigani Ahmed^{1*}, James Kilika², Clare Gakenia³

^{1,3}School of Leadership, Business and Technology, PAC University, Kenya ²Department of Business Administration, Kenyatta University, Kenya

ABSTRACT

This paper aimed to define, operationalise, and generate measures of leadership strategy that can inform future empirical enquiry and analysis. In addition, the paper aimed to provide a conceptualisation of the notion of leadership strategy, situating the concept within the broader leadership strategy literature from which a working definition of leadership strategy is coined. From the definition, leadership strategy was then operationalised by developing a set of items that can be used to measure it. The items were subsequently subjected to empirical evaluation and testing within the context of the banking sector in Kenya. Using SmartPLS software, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were performed on questionnaire data collected online from 184 senior managers of 12 banks listed in the Nairobi Securities Exchange. The factors or indicators were validated with high scores of exploratory factor analysis and confirmatory factor analysis. All factors/indicators were validated and found to be consistently above theoretical thresholds. The study proposed an inventory for measuring leadership strategy using 24 Likert-scale items based on the empirical results. It is worth mentioning that while the items were validated in the banking sector context, each item is a generic measure of the corresponding factors and can be adapted for use in other research contexts. The paper established an empirical lead towards the proposition of an inventory for the construct of leadership strategy.

Keywords:

Factor analysis, Leadership strategy, Measurement, Validation

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*Correspondence: Eltigani.ali@students.pacuniversity.ac.ke

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Measurement facilitates the quantification of phenomena by operationalising constructs and subsequently developing and applying instruments in strict adherence to scientific procedures (Mohajan, 2018). Rigour of the process is central to advancing knowledge, especially when the phenomenon in question is complex or not readily manifest (Santos & Brito, 2012). However, the importance of measurement has been trivialised in strategic management scholarship (Nielsen, 2014; Santos & Brito, 2012), resulting in a potential underutilisation of psychometrically sound tools (Kalkbrenner, 2021).

Instrument development and validation is an essential first step of measurement, especially when literature on measurement is inadequate, lacks evidence of validity or reliability, is appropriate for application in the target population, or is non-existent (Kalkbrenner, 2021). Instrument development is necessary for leadership strategy, a nascent concept in recent strategic management thinking (Pasmore et al., 2009). While leadership and strategy are not new ideas, the notion of leadership strategy is underdeveloped, and its meaning, dimensions, and measurement are less clear. As a result, leadership strategy is often confused with strategic leadership, and, in practice, most organisations have no clear leadership strategy (Mjaku, 2020).

It is instructive to note that while strategic leadership and leadership strategy share some commonalities, they are not the same. For instance, Mjaku (2020) defines strategic leadership as deploying the right strategies towards organisational transformation. Similarly, extant literature characterises leadership strategy as an amalgam of policies and actions activated by the leadership of an organisation to implement a transformative agenda, particularly during disruptive shocks (Bradley, 2018; Dele et al., 2015; Hanslik, 2018; Hill, 2016; Korbi, 2015; Mahdi et al., 2015; Mansaray, 2019; Muthimi & Kilika, 2018; Pasmore et al., 2009; Sarojini et al., 2018). The two terms share a common agenda, namely, positive organisational transformation. However, a deeper analysis of the definitive characteristics of the two concepts reveals multiple distinctions. Strategic leadership is thought of as the strategic aspect within the broader mural of organisational leadership (Gakenia et al., 2017). Strategic leadership is almost exclusively centred on the long-term prosperity of an organisation, typically the preservation of the highest echelon within an organisation (Duursema, 2013; Norzailan et al., 2016). Its dimensions include anticipatory capabilities, adaptability, long-range planning, and people empowerment (Kabetu & Iravo, 2018). Strategic leadership also focuses on who strategic leaders are within an organisation's hierarchy and what they do (Kitonga et al., 2016). On the other hand, leadership strategy goes beyond these two concerns (Pasmore et al., 2009).

Despite its broad scope, there is no pinpoint clarity in measuring the concept of leadership itself (Pasmore et al., 2009). Consequently, leadership as a concept has been expanded over time to consider both functional and behavioural elements (Mbaya, 2017; Munyaka et al., 2017; Trusler, 2018). Leadership strategy has emerged from this expansion as an alternative and complementary concept to strategic management thinking that assimilates the two notions of leadership and strategy (Aithal & Aithal, 2019; Folan, 2019; Muthimi & Kilika, 2018). The central idea underpinning leadership strategy as a distinct paradigm in strategic management thinking is that the configuration of leadership as the collective action of organisational leaders working as a team to deliver organisational results over and above leadership presence is what counts (Pasmore et al., 2009). Other contributors argue that leadership strategy is merely strategic management intersecting with various orientations and variants of leadership, be it

transactional leadership, transformational leadership or strategic leadership (Canwell et al., 2018; Ireland et al., 2014).

Over the years, the general leadership space has enjoyed a variety of measurement literature that signal the broad spectrum of leadership research trajectories. These include Multifactor Leadership Questionnaire (Mushtaq, 2019), Empowering Leadership Questionnaire (Na-Nan et al., 2020), Transformational Leadership Questionnaire (Alban-Metcalfe & Alimo-Metcalfe, 2000), Leadership Competencies and Engaging Leadership Scale (Alban-Metcalfe & Alimo-Metcalfe, 2013), Transformational-Transactional Leadership Inventory (Kasemaa et al., 2016) and Firm-Level Strategic Shared Leadership Scale (Jha & Bhattacharyya, 2017). Despite this rich history, the broad lead-management spectrum of leadership strategy has inspired claims that extant literature is deficient in theoretical and empirical precision regarding the measurement, operationalisation, and modelling of the construct (Dos Santos et al., 2016). For instance, Mwaura (2013) made an early contribution to leadership strategy research by analysing leadership strategies adopted by the top 40 banks in Kenya to drive corporate performance. While leadership strategy as a variable was dimensionalised into seven facets measured using 11 items on a 5-point Likert-scale, there was no evidence of reliability and validity analysis. Furthermore, the leadership strategy construct was ambiguous as neither leadership nor strategy was defined.

