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Proposed B2B Marketing Strategy to Strengthen Industrial Customer Relationship: A Commitment-Trust Theory Approach at PLN UID East Java

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ABSTRACT

PT PLN (Persero) UID East Java, the state utility serving Indonesia's second-largest industrial hub, faces an emerging challenge this study terms partial defection: customers do not switch away from PLN, but progressively reduce their share of wallet via rooftop photovoltaic (Rooftop PV) self-generation while staying grid-connected. Industrial Rooftop PV capacity grew roughly 200-fold, from 0.80 MWp (2020) to 163.82 MWp (April 2026), as carbon-border pressures and falling renewable costs reshape expectations toward integrated green solutions. This study proposes a B2B marketing strategy grounded in Commitment-Trust Theory Morgan & Hunt, the Key Mediating Variable (KMV) model examining PLN's internal-external conditions, four antecedents' influence on Trust and Commitment, their effect on Propensity to Leave and Cooperation, and the resulting strategy. PLS-SEM tested nine hypotheses on 300 industrial respondents (24 HV, 276 MV), followed by Importance-Performance Map Analysis (IPMA), with frameworks converged through a SWOT/TOWS matrix. All nine hypotheses were supported; Communication was the strongest antecedent of Trust ($\beta = 0.460$), and Relationship Commitment the strongest determinant reducing Propensity to Leave ($\beta = -0.577$). IPMA identified Shared Values and Relationship Termination Cost as Tier 1 leverage, while beyond-kWh rivalry was HIGH and rising across four competitor categories. The proposed strategy synthesizes four Strategic Thrusts—Repositioning as Energy Transition Partner, PLN Group Orchestration, Digital-First B2B Infrastructure, and PAE Upskilling—decomposed into twelve sub-initiatives across a 0–24-month roadmap. The study validates KMV in a regulated-utility developing-country context, integrates IPMA as a B2B prioritization tool.

INTRODUCTION

Electricity is a fundamental input for industrial production and national economic growth. In Indonesia, grid-based electricity supply is predominantly provided by PT PLN (Persero), a state-owned enterprise that holds a near-monopoly position in electricity distribution. Within PLN's customer portfolio, industrial customers occupy a strategic position (Charisma et al., 2024; Sujarwo & Muttaqien, 2024). Although they represent a small proportion of total customers, they contribute a disproportionately large share of electricity consumption and revenue; therefore, relatively small changes in their consumption patterns may materially affect PLN's overall performance.

Traditionally, utility performance has relied on two key marketing capabilities: customer acquisition and customer retention, with the latter generally understood as preventing customers from switching suppliers (Palmatier et al., 2006; Rauyruen & Miller, 2007). However, industrial customers increasingly have access to alternative on-site energy solutions, particularly rooftop solar photovoltaic (PV) systems, driven by cost considerations and sustainability commitments (Kumar et al., 2023). This development does not necessarily indicate declining industrial energy demand, as grid reliability remains essential for operational continuity (Praktiknjo, 2016). Instead, it reflects a shift in the proportion of energy demand that customers fulfill through PLN's grid supply versus self-generation (León-Martínez et al., 2024; Revesz & Unel, 2016; Setiawan & Effendi, 2023).

Because industrial customers generally have limited alternatives to grid-based electricity providers, the primary threat to PLN is not customer loss in the conventional sense but the gradual erosion of PLN's share of customers' total energy consumption. Following Lam et al. (2004), this study refers to this phenomenon as partial defection, in which customers reduce rather than completely terminate their reliance on a primary supplier when alternative options become available. Therefore, the strategic challenge facing PLN is maintaining its share of customer energy demand rather than retaining customers in the conventional sense. This reframing also highlights the need for an appropriate theoretical perspective: electricity tariffs are regulated rather than competitively determined, and service reliability has become a baseline expectation. Consequently, neither pricing nor reliability alone sufficiently explains why customers continue allocating a larger proportion of their energy demand to PLN (Eid et al., 2016; Pérez-Arriaga et al., 2017; Yuniarto et al., 2024). Although customer satisfaction remains relevant in monopolistic utility markets, its influence on firm performance primarily operates through cost reduction rather than revenue growth (Bhattacharya et al., 2021), making long-term relationship quality a more relevant strategic perspective.