The present study was inspired by the preceding claims, which triggered interest in developing and validating a tool for evaluating leadership strategy using Kenya's banking sector as a context. This paper aimed to develop an inventory for advancing empirical research on leadership strategy as a distinct concept in the evolution of strategic management theory. A review and synthesis of extant theoretical and empirical literature are first provided in this endeavour. Subsequently, the methodology utilised is explained before presenting and discussing the factor analysis results. The results are discussed, and a conclusion is drawn. Finally, a Leadership Strategy Inventory is proposed.

Literature Review

Extant literature suggests that the term leadership strategy is becoming a buzzword in strategic management scholarship (Canwell et al., 2018; Ebbeck & Lian, 2018; Garza, 2019; Josiah & Nyagara, 2015; Mbaya, 2017). However, in most instances, these scholars have neither attempted to define nor operationalise the term with the adequacy it deserves, let alone develop a measurement tool. A few notable exceptions are worth acknowledging, such as Pasmore et al. (2009) and Muthimi and Kilika (2018), which became foundational to the present paper.

Taking a pluralistic view of leadership, Pasmore and Woodman (2017) offered one of the most comprehensive conceptualisations of leadership strategy and went ahead to break down the concept into constituent elements. In their view, one of the topmost facets of leadership strategy is leadership talent, signifying that a personnel pool with leadership capabilities is central to leadership strategy robustness. They visualised leadership strategy as the product of leadership quality and quantity, leadership skills and collective capabilities, and leadership culture. They insinuated that while strategy responds to questions about where an organisation wants to go and how to get there, leadership strategy answers questions about the number and quality of leaders needed. It also addresses questions about the skillset and behaviours required both as individuals and as teams to achieve the organisation's objectives. They emphasised that

a thorough situational analysis must inform responses to these questions. While their ideas make the dimensions of leadership strategy explicit and suggest data collection approaches, their measurement items were neither developed nor validated.

Building on the foundations laid by Pasmore and Woodman (2017) and other legacy theorists, Muthimi and Kilika (2018) ventured into the leadership strategy discourse by arguing the case for construct expansion. They proposed a model that unifies fragmented viewpoints on leadership strategy and firm outcomes through a critical review of extant literature with strategic management theories. They concurred with and further expounded on the dimensionalisation of leadership strategy construct advanced by Pasmore et al. (2009). However, while they anchored their proposed theoretical model on a thorough discussion of traditional and emerging leadership theories and concepts, including Leader-Member Exchange, Transformational Leadership and Path-Goal Theory, three pertinent gaps create windows of opportunity for continued literature production. Firstly, the model was developed to explain firm performance, suggesting that the robustness of the model, as comprehensive as it may be, is potentially limited to for-profit organisations. Secondly, the model led to several theoretical propositions that were yet to be subjected to empirical scrutiny through original research. Lastly, while the model clarifies and expands on the dimensions put forward by Pasmore et al. (2009) through operationalisation of the elements, an empirically validated measurement tool was not developed, hence the difficulty of making comparisons between study findings. This limitation was notably recognised by Muthimi and Kilika (2018), who called for developing measurement instruments.

Latter-day contributors have also delved into the discourse, albeit without the precision and comprehensiveness featured in the works of Muthimi and Kilika (2018). For instance, a generic definition of leadership strategy was put forward by Juharyanto et al. (2020), who construed leadership strategy as causing organisational stakeholders to maximise outputs to achieve desired organisational results through an effective tactic. In many ways, this definition aligns well with those of its predecessors, particularly the lead-manage spectrum fusion. However, from this generality can spring forth multiple dimensional trajectories, which the authors did not offer direction for scoping future research.

Extending scholarship on the leadership strategy construct following Pasmore et al. (2009) and Muthimi and Kilika (2018), this study defines leadership strategy as a blend of leadership styles and strategically orchestrated policy actions. The dimensions comprise leadership direction as reflected in the mission, vision, and core values, quantitative adequacy of leaders in terms of numbers, seniority levels, and educational background. Qualitative aspects of leadership include talent repository, soft skills and attitudes, and capability aspects, including environmental awareness, adaptability, and creativity to change and survive in changing environment.

In strategic management parlance, an organisation's mission and vision shape the operational scope, thus setting boundaries on what it produces, the market it serves, what the future looks like, and its priorities (Leah et al., 2016). Thriving organisations possess a clear and compelling mission and vision (Ledesma, 2014). A well-defined mission and vision are cited as critical elements of a strategy that foster organisation resilience. Shared values and common goals are foundational to organisational sustainability (Bowers et al., 2017). This viewpoint is affirmed by Al-Balushi (2019), who posits that organisational strength is a

function of core values and other elements of leadership strategy. As such, organisations that survive the test of time embed preparedness with mission, vision, and the values that form their identity and set them apart in the marketplace (Campos, 2016). Furthermore, while constituting one of the necessary conditions for a successful leadership strategy, an organisation's ethics take precedence over all other strategy ingredients during times of distress (Johannessen & Stokvik, 2019).

Leadership quantity is another dimension of the leadership strategy construct that is defined as a pool of highly skilled and talented workforce that possess a raft of competencies and capabilities, including the capability to face unexpected situations, desire and motivation to learn and apply knowledge in new ways, agility, and resilience (Crowley-Henry & Al-Ariss, 2018). Talent repository as a leadership strategy has been previously demonstrated through empirical research that links employee training and development to organisational sustainability (Siddiqui, 2017). Leadership quantity is also reflected in the number of leadership positions in an organisation (Stilwell & Pasmore, 2016). The critical need for talented leaders was spotlighted by the Covid-19 crisis and several other episodes of disruption where organisations look up to leaders who rise to the occasion in the face of existential threats and work tirelessly to navigate the disruption and lead organisations to safe territories (Vaughn et al., 2020).

Social intelligence is a behavioural dimension of leadership strategy, and it relates to behavioural aspects that denote the competencies associated with human skills that foster a collegial working relationship with other organisation members (Ariratana et al., 2015). Another behavioural dimension of leadership strategy is adaptability, which entails positive, proactive, and timely thinking. Adaptability enables leaders and teams to prepare for adversity and navigate through sensemaking, supportive coaching, clarifying goals and processes, building team confidence, building a team's capacity to improvise, reframing, increasing psychological safety by speaking and acting appreciatively, shared leadership, leading by example and debriefing team members (Stoverink et al., 2020).

The dimension of competitive strategy is about the deliberate choice of decisions and activities that together deliver a unique mix of value to the market (Kruger, 2017). In environments characterised by volatility, uncertainty, complexity, and ambiguity (VUCA), the conceptual literature adopts the lenses of dynamic capabilities for attaining competitive advantage (Menghwar & Daood, 2018). Advocates of the dynamic capabilities framework posit that organisational survival and prosperity is a function of threat and opportunities sensing, threat management and exploitation of opportunities, and the ability to maintain, reshape, and configure existing capacities.

The present study gleaned and adapted variables or first-order constructs from Pasmore et al. (2009) and Muthimi and Kilika (2018), as summarised in Table 1.

Pasmore et al. (2009)	Muthimi and Kilika (2018)	Present Research
Quantity: timing, location, level	Quantitative: number, levels, functions, reporting relationships, business units	Leadership Direction: vision, mission, values
Quality: sourcing, experience, locational distribution	Qualitative: demographic, background, experience	Leadership Quantity: leaders count, seniority, education
Behavioural: competency, knowledge, language	Skills and behaviour: skills, competencies, knowledge	Leadership Quality: talent repository, social intelligence, attitude
Aggregative: alignment to culture, problem-solving, collaborative decision-making, strategy formulation	Culture strategy: collaboration, engagement, responsibility	Leadership Capability: awareness, adaptability, creativity
Culture: degree of dependence, values, ethics, leading style	Capability: implementability, problem- solving, response to threats, adaptation, innovation	

 Table 1

 Variables (First-Order Constructs) of Leadership Strategy

Accordingly, the study adopted four first-order constructs (latent constructs or variables) measuring the aggregate construct of leadership strategy. These first-order constructs are leadership direction, leadership quantity, leadership quality, and leadership capability. Each of the four first-order constructs is measured by latent indicators or factors (indicators and factors are used interchangeably in this study). Thus, leadership direction is measured by vision, mission, and values. Leadership quantity is measured by leader count, seniority, and education. Leadership quality is measured by talent repository, social intelligence, and attitude. Finally, leadership capability is measured by awareness, adaptability, and creativity.

Furthermore, the latent indicators are measured by two Likert-scale type questions, which have been developed mostly from extant empirical research. Thus, for instance, the vision was measured by two questions coded as vision1 and vision2. Similarly, the mission is measured by two questions coded mission1 and mission2, and so forth. The questionnaire resources were adopted and amended from Abou-Foul (2018), Al-afifi (2015), Berseck (2018), Bhaskar (2018), D'Oria et al. (2021), Hughes et al. (2015), Naicker (2018), Parker and Ameen (2018), and Utoyo et al. (2020). In Table 2, 5L denotes five Likert-scale, 6L denotes six Likert-scale, and 7L denotes seven Likert-scale metrics as originally used in the referenced empirical publications. Further, P and PP denotes pages where the metrics can be traced. The four latent or first-order constructs of leadership strategy, their codes, measurement scales, and empirical sources are reported in Table 2. The full Likert-skale questions used to measure leadership strategy factors is reported in the Appendix of this study.

Construct and Indicator	Code	Likert-Scale Measure	Source
Leadership Direction			
Vision1	V_1	The bank's strategy is inspired by its vision	Abou-Foul (2018).6L.P317
Vision2	V_2	Leadership promotes a shared vision	Abou-Foul (2018).6L.P317
Mission1	M_1	Bank's mission drives its financial strength	Al-afifi (2015).5L.P291
Mission2	M_2	Leadership promotes an enabling environment	Abou-Foul (2018).6L.P317
Values1	VL_1	Staff understands the Bank's core values	Chen et al. (2021).PP15-16
Values2	VL_2	Staff are aware their jobs contribute to core values	Chen et al. (2021).PP15-16
Leadership Quantity			
Leader count1	LC ₁	Our organisational chart is updated and complete	D'Oria et al. (2021)
Leader count2	LC_2	Vacant leadership positions filled by internal hiring	Parker and Ameen (2018)
Seniority1	S_1	Career advancement measures are transparent	Utoyo et al. (2020).
Seniority2	S_2	Our senior staff are more likely to retire here	Introduced by researcher
Education1	ED_1	Training and development are linked to the strategy	Introduced by researcher
Education2	ED_2	Certificates increase career advancement chances	Introduced by researcher
Leadership Quality			
Talent1	T_1	Leadership encourages new ideas	Zobel (2013).7L.p77
Talent2	T_2	Our management rewards new ideas	Bhaskar (2018).5L.P245
Social Intelligence1	S_1	Our managers are friendly	Zobel (2013).7L.p77
Social Intelligence2	S_2	There is a sense of belonging as one team	Junaid et al. (2018).L5.P60
Attitude1	A_1	There is an ambience of humour in this bank	Bhaskar (2018).5L.P139
Attitude2	A_2	Our managers take proactive problem-solving actions	Junaid et al. (2018).L5.P58
Leadership Capability			
Awareness1	AW_1	Leadership is alive to competition threat	Abou-Foul (2018).6L.P317
Awareness2	AW_2	Our staff has an action-oriented mindset	Mwazumbo (2016).5L.P202
Adaptability1	AD_1	Staff are empowered to make business decisions	Hughes et al. (2015).7L.P16
Adaptability2	AD_2	Our leaders excel in stressful situations	Hughes et al. (2015).7L.P16
Creativity1	CR_1	We are highly creative in stressful situations	Naicker (2018).L7.P347
Creativity2	CR_2	We take a collective approach to problem-solving	Naicker (2018).L7.P347