Relationship marketing theory provides a well-established foundation for examining these dynamics. Among available frameworks, the Commitment-Trust Theory proposed by Morgan and Hunt (1994) is one of the most influential and extensively validated approaches, positioning trust and relationship commitment as key mediating variables (KMVs) influenced by relational antecedents, including relationship termination costs, relationship benefits, shared values, and communication. These variables subsequently drive relational outcomes with direct strategic implications. The continuing relevance of this framework has been supported by subsequent B2B marketing research (Palmatier et al., 2006; Rauyruen & Miller, 2007; Gansser et al., 2021). In the context of PLN UID East Java, the outcome dimensions of this framework require adaptation. Because industrial customers generally cannot switch to alternative grid-based electricity suppliers, propensity to leave is operationalized as the intention to partially reduce dependence on PLN through self-generation rather than as complete switching intention. Meanwhile, cooperation reflects customers' willingness to participate in collaborative initiatives, such as supply planning and integrated sustainability programs (Andalib Ardakani et al., 2023; Burki et al., 2019; Dahlmann & Roehrich, 2019).

Developing an effective strategy requires more than understanding relational drivers; PLN must also evaluate its broader internal and external environment using established strategic frameworks (Kotler & Keller, 2016; Sammut-Bonnici & Galea, 2015; Porter, 2008; Rothaermel, 2019). PLN UID East Java, as the second-largest PLN distribution unit, provides

a particularly relevant research setting. Understanding how relational antecedents shape trust and commitment among industrial customers, how trust and commitment influence partial defection intentions and cooperation, and how internal and external conditions can be optimized is essential for developing a B2B marketing strategy capable of sustaining industrial demand share over the long term. This study addressed four research questions: (RQ1) What are PLN UID East Java's internal and external conditions in serving industrial customers? (RQ2) To what extent do the five KMV antecedents influence trust and commitment? (RQ3) To what extent do trust and commitment influence propensity to leave and cooperation? (RQ4) What B2B marketing strategy can be proposed to strengthen industrial customer relationships?

This study aimed to analyze PLN's internal and external conditions, examine the influence of KMV antecedents on trust and commitment, assess the effects of trust and commitment on propensity to leave and cooperation, and formulate a comprehensive B2B marketing strategy to strengthen industrial customer relationships. Theoretically, this research extended Commitment-Trust Theory into the context of a regulated utility industry in a developing country, introduced partial defection as an adaptation of propensity to leave, and integrated Importance-Performance Map Analysis (IPMA) with partial least squares structural equation modeling (PLS-SEM) as a strategic prioritization approach. Practically, this study provided PLN UID East Java with an evidence-based roadmap consisting of four strategic thrusts and twelve sub-initiatives within a 0–24-month implementation timeline, offered diagnostic tools for early detection of partial defection risks, supported PLN Group's national energy transition initiatives, and provided a replicable framework for other utilities and industries experiencing similar substitution pressures.

METHOD

This study employed a quantitative, descriptive-explanatory research design with a cross-sectional approach, consistent with previous Commitment-Trust research (Morgan & Hunt, 1994; Palmatier et al., 2006; Gansser et al., 2021). The descriptive component addressed RQ1 through internal and external strategic analyses, while the explanatory component addressed RQ2 and RQ3 by testing nine hypotheses (H1–H9) derived from the Key Mediating Variable (KMV) model using partial least squares structural equation modeling (PLS-SEM). RQ4 was addressed by synthesizing quantitative findings and strategic analyses through a SWOT/TOWS matrix (Weihrich, 1982; Gürel & Tat, 2017). Primary data were collected through an online questionnaire distributed to industrial customers of PLN UID East Java from June 10–21, 2026, while secondary data supported the internal and external strategic analyses.

The target population consisted of 3,009 medium-voltage (MV) and high-voltage (HV) industrial customers registered with PLN UID East Java, comprising 2,981 MV customers and 28 HV customers. A stratified sampling approach was applied, using a census method for the HV customer group and probability random sampling for the MV customer group, resulting in 300 respondents (24 HV and 276 MV customers). The sample size exceeded the recommended requirements for marketing research and PLS-SEM analysis, ensuring adequate statistical power and stable model estimation.

The questionnaire measured eight constructs: relationship termination costs, relationship benefits, shared values, communication, trust, relationship commitment, propensity to leave, and cooperation. The constructs were measured using 32 items adapted from established

relationship marketing scales and assessed using a 7-point Likert scale. A pilot test involving 30 respondents was conducted to evaluate instrument reliability and validity using JASP. All items met the required item-total correlation criteria ($r > 0.361$, $p < 0.001$), indicating acceptable measurement quality.