Latent Construct, Codes, and Measurement Scales

Table 2

Methodology

Kenya's banking sector was chosen as the study context. The banking landscape in Kenya is the most developed, rapidly growing, and most significant in the Eastern Africa region (Muriithi et al., 2016). The sector has 43 commercial banks licensed by the Central Bank of Kenya. However, an estimated 28 percent of the banks control nearly 90 percent of the sector's collective wealth (CBK, 2020). These banks numbered 12 in total and were all listed on the Nairobi Securities Exchange. The sector's history has been punctuated by turbulence, most notably in the recent past, making it a suitable context for leadership strategy research (Muhia & Afande, 2015). These include the failure of three banks (Dubai Bank, Imperial Bank and Chase Bank) in a span of fewer than two years (between 2015 and 2016) (Gathaiya, 2017), interest rate cap that lasted from 2016 to 2019 (Hussain et al., 2021), the Covid-19 pandemic (Tut, 2020) and associated acceleration of Fintech (Fu & Mishra, 2022). The target population comprised 1,789 senior managers and top-level executives of the 12 listed banks. This population comprises members of the C-suite such as Chief Executives, Chief Risk Officers, Managing Directors, Directors of Strategy, Internal Auditors, Heads of Marketing, Heads of Operations and Branch Managers.

Determining the sample size involves considering sample size adequacy; that is, what amount of the population proportion should be considered (Etikan & Babtope, 2019). According to Taherdoost (2016), sample size adequacy depends on the complexity of the population, the study's purpose, and the statistical operations undertaken. Sampling is

undertaken whenever a census is inappropriate or economically unfeasible (Bhardwaj, 2019; Majid, 2018). However, the process of sampling can equally be uneconomical and timeconsuming (Umar & Usman, 2015). Thus, researchers get concerned with sample size adequacy decisions when not all elements of the study population are included in the sample. In this respect, Kyriazos (2018) outlined several considerations necessary in making sample size decisions in any study involving factor analysis. When carrying out EFA, the factors affecting sample size required for Structural Equation Modelling (SEM) include model complexity, normality of data distribution, the interaction between data, reliability scores, whether variables are latent or manifest, and whether there are missing data. In addition, when CFA is planned, researchers must consider the number of indicators per factor and covariance of indicators.

For sample size adequacy in construct validation, an N:p ratio of five subjects per item is recommended at a minimum based on the results of simulation studies (DiStefano & Hess, 2005; Kyriazos, 2018). In keeping with this ratio, a stratified sample of 184 senior executives was drawn from this population distributed proportionately across the 12 banks. Since 24 items used in this study translates to a minimum sample of 120, the sample size was well above the minimum threshold. This sample size compares favourably with previous samples generated to validate tools used in management research. For example, Zelt et al. (2018) gathered data from a sample of 152 participants to develop and validate an instrument to measure and manage organisational process variety. The sample size was used on the argument fronted by Osborne and Costello (2004) that larger samples are always more accurate as they tend to reduce the chances of error while increasing both the accuracy of statistical estimates and the generalisability of findings. This argument aligns with the general principle in research that a sample size closer to the population reduces sampling error and enhances the validity of the research results (Etikan & Babtope, 2019).

A questionnaire tool comprising items measuring leadership strategy was developed, and pilot tested. The questionnaire was structured into two sections of a five-point Likert-scale covering leadership strategy and demographic data. The questionnaire was initially validated by comparing and contrasting the tool with several established metrics. Items used for the first time were developed from previous empirical studies.

Table 3 presents a sample of the database and websites consulted to generate the items for the questionnaire. Some of the data repositories considered relevant to this research include Leadership Practice Inventory (LPI), Campbell Leadership Practice Descriptor (CLPD), Future Leaders Diagnostic Survey (FLDS), Leadership Assessment Tool (LAT), Transformational Leadership Survey (TLS), Performance Skills Leader (PSL), and Least-preferred Co-worker Scale (LCS). Other tools were reviewed but found not to be of practical relevance to this research. Consequently, they were excluded.

Table 3	
Ouestionnaire Instruments	Data Sources

Instrument	Host Name
Leadership Practice Inventory	360 Degree Leadership Assessment
Practical Reflexivity, Self-Awareness, and Self-Authorship	Journal of Management Education
Campbell Leadership Descriptor	Human Resource Development Quarterly (HRDQ)
Measuring Leadership Development	Stanford Social Innovation Review
Leadership Assessment Tools	Kellogg
Least-Preferred Co-worker Scale	The University of Minnesota Centre for Leadership training
High Performing Manager Assessment Tool	Free Management Library
Future Leaders Diagnostic Survey	The Brigespan Group
Performance Skills Leader	Creative Organisational Design
Transformational Leadership Survey	Leadership Studies Commons

Table 4 reports the operationalisation of 12 indicators used to measure leadership strategy. These indicators are vision, mission, and values for leadership direction, leader count, seniority, education for leadership quantity, talent, social intelligence, attitudes for leadership quality, awareness, adaptability, and capability for leadership capability. The questionnaires were administered to serving bank executives of the listed banks who were on active duty at the time of the study. Holders of these positions were deemed to play a strategic role in ensuring organisational resilience.

Table 4

Operationalisation of Variables and Indicators

Construct/Variable	Indicator	Operationalisation
	Vision	Vision clarity
Leadership Direction	Mission	Mission clarity
1	Values	Value clarity
	Leader count	Number of positions
Leadership Quantity	Seniority	Years in the position
f (Education	Level of education
	Talent	Potential and growth
Leadership Quality	Social Intelligence	Social skills
Leadership Quanty	Attitude	Positivity
	Awareness	Alertness
Leadership Capability	Adaptability	Change
	Creativity	Innovation

Structural equations model was developed for inferential analysis. The underlying research hypotheses were tested using partial least squares estimates. Standardised Root Mean Square Residual (SRMSR) was obtained to test the model fit. Test of univariate normality was done using kurtosis and skewness. Breuch-pagan/Cook-Weisberg test was conducted to evaluate heteroscedasticity, while multicollinearity was tested using the Variance Inflation Factor. For model health metrics, Kaiser-Meyer Olkin's test of sampling adequacy and Bartlett's test of sphericity facilitated EFA, while CFA was performed using a combination of factor loadings and p-values. Exploratory Factor Analysis and CFA are two mutually complementing procedures to establish testable structures with multivariate data (Widaman, 2012).

It should be noted that EFA is a statistical method used to uncover the underlying structure of a relatively large set of variables (Watson, 2017). While EFA explores the existence of testable structures, CFA establishes the nature and dimension of such structures. Therefore, EFA typically precedes CFA.

Exploratory Factor Analysis involves the determination of the pattern matrix, communalities and factor analysis using Principal Components Analysis (PCA) (García-Gil et al., 2018). Principal component analysis is conducted using two types of tests: Kaiser-Meyer Olkin (KMO) test of sampling adequacy and Bartlett's test of sphericity. The KMO test is used to test the homogeneity of variances, while Bartlett's test of sphericity is used to verify if the samples are from populations with equal variances (Shrestha, 2021). Once PCA had been established, communalities were then assessed to determine how much of the variance in each original variable was explained by the extracted factors (Schreiber, 2021). According to Shrestha (2021), communalities values of less than .5 should be dropped because they have low explanatory power. In this study, EFA was conducted using the PCA to reduce the factors used to measure the variables. The test characteristics for EFA are that KMO, factor loadings, and communalities should all not be less than 0.5 and that Bartlett's test of sphericity should be significant with a p-value less than .05 (Mustafa et al., 2020). This argument is supported by Watkins (2018), who advances the view that factor items with factor loadings below .5 should be dropped.

Confirmatory Factor Analysis was measured by a combination of factor loadings and pvalues. Factor loadings for the original sample represent the relationship between the item (question-statement) and the construct. The theory stipulates that the item loadings should be equal to or greater than .50 and statistically significant (Hair et al., 2021; Kock, 2019). It is worth mentioning that the sample means, the standard deviations, and t-Statistics were not reported in this study since the satisfaction of factor loadings and p-value are considered sufficient for factor confirmation (Kock, 2019). Composite reliability measures were assessed using Cronbach's alpha at .7 coefficient threshold. Average Variance Extracted (AVE) metrics were used for discriminant and convergent validity tests. All tests and analyses were performed in SmartPLS software.

Data Analysis

A total of 184 executives participated in this study. The demographic statistics are reported in Table 5. The Table indicates that the study sample scored reasonable gender representation with 58.7% male and 41.3% female respondents. The age category gravitated towards the age bracket of 30-39 years with a percentage of 44.6%, followed by 40-49 years at 31%. Respondents aged 50-59 years were 16.8%, whereas respondents aged 20-29 were the least, at 7.6%. In terms of education, 54% of the respondents held masters' degrees, followed by 25% with bachelor's and 6% had doctorate degrees. Therefore, the majority of the respondents were university graduates. In terms of years in banking, most respondents had between 10 and 19 years of professional experience. Heads and directors occupied 32.5% and 25%, respectively, whereas 12% of the respondents held executive positions. Finally, departmental representation was close to even across the eight departments of the representative banks.