Quantitative analysis was conducted using PLS-SEM with SmartPLS to examine the relationships among the research constructs. The measurement model was assessed based on indicator reliability, internal consistency reliability, and discriminant validity. The structural model was evaluated through collinearity assessment, coefficient of determination (R^2), and hypothesis testing using 5,000-subsample bootstrapping. Importance-Performance Map Analysis (IPMA) (Ringle & Sarstedt, 2016) was subsequently applied to identify strategic priorities for relationship commitment and propensity to leave. Internal conditions were analyzed using STP, the 7P marketing mix, VRIO, and value chain analysis, while external conditions were assessed using PESTEL analysis, Porter's Five Forces, and competitor analysis. The findings from quantitative and strategic analyses were integrated through a SWOT/TOWS matrix to formulate strategic recommendations. This study involved no human or animal experimentation beyond a standard anonymized customer perception survey. All respondents participated voluntarily, and the collected data were managed according to PLN's confidentiality standards.

RESULTS AND DISCUSSION

This section synthesizes findings from PLS-SEM hypothesis testing, IPMA prioritization, internal and external strategic analysis, and SWOT/TOWS-based strategy formulation, structured to answer the four research questions in sequence before turning to their theoretical and practical discussion.

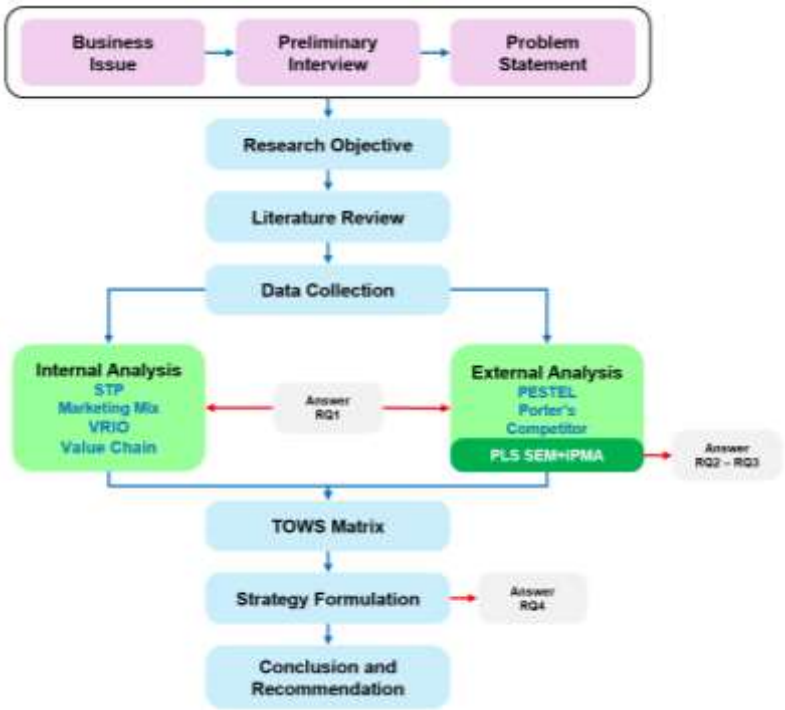

Figure 1. Research Flow
Source: Adapted by the Author

Respondent Profile and Measurement Model

Of 300 questionnaires targeted, valid responses were obtained from 300 industrial customers (24 HV, 276 MV), matching the stratified sampling design and exceeding minimum PLS-SEM sample requirements. Descriptive statistics across the eight constructs showed Propensity to Leave at a mean of 4.04 on the 7-point scale—above the midpoint—indicating that industrial customers are, on average, already actively considering partial defection toward self-generation, which underscores the practical urgency of this study's strategic recommendations.

The measurement (outer) model met all standard PLS-SEM thresholds: indicator outer loadings, composite reliability, and average variance extracted (AVE) exceeded conventional cut-offs for all eight constructs, and discriminant validity was confirmed via the Fornell-Larcker criterion and HTMT ratios. The structural (inner) model showed acceptable collinearity (VIF well below 5 across all predictors) and satisfactory explanatory power, with the model explaining a substantial proportion of variance in Relationship Commitment, Trust, Propensity to Leave, and Cooperation. These results establish the model as methodologically sound for hypothesis testing.

Hypothesis Testing

All nine hypotheses derived from the Commitment-Trust (KMV) model were supported (Table 1), eight at $p < 0.001$ and one (H3) at $p < 0.05$. Communication was the strongest direct antecedent of Trust (H5: $\beta = 0.460$), and Relationship Commitment was the single strongest determinant reducing Propensity to Leave (H7: $\beta = -0.577$)—the largest coefficient in the model. Relationship Commitment also strongly increased Cooperation (H8: $\beta = 0.631$). Trust itself was driven by Shared Values (H4: $\beta = 0.388$) and Communication (H5), and in turn strengthened Relationship Commitment (H6: $\beta = 0.304$) and Cooperation (H9: $\beta = 0.145$). Relationship Termination Cost, Relationship Benefits, and Shared Values all significantly strengthened Relationship Commitment directly (H1, H2, H3), with Shared Values' direct path (H3: $\beta = 0.136$) comparatively marginal relative to its substantial indirect effect through Trust.