Factor	levels	Frequency	Percent
Gender	Male	108	58.7
	Female	76	41.3
	Total	184	100
Age	20-29 years	14	7.6
	30-39 years	82	44.6
	40-49 years	57	31.0
	50-59 years	31	16.8
	Total	184	100
Education	Certificate	17	9.2
	Diploma	9	4.9
	Bachelors	46	25.0
	Masters	101	54.9
	Doctorate	11	6.0
	Total	184	100
Years in current position	Below 5 years	70	38.0
	5-9 years	59	32.1
	10-14 years	27	14.7
	15-19 years	13	7.1
	20 and above	15	8.2
	Total	184	100
Years in Banking	Below 10 years	39	21.2
	10-19 years	100	54.3
	20-29 years	35	19.0
	30-39 years	10	5.4
	Total	184	100
Current position	Team leader	19	10.3
	Supervisor	25	13.6
	Head	60	32.6
	Director	46	25.0
	Executive	22	12.0
	Branch manager	12	6.5
	Total	184	100
Department	Corporate Strategy	20	10.9
	HR	16	8.7
	Finance	22	12.0
	Risk	19	10.3
	Treasury	25	13.6
	Financial Institution	19	10.3
	Business	26	14.1
	Legal	19	10.3
	Other	18	9.8
	Total	184	100

Table	5
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Demographic Statistics

Exploratory Factor Analysis

The results of factor analysis for leadership strategy are summarised in Table 6. Leadership Strategy yielded a KMO statistics of .93, significant Bartlett's test of sphericity (p < .05), and all factor loadings and communalities are greater than the .5 threshold. The 24 factors/indicators measuring leadership strategy cumulatively explained 73.52% of the total variance in the data. Furthermore, items measuring leadership strategy attained factor loading above .5; therefore, all factors were retained.

exploralory Facior	^r Analysis				
KMO: .93					
Bartlett's (df): $\chi 2 = 4$	125.07 (df = 276)				
Sig.: 0					
Cumulative: 73.62%					
Indicator	Loading	Communality	Indicator	Loading	Communality
Vision 1	.82	.66	Talent 1	.52	.64
Vision 2	.81	.74	Talent 2	.76	.75
Mission 1	.81	.82	Social Intelligence 1	.72	.68
Mission 2	.78	.72	Social Intelligence 2	.61	.75
Values 1	.56	.75	Attitude 1	.74	.77
Values 2	.50	.69	Attitude 2	.69	.73
Leader count 1	.68	.59	Awareness 1	.91	.70
Leader count 2	.57	.52	Awareness 2	.67	.67
Seniority 1	.82	.74	Adaptability 1	.70	.76
Seniority 2	.71	.68	Adaptability 2	.66	.67
Education 1	.52	.61	Creativity 1	.75	.66
Education 2	8	64	Creativity 2	56	62

Table 6

Confirmatory Factor Analysis

The output of confirmatory factor loadings for leadership strategy computes the loadings for all the 24 factors of the construct and measures their respective p-Values. These Factor loadings are reported in Table 7. The Table shows that all of the item loadings for leadership strategy were greater than .50 and statistically significant (p < .05), therefore, all the 24 factors/indicators of leadership strategy are confirmed as valid factors for the construct of leadership strategy and its four latent variables: leadership direction, leadership quantity, leadership quality, and leadership capability.

Table 7

Confirmatory Factor Loadings for Leadership Strategy

<i>J</i>	0,0	1 07			
Factor	Loading	р	Factor	Loading	р
Vision 1	.77	.00	Talent 1	.83	.00
Vision 2	.86	.00	Talent 2	.85	.00
Mission 1	.91	.00	Social Intelligence 1	.87	.00
Mission 2	.84	.00	Social Intelligence 2	.87	.00
Values 1	.83	.00	Attitude 1	.89	.00
Values 2	.81	.00	Attitude 2	.86	.00
Leader count 1	.73	.00	Awareness 1	.80	.00
Leader count 2	.76	.00	Awareness 2	.78	.00
Seniority 1	.88	.00	Adaptability 1	.84	.00
Seniority 2	.83	.00	Adaptability 2	.85	.00
Education 1	.79	.00	Creativity 1	.83	.00
Education 2	.74	.00	Creativity 2	.83	.00

Instrument Reliability

Instrument reliability refers to the consistency of measurement in a composite variable formed by combining scores on a set of items (Easterby-Smith et al., 2021). Reliability is tested statistically using Cronbach's alpha. This is basically a number that represents the average relationship between all test items as well as the number of items (Dempster & Hanna, 2015). This number ranges from zero to one, with a lower value denoting that the instrument is not reliable, and a higher value gives assurance of reliability. According to statistical theory, a value of .7 or higher signifies high instrument reliability (Taber, 2018).

Construct reliability was assessed by computing the composite reliability and the Cronbach's alpha of the constructs. Composite reliability measures were evaluated using SmartPLS. The reliability of all the study constructs, second-order and first-order constructs, are reported in Table 8.

Table 8

Second-order Constructs	1st Order Constructs	Cronbach's Alpha≥0.7	Composite Reliability≥0.7	$AVE \ge 0.5$
Leadership strategy		.96	.97	.58
	Leadership Direction	.91	.93	.70
	Leadership Quantity	.88	.91	.63
	Leadership Quality	.93	.94	.75
	Leadership Capability	.90	.92	.68

Second-order and first-order Construct Reliability

The Cronbach's alphas were above the .7 thresholds specified for PLS analysis indicating good reliability (Sarstedt et al., 2019). Composite reliability of indicator items were all above the acceptable .7 threshold, which means all the variables in the study exhibited construct reliability. All constructs were observed to have acceptable reliability levels because the composite reliability scores for all constructs were above the .7 threshold.

Olabode et al. (2019) propose tools for assessing secondary data's reliability. They suggest that the term reliability, when applied to secondary data, covers three aspects: completeness, accuracy, and consistency. Completeness refers to the relevance and appropriateness of the data records. Accuracy is the extent to which recorded data is representative of the underlying information. Finally, consistency is measured by data impartiality, or its ability to lead to comparable results when comparable methods are applied.

Instrument Validity

The validity of a research instrument means the ability of an instrument to measure precisely what it intends to measure (Souza et al., 2017). It is concerned with how the measurement instrument represents the latent construct and the extent to which the measures of the same construct converge.