These results confirm that the KMV framework—originally formulated for competitive B2B markets—remains robust when applied to a regulated monopoly: customers who cannot fully switch suppliers still exhibit commitment-trust dynamics consistent with the theory, and strengthening Relationship Commitment empirically reduces partial-defection intention (H7). Four strategic insights follow: Communication, as the strongest direct pathway, is the highest-priority capability investment; Relationship Commitment, as the central lever, must be strengthened indirectly through its antecedents rather than directly; Trust functions as a mediator with multiplier effects across all downstream outcomes; and Shared Values, though modest in direct effect, carries a substantial total effect and should not be treated as a secondary investment.

Table 1. Hypothesis Testing Summary

H	Path	Direction	β	t-stat	p-value	Decision
H1	RTC → RC	(+)	0.287	6.151	<0.001	Supported
H2	RB → RC	(+)	0.245	5.180	<0.001	Supported
H3	SV → RC	(+)	0.136	2.607	0.009	Supported

H4	SV → TR	(+)	0.388	8.376	<0.001	Supported
H5	COM → TR	(+)	0.460	10.102	<0.001	Supported
H6	TR → RC	(+)	0.304	5.829	<0.001	Supported
H7	RC → PL	(−)	−0.577	15.749	<0.001	Supported
H8	RC → CO	(+)	0.631	15.942	<0.001	Supported
H9	TR → CO	(+)	0.145	3.153	0.002	Supported

Source: SmartPLS

Importance-Performance Map Analysis (IPMA)

IPMA translated the PLS-SEM path coefficients into a consolidated strategic priority matrix across four tiers (Table 2). Relationship Termination Cost and Shared Values emerged as Tier 1 Strategic Focus—both combine high total-effect importance with comparatively low performance scores (RTC importance 0.287/0.166 toward RC/PL; SV importance 0.254/0.147), revealing a capability gap: dimensions customers perceive as weak are precisely those that most strongly drive commitment and defection intent. Trust falls in Tier 2 (Maintain), combining the highest importance (0.304) with good performance (55.943), requiring continuous monitoring given its pivotal mediating role. Relationship Benefits sits in Tier 3 (Steady-State), just below mean importance with adequate performance, implying existing programs should be maintained rather than aggressively expanded. Communication is classified Tier 4 (Essential Infrastructure): though its direct importance to final outcomes is comparatively low, it is the strongest direct driver of Trust ($\beta = 0.460$) and therefore underpins the entire KMV mechanism, making it a foundation that cannot be divested despite its lower apparent priority.

Table 2. Consolidated Strategic Priority Matrix (IPMA)

Tier	Antecedent	Imp → RC	Imp → PL	Performance	Strategic Implication
Tier 1 Strategic Focus	RTC	0.287	0.166	51.325	Strengthen switching-cost perception: education on migration complexity, true cost of rooftop solar, operational risks
Tier 1 Strategic Focus	SV	0.254	0.147	51.539	Shared values cultivation: joint sustainability roadmap, industry-standard alignment, positioning as energy-transition partner
Tier 2 Maintain	TR	0.304	0.176	55.943	Continuous monitoring as pivotal mediator; sustain trust-building program quality
Tier 3 Steady-State	RB	0.245	0.141	55.344	Borderline importance with adequate performance; maintain existing programs (PAE management, technical support, supply reliability) without aggressive intervention
Tier 4 Essential Infrastructure	COM	0.140	0.081	55.914	Trust gateway — sustain and enhance communication capability; foundation underlying all Tier 1–3 programs

Source: SmartPLS

Internal and External Conditions (RQ1)

Consolidating STP, the 7P Marketing Mix, VRIO, and Value Chain analysis across nine strategic themes (Table 3) reveals a clear strategic paradox: PLN UID East Java's resource base is already strong—an integrated distribution grid serving 2,981 MV and 28 HV customers with mature SCADA and SAIDI/SAIFI performance, a regulated institutional position, a deep trust reservoir (88.7% of customers with tenure exceeding 10 years), 36 Priority Account Executives (PAE) under a formal key-account structure, a broad PLN Group ecosystem (Icon Plus, Indonesia Power, Nusantara Power, Enjiniring, EMI), and a maturing CoreBoost transformation framework. However, organizational activation of these assets into sustained competitive advantage remains underdeveloped across seven of the nine themes: AI/ML predictive maintenance and digital-twin capability for premium customers are limited; no tariff flexibility exists to respond to rooftop PV competition; no formal loyalty or co-creation programs activate relationship depth as a strategic asset; energy-solution-selling capability and a formal customer-success role need strengthening; end-to-end orchestration across PLN subholdings remains siloed; no Energy Transition Partner campaign or segmented customer storytelling yet exists; and a dedicated B2B digital portal and customer-analytics capability for early-warning of defection are not yet available.

External analysis across PESTEL, Porter's Five Forces, and Competitor Analysis, consolidated into six strategic themes (Table 4), confirms that PLN's strategic window is narrowing even as macroeconomic conditions remain favorable. East Java's GRDP grew 5.33% in 2025 with the processing industry contributing 31.32% of GRDP and Rp147.7 trillion in investment (third-highest nationally), and national policy (RPJMN 2025–2029, RUPTL 2025–2034, enhanced NDC of 31.89% by 2030, NZE 2060) creates demand for integrated green energy solutions PLN Group is positioned to deliver. Yet converging threats are substantial: East Java industrial Rooftop PV capacity grew approximately 200-fold in six years to 163.82 MWp (April 2026), reinforced by battery pack prices falling to USD 108/kWh (2025) and utility-scale solar LCOE of USD 0.043/kWh (2024); Porter's Five Forces analysis rates the threat of substitutes as HIGH and increasing; five distinct competitor categories now compete in the beyond-kWh space (Rooftop PV turnkey providers, Energy Service Companies, green PPA-IPP partnerships, I-REC/REC providers, and integrated energy platforms); and perception of PLN as "insufficiently green" is pushing multinational and export-oriented customers toward independent green alternatives, compounded by CBAM pressure.

Table 3. Consolidated Internal Strengths and Weaknesses

No	Strategic Theme	STRENGTHS (S)	WEAKNESSES (W)
1	Grid Infrastructure & Operations	S1 — Integrated distribution grid on 16 UP3 serving 2,981 MV + 28 HV customers with SCADA, SOP, SAIDI/SAIFI mature (VRIO Sustained CA; VC Top CA)	W1 — AI/ML predictive maintenance, smart grid, and digital twin for Premium industrial customers are still limited (VC gap)
2	Institutional & Regulatory Position	S2 — Regulated national utility position with institutional	W2 — No tariff flexibility to respond to rooftop PV

		legitimacy and regulated tariffs per Permen ESDM 7/2024 (VRIO defensive advantage; VC Top CA)	competition; differentiation only through connection-fee promotions (7P Price)
3	Customer Relationships	S3 — 88.7% of industrial customers with tenure >10 years as trust reservoir and RTC anchor (STP Behavioural; VRIO Underexploited Sustained CA)	W3 — No formal programmes yet (loyalty programme, co-creation, structured customer appreciation) to activate relationship depth as strategic asset (VRIO Organization gap)
4	Account Management (PAE)	S4 — 36 PAE personnel with formal Key Account Management structure + CoreBoost framework for beyond-kWh growth (STP Targeting; 7P People; VC Top CA)	W4 — Energy solution selling capability, PAE coverage of all strategic customers, and formal customer success role still need strengthening (VRIO Temporary CA; 7P People gap)
5	Service Portfolio & Ecosystem	S5 — PLN Group ecosystem (Icon Plus, Indonesia Power, Nusantara Power, Enjiniring, EMI) provides total energy solution beyond-kWh capability (VRIO V+R+I strong)	W5 — End-to-end orchestration across subholdings and subsidiaries remains siloed; beyond-kWh delivery (REC, rooftop PV, energy management) not yet fully mature (VRIO Unexploited; 7P Product & Process gap)
6	Positioning & B2B Communication	S6 — Strong perception as Reliable National Grid and Trusted Long-term Partner (STP Positioning defensive; VRIO Sustained CA)	W6 — No Energy Transition Partner campaign yet, minimal customer storytelling, CoreBoost portfolio not intensively and segmentedly promoted (STP offensive positioning gap; 7P Promotion; VC gap)
7	B2B Channels & Digital Infrastructure	S7 — Omnichannel physical (16 UP3), digital (PLN Mobile, Service Portal), and account-based (PAE, WA/email) available (7P Place; VC HRM & Tech mature)	W7 — Dedicated B2B Portal not yet available; PLN Mobile still B2C-oriented; customer analytics for early warning of partial defection not yet optimal (7P Place & Physical Evidence; VC Technology gap)
8	CoreBoost Transformation Program	S8 — CoreBoost as transformation framework from electricity supplier to energy solution provider since 2025 (VRIO Temporary CA; STP anchor concept)	W8 — CoreBoost implementation still rollout in progress — integration into daily processes, account planning, cross-functional KPIs, and orchestration are still maturing (VRIO Organization Developing)
9	Human Resources	S9 — Mature talent pipeline through PLN Corporate University, "Melayani Sepenuh Hati" culture, and PAE	W9 — Upskilling of energy solution selling and building of customer success competency still needed (VC