In this study, four validity metrics were assessed, including content, construct, discriminant, and convergent validities (Shirali et al., 2018). Content validity entails the appraisal of the research tool to verify that all the items that should represent a construct are included (Mohamad et al., 2015). This was achieved in the current study by developing items covering all the indicators of the respective variables following an extensive literature review. Construct validity is concerned with the proper operationalisation of each variable represented in the research instrument (Shirali et al., 2018). For the purpose of the study, similar constructs used in past research were used. This was applied to the questionnaire tool, which was subjected to discriminant validity analysis. Discriminant validity is the extent to which items measuring one construct differentiate from items measuring other constructs (Hair et al., 2021; Sahoo, 2019). In this study, the discriminant validity was found to be .76, which is in line with inter-construct criterion and the Average Variance Extracted (AVE) suggested by Hair et al. (2021). Convergent validity was assessed using AVE. The AVE of all constructs was above the .5 threshold, indicating that the latent constructs account for at least 50 percent of the variance in

the items. This indicates that the measurement scales exhibited adequate measurement validity (Hair et al., 2021). Finally, criterion validity measures the temporal or situational validity of an instrument (Shirali et al., 2018). It measures an instrument's predictive power in past or future comparable conditions based on its current predictive power. This study adopted instruments that have been empirically verified to ensure instrument validity from the criterion perspective.

Proposition of Leadership Strategy Inventory

Leadership strategy is an emergent but distinct concept in strategic management scholarship. Due to its newness, it is frequently confused with strategic leadership. While the two ideas share notable commonalities, their conceptualisation takes different trajectories. This paper aimed to make this distinction explicit by clarifying its definition, its operationalisation, and its measurement. The overriding aim was to develop and validate an inventory for measuring the leadership strategy construct. The paper has achieved this by building on the pioneering attempts by Pasmore et al. (2009) and Muthimi and Kilika (2018), among others, to the advancement of the construct of leadership strategy by conceptualising and empirically validating leadership strategy as an emergent paradigm of leadership thinking distinct from strategic leadership. While legacy theories are very relevant, they require a fresh interpretation of the role of leadership within an organisational context, especially in times of crisis. The paper has empirically tested and validated 12 factors of leadership strategy using 24 Likert-scale items referred to herein as the Leadership Strategy Inventory as reported in Table 9.

Table 9

Leadership Strategy Inv	entory			
Indicator	Code	EFA	CFA	Inventory (5-Likert-Scale)
Vision 1	V_1	.82	.77	The bank's strategy is inspired by its vision
Vision 2	V_2	.81	.86	Leadership promotes a shared vision
Mission 1	M_1	.81	.91	Bank's mission drives its financial strength
Mission 2	M ₂	.78	.84	Leadership promotes an enabling environment
Values 1	VL_1	.56	.83	Staff understands the Bank's core values
Values 2	VL_2	.50	.81	Staff are aware their jobs contribute to core values
Leader count 1	LC_1	.68	.73	Our organisational chart is updated and complete
Leader count 2	LC_2	.57	.76	Vacant leadership positions filled by internal hiring
Seniority 1	S_1	.82	.88	Career advancement measures are transparent
Seniority 2	S_2	.71	.83	Our senior staff are more likely to retire here
Education 1	ED_1	.52	.79	Training and development are linked to the strategy
Education 2	ED_2	.8	.74	Certificates increase career advancement chances
Talent 1	T_1	.52	.83	Leadership encourages new ideas
Talent 2	T_2	.76	.85	Our management rewards new ideas
Social Intelligence 1	S_1	.72	.87	Our managers are friendly
Social Intelligence 2	S_2	.61	.87	There is a sense of belonging as one team
Attitude 1	A_1	.74	.89	There is an ambience of humour in this bank
Attitude 2	A_2	.69	.86	Our managers take proactive problem-solving actions
Awareness 1	AW_1	.91	.80	Leadership is alive to competition threat
Awareness 2	AW_2	.67	.78	Our staff has an action-oriented mindset
Adaptability 1	AD_1	.70	.84	Staff are empowered to make business decisions
Adaptability 2	AD_2	.66	.85	Our leaders excel in stressful situations
Creativity 1	CR_1	.75	.83	We are highly creative in stressful situations
Creativity 2	CR_2	.56	.83	We take a collective approach to problem-solving

The factors were validated with high scores of EFA and CFA, consistently above the theoretical thresholds. Based on the empirical results and the statistical power produced, the study proposes the inventory in Table 9 for measuring leadership strategy. The proposed inventory is reported in the last column, while the corresponding factors and codes are reported

in the first and second columns. It is worth mentioning that while the items were validated in the banking sector context, each item is a generic measure of the corresponding factors and can be adapted for use in other research contexts.

Discussion of Previous Research

The empirical literature on leadership strategy is vast. However, most of the studies are either theoretical or qualitative empirical due to the nature of the underlying metrics measuring the construct of leadership strategy. Nonetheless, no prior attempt has been undertaken to produce a distinct inventory for construct due to the fact that leadership strategy is a relatively new concept grown out of an amalgamation of strategic leadership and behavioural leadership theories. This section reviews some empirical studies that discussed factors likely to constitute an inventory for the leadership construct. The previous studies are summarised in Table 10. Table 10