		capability programme (VC HRM CA)	HRM gap)

Source: Author's synthesis based on STP and Marketing Mix 7P analysis and internal data from PLN UID East Java.

Table 4. Consolidated External Opportunities and Threats

No	Strategic Theme	OPPORTUNITIES (O)	THREATS (T)
1	Rooftop PV & Storage Substitution	O1 — Customer demand for integrated rooftop PV + REC + energy management solutions can be answered by PLN Group as a one-stop energy transition partner (PESTEL Technological + Competitor Category 1)	T1 — East Java rooftop PV capacity grew ~200x in 6 years (163.82 MWp industrial, per Apr 2026); battery pack USD 108/kWh (2025) reinforces partial substitution (Porter Substitutes HIGH & Increasing)
2	Decarbonisation & Energy Transition	O2 — Enhanced NDC (31.89% by 2030), NZE 2060, and EU CBAM 2026 drive demand for REC, green energy solutions, and sustainability support — a growing market (PESTEL Environmental)	T2 — Perception of PLN as "insufficiently green" drives MNC/exporter customers to seek independent green alternatives; CBAM pressure increases decarbonisation urgency (PESTEL Social + Environmental)
3	East Java Economy & Manufacturing Base	O3 — East Java GRDP grew 5.33% (2025); processing industry contributes 31.32% of GRDP; investment Rp 147.7 T (3rd nationally); PLN UID East Java industrial electricity sales 18.50 TWh (2025) — large manufacturing base for growth (PESTEL Economic)	T3 — Industrial cost pressures (inflation, wages, efficiency) push customers to seek cheaper energy alternatives; utility-scale solar LCOE USD 0.043/kWh (2024) increasingly competitive (PESTEL Economic + Technological)
4	Domestic Regulatory Ecosystem	O4 — Permen ESDM 2/2024 (excess export compensation removed) reduces rooftop PV attractiveness as full substitute; Permen ESDM 7/2024 guarantees regulated tariffs; Perpres 98/2021 NEK opens space for PLN green products (PESTEL Legal)	T4 — Permen ESDM 2/2024 still provides legal framework for partial substitution; RUU EBET uncertainty (still under DPR discussion 2025); CBAM regulation adds pressure on industrial customers (PESTEL Legal + Environmental)
5	Industrialisation Policy & Infrastructure	O5 — RPJMN 2025-2029 drives industrial sector growth and industrial estate development; RUPTL 2025-2034 supports economic growth + energy transition (PESTEL Political)	T5 — Increasingly aggressive energy transition policies may accelerate adoption of independent energy solutions without PLN's role as energy transition partner (PESTEL Political)
6	Digital Technology & Smart Grid	O6 — Smart grid, digital twin, AMR, AI/ML energy management, customer analytics, and EV charging can become PLN advantages if developed as integrated solutions (PESTEL Technological)	T6 — Specialised technology vendors (SCADA, smart metering, digital platform, energy solution) hold MEDIUM bargaining power that can hamper PLN's response speed (Porter Suppliers)

7	Beyond kWh Competition Structure	O7 — Rivalry at core electricity supply layer is NONE (PLN monopoly); core supply is protected by high switching costs, 24/7 reliability, and regulated tariffs (Porter Rivalry Core + Entrants)	T7 — Rivalry at beyond-kWh layer is HIGH — SUN Energy (PT Tjiwi Kimia 9.8 MWp), Xurya, Utomo SolaRUV, global ESCO (Schneider, Siemens, ABB, Envision), battery vendors (Tesla Megapack, CATL, BYD, LG, Fluence, SUN Terra), I-REC/I-TRACK — capturing share of wallet (Porter Rivalry Beyond + Competitor Categories 1-4)
8	Bargaining Power of Industrial Customers	O8 — HV/MV Premium customers with long tenure (88.7% >10 years) hold trust-based relationships and account access difficult for competitors to replicate — strong retention foundation (Porter Buyers)	T8 — Premium customer demands for sustainability, reliability premium, and value-added services are increasing; partial substitution options give implicit bargaining power (Porter Buyers)
9	Corporate Customer ESG Awareness	O9 — MNC/exporter customer needs for green attributes (REC), ESG reporting (IFRS S1&S2), and RE100 alignment open strategic market for REC PLN as flagship product (PESTEL Social + Competitor Category 4)	T9 — Competitors I-REC/I-TRACK (>70 countries) compete on green attributes; global ESCOs offer energy management with strong sustainability branding (PESTEL Social + Competitor Categories 2 & 4)