Previous Research on L	eadership Inventory	
Author	Context	St

Author	Context	Strategy Contextual Variables			
Everly et al. (2020)	US	Vision development, Vision activation, Communication, Moral compass			
Ulfig (2019)	US	Attractive rewards, Flexible work arrangements, Employee empowerment,			
		Employee appreciation, Employee development, Open communication, Team			
		building			
Ward (2019)	US	Employee engagement, Goals communication, Collegial relationships			
Kimball (2019)	US	Passion, Commitment, Conviction, Confidence, Perseverance, Tenacity, Hard			
		work, Agility, Open-mindedness, Humility, Empowering teams, Distributed			
		leadership, Partners' network, Business insight, Driving vision, Ability to get			
		things done			
Garza (2019)	US	Communication, Supportive leadership Behaviour, Employee engagement			
Hanslik (2018)	US	Charisma			
Browder (2018)	US	Functional leadership, Situational leadership, Transformational leadership.			
Alibašić (2018)	US	Good governance, Bottom-line growth, Technological prowess,			
		Transformational awareness			
Bradley (2018)	US	Employee engagement, Communication,			
Harvey (2018)	US	Sustainable leadership, Market value, Employee loyalty			
Braimoh (2017)	Canada	Communication, Engagement, Motivation, Empowerment, Monitoring, Control,			
		Self-awareness, Humility, Efficiency, Optimisation.			
Walker et al. (2016)	US	Mindset, Communication, Decisive action			
Oroszi (2016)	US, UK,	Situational awareness, Attention to group dynamics, Decision-making.			
	South Africa,				
	Turkey				
Mahdi et al. (2015)	Adidas and	Innovation focus, Research and development, Differentiation, Brand strategy,			
	Nike	Continuous improvement, Embracing change			
Kohtakangas et al. (2015)	Finland	Change, Empowerment, Autonomy, Interaction, Participation			
Al-Thani & Obeidat (2020)	Jordan	Transformational leadership, Transactional leadership			
Jaroudi & Hammoud (2019)	Lebanon	Awareness, Change, Organisational Structures, Niche markets.			
Zatta et al. (2019)	Brazil	Relational synergies, Operational competencies			
Davidson (2018)	Caribbean	Organisational protection, Supportive leadership, Occupational Health,			
		Wellbeing strategies			
Permana et al. (2017)		Environmental dynamism, Managerial capabilities, Organisational learning			
Mukabi (2019)	Kenya	Business continuity, Recovery instincts			
Johannessen (2018)	Libya	Communication, Power, Identity, Ethics			
Nyenswah et al. (2016)	Liberia	Distributed leadership, Empowerment			

Leadership Strategy Inventory Field

The articles reviewed in this study aggregated some generic concepts that can form potential fields for leadership strategy inventory. Based on these studies, we recommended 60 generic concepts that can be used to develop a comprehensive leadership strategy inventory in future research. These concepts are listed in Table 11.

Panel A	Panel B	Panel C			
Agility	Functional leadership	Participation			
Autonomy	Goals communication	Partnership			
Awareness	Good governance	Passion			
Bottom-line growth	Group dynamics	Perseverance			
Brand strategy	Humility	Power			
Business continuity	Innovation	Recovery instincts			
Business insight	Leader Charisma	Relational synergies			
Change	Leader efficiency	Resource optimisation			
Commitment	Leader humility	Self-awareness			
Communication	Leader Mindset	Situational awareness			
Confidence	Managerial capabilities	Situational leadership			
Continuous improvement	Moral compass	Supportive leadership			
Decisive action	Motivation	Sustainable leadership			
Differentiation	Niche markets	Team building			
Employee appreciation	Occupational health	Technological prowess			
Employee development	Open-mindedness	Tenacity			
Employee engagement	Operational competencies	Transactional leadership			
Environmental dynamism	Organisational learning	Transformational leadership			
Ethics	Organisational protection	Vision activation			
Flexibility	Organisational Structures	Vision development			

Table 11

Leadership Strategy Inventory Field

Conclusion

The 24 empirically validated strategic leadership factors discussed in this study, together with the 60 additional generic concepts aggregated from previous studies, collectively constitute a potentially rich field for leadership strategy inventory, representing an opportunity for future empirical research to expand on the findings of this study. One particular aspect to note is that most previous studies have been undertaken in advanced or developed economies with only scanty research on the global South. While this represents a shortcoming in the research production, it also constitutes an opportunity for future research, particularly in emerging and less-integrated markets, some of which have been experiencing material events that call for fostering the role of organisational strategy and leadership strategy.

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Appendix

Leadership Strategy Likert-scale Questionnaire

Instructions: This section aims to evaluate your bank's leadership strategies. On a scale of 1 to 5, please rate the following dimensions in your bank (1=Strongly disagree, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Strongly agree).

Please rate your bank's leadership strategy		1	2	3	4	5
The bank's strategy is inspired by its vision						
Leadership promotes a shared vision	V ₂					
Bank's mission drives its financial strength	M_1					
Leadership promotes an enabling environment	M ₂					
Staff understands the Bank's core values	VL ₁					
Staff are aware that their jobs contribute to core values	VL ₂					
Our organisational chart is updated and complete	LC ₁					
Vacant leadership positions are filled by internal hiring	LC ₂					
Career advancement measures are transparent	S ₁					
Our senior staff are more likely to retire here	S_2					
Training and development are linked to the strategy	ED_1					
Certificates increase career advancement chances	ED ₂					
Leadership encourages new ideas	T ₁					
Our management rewards new ideas	T ₂					
Our managers are friendly	S ₁					
There is a sense of belonging as one team	S_2					
There is an ambience of humour in this bank	A ₁					
Our managers take proactive problem-solving actions	A_2					
Leadership is alive to competition threat	AW ₁					
Our staff has an action-oriented mindset	AW ₂					
Staff are empowered to make business decisions	AD ₁					
Our leaders excel in stressful situations	AD ₂					
We are highly creative in stressful situations	CR ₁					
We take a collective approach to problem-solving						