Source: Author's consolidation based on PESTEL, Porter's Five Forces, and Competitor Analysis

SWOT/TOWS Synthesis and Strategic Thrusts

The internal Strengths and Weaknesses and external Opportunities and Threats were converged through a SWOT/TOWS matrix (Weihrich, 1982) into eleven SO/WO/ST/WT strategies, which were then synthesized into four mutually reinforcing Strategic Thrusts (Table 5) — a synthesis of consistent patterns across the organizational activation gap (VRIO), the top value-chain gaps (marketing and sales, technology, after-sales), the top PESTEL drivers (technological, environmental, economic), and Porter's HIGH-and-rising substitute threat. The four thrusts form a system rather than independent initiatives: repositioning (Thrust 1) without orchestration (Thrust 2) becomes rhetoric; orchestration without digital-first infrastructure (Thrust 3) becomes slow to execute; and none of the three can be delivered without capability upskilling (Thrust 4).

Table 5. Four Strategic Thrusts as Business Solution Framework

Code	Strategic Thrust	Covers	Rationale
T1	Strategic Repositioning as Energy Transition Partner	SO-1, SO-2, WO-3	Reposition PLN's identity, launch REC PLN as flagship green product, and run B2B Energy Transition Campaign to neutralise the "insufficiently green" perception.
T2	PLN Group Orchestration for Integrated Total Energy Solution	WO-2, ST-2	Accelerate CoreBoost as operating model, orchestrate across subholdings and subsidiaries, and build co-opetition partnerships with

			competitors to deliver integrated total energy solution.
T3	Digital-First B2B Infrastructure & Analytics	WO-1, ST-3	Build B2B digital portal + customer analytics for early warning + reliability premium service as enabler of retention and growth.
T4	PAE Capability Upskilling & Customer Success	SO-3, ST-1, WT-1, WT-2	Strengthen PAE with energy solution selling capability + build formal customer success role + fortress retention program as the human capital foundation for executing all other thrusts.

Source: Author's synthesis grouping eleven TOWS strategies into four Strategic Thrusts

Table 6. Implementation Roadmap (0-24 Months)

Horizon	Timeline	Sub-Initiatives	Rationale
Quick Wins	0-6 months	1a, 2a, 4a, 4c	Establish momentum, protect at-risk revenue, activate existing PAE capacity
Mid-term	6-18 months	1b, 1c, 2b, 3a, 3b, 3c, 4b	Build core capabilities and platforms — infrastructure enabler
Long-term	12-24 months	2c (mature phase)	Transformational partnership; requires prior programs to reach maturity

Source: Author's synthesis based on strategic recommendations and the implementation roadmap concept (Quick Wins, Mid-term, Long-term)

These findings extend Commitment-Trust Theory (Morgan & Hunt, 1994) into a setting distinct from the competitive B2B markets in which it was originally formulated. In a regulated monopoly where customers cannot fully switch suppliers, commitment-trust dynamics remain empirically robust, and the reframing of the theory's outcome variable—propensity to leave as partial defection through self-generation rather than total switching—proves both theoretically coherent and empirically validated (H7: $\beta = -0.577$), extending the KMV framework's relevance to contemporary substitution economies where customers unbundle rather than abandon a core supplier relationship.

The IPMA-based prioritization directly answers the practical question of where PLN should intervene first: Shared Values and Relationship Termination Cost are simultaneously the most important and the weakest-performing dimensions, meaning current customer-facing capabilities are systematically misaligned with what actually drives commitment and reduces defection intent. This mismatch, combined with a Propensity to Leave score already above the scale midpoint, indicates that the strategic window for intervention is active rather than anticipatory. The internal analysis shows this is fundamentally not a resource problem: PLN UID East Java already possesses the structural strengths—grid infrastructure, regulatory legitimacy, long-tenured relationships, a broad group ecosystem—required to compete beyond kWh. What is missing is organizational activation: formalized programs, cross-functional integration, and dedicated digital and human-capital infrastructure to convert existing assets into a coherent customer value proposition.

The four Strategic Thrusts operationalize this diagnosis by directly targeting the Tier 1 and Tier 2 IPMA levers. Strategic Repositioning as Energy Transition Partner (T1) and

PLN Group Orchestration for Integrated Total Energy Solution (T2) jointly strengthen Shared Values by aligning PLN's positioning and cross-subholding delivery with customers' sustainability expectations. Digital-First B2B Infrastructure and Analytics (T3) strengthens Relationship Termination Cost by building a dedicated B2B portal and early-warning customer analytics that make switching costs and risks transparent to customers considering self-generation. PAE Capability Upskilling and Customer Success (T4) strengthens Trust through account-based execution capability, providing the human-capital foundation without which the other three thrusts cannot be delivered. Implementation follows a phased 0–24-month roadmap (Table 6) allocating roughly 40% to Quick Wins that protect at-risk revenue and build momentum within six months, 40% to mid-term capability and platform building over 6–18 months, and 20% to a longer-term transformational partnership that matures over 12–24 months, with the Priority Customer Service Manager as primary owner for eleven of the twelve underlying sub-initiatives.

This study is subject to limitations that also point toward future research. The PLS-SEM specification did not incorporate firm-level control variables such as firm size, industry sector, or customer tenure; future work could extend the model through multi-group analysis to test whether KMV mechanisms and strategic priorities are heterogeneous across industrial customer sub-segments. The cross-sectional design captures customer perceptions at a single point in time; longitudinal data would allow the trajectory of partial defection and the effectiveness of the proposed Strategic Thrusts to be tracked directly. Finally, while this study is grounded in a single PLN distribution unit, the partial-defection phenomenon and the KMV-IPMA prioritization approach are conceptually replicable across other PLN Distribution Units and, more broadly, other regulated utilities in developing economies facing similar substitution pressure from distributed renewable generation.

CONCLUSION

This study aimed to examine how PLN UID East Java could strengthen industrial customer relationships amid accelerating rooftop solar substitution, using Commitment-Trust Theory as the analytical framework. Regarding internal and external conditions, the analysis revealed a strategic paradox: PLN possessed valuable structural strengths, including regulated grid legitimacy, service reliability, long-standing customer relationships, and an extensive group ecosystem; however, its organizational readiness to move beyond kilowatt-hour (kWh)-based value propositions remained underdeveloped. At the same time, the external opportunity window was becoming increasingly constrained due to the approximately 200-fold growth in rooftop photovoltaic (PV) capacity over six years and intensifying beyond-kWh competition. Regarding the relational antecedents of trust and commitment, all five hypothesized antecedents were empirically supported through PLS-SEM analysis involving 300 industrial customer respondents. Communication emerged as the strongest driver of trust, while shared values contributed both directly and, more substantially, indirectly through trust, supporting the applicability of the Commitment-Trust framework within a regulated utility context that remains underrepresented in B2B relationship marketing literature. Regarding the effects of trust and commitment on customer outcomes, both mediating variables significantly reduced propensity to leave and increased cooperation, with relationship commitment demonstrating the strongest effect on propensity to leave. IPMA further identified shared values and

relationship termination costs as Tier 1 strategic leverage factors. Regarding strategy formulation, the integration of empirical findings and strategic analyses produced four mutually reinforcing strategic thrusts: strategic repositioning as an energy transition partner, PLN Group orchestration for integrated total energy solutions, digital-first B2B infrastructure and analytics, and PAE capability upskilling and customer success. These strategic thrusts were operationalized through twelve sub-initiatives within a 0–24-month roadmap designed to balance short-term improvements, capability development, and long-term transformational partnerships.

This study contributed three theoretical insights: first, it validated Commitment-Trust Theory within a regulated utility context in a developing country, where core electricity supply remains relatively monopolistic but competition increasingly occurs through beyond-kWh value propositions in which relationship quality becomes strategically important; second, it integrated IPMA as a prioritization approach that translates PLS-SEM findings into actionable strategic interventions; and third, it extended the KMV framework to address the contemporary phenomenon of partial defection in technology-driven substitution environments, providing a conceptual foundation for future research in other industries experiencing similar disruptions. Practically, this study provided PLN UID East Java with an actionable, evidence-based roadmap that can be adapted by other PLN Distribution Units facing comparable market pressures and is aligned with national energy transition policies and Indonesia's Net Zero Emission 2060 commitment.

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