

Continuity No Longer Ends at the Grid

How integrated utilities can preserve trust across operations, billing, channels and decisions.

Commercial transformation stops being a channel program when the same customer depends on multiple services, companies and territories. For an integrated utility, the executive challenge is to build continuity of trust: ensuring that every operational event retains identity, context, explanation, accountability and the ability to resolve the issue until the loop is closed with the customer.



Executive thesis

“ The next advantage for an integrated utility will not be offering more channels, but preventing context from being lost between them. When operational data, the bill, the explanation and the resolution remain connected, experience stops being a service layer and becomes continuity of trust. Continuity no longer ends at the grid; it ends when the customer understands, trusts and can act.



A. At a glance

Across Colombia's energy and gas sector, customer friction has become a direct regulatory, operational and financial exposure. Service providers recorded 296,720 electricity and natural gas complaints in 2025, while the Superintendence of Residential Public Services (Superservicios) logged 48,809 escalations through its Te Resuelvo channel, 21.63% of which were registered under the positive administrative silence (SAP) procedure [\[1\]\[2\]](#). At the same time, CREG has proposed linking commercial-quality indicators to the regulated retail supply operating margin through its 2024 draft regulatory framework, and Colombia's data protection authority (SIC) has established strict transparency, privacy and accountability requirements for artificial intelligence in consumer service [\[3\]\[6\]\[7\]](#).

For CIOs, Chief Commercial Officers and Customer Experience executives in integrated multi-service utilities, these pressures rule out both superficial chatbot deployments and high-risk, wholesale CRM replacements. Value lies in connecting existing transactional systems through a shared context contract, preserving identity, operational status, billing accuracy and auditable explanations across every customer handoff.



Signal	Why it matters for executive decision-making
● Friction is already regulatory	Service providers reported 296,720 gas and electricity complaints in 2025; 70% related to natural gas (approx. 207,704 derived) and 30% to electricity (approx. 89,016 derived) [2].
● Resolution matters as much as intake	Superservicios' Te Resuelvo channel received 48,809 cases in 2025 (78.3% in electricity and gas) and recorded 10,559 procedures classified as positive administrative silence (21.63%) [1].
● Commercial quality is gaining regulatory and economic relevance	CREG's draft Resolution 701 038 of 2024 proposes commercial-quality indicators covering complaints, telephone service, abandonment, digital response and billing, alongside potential operating-margin adjustments [3].
● Technical improvement is not uniform	Aggregate continuity indicators improved in 2025, but significant territorial gaps persisted, especially in rural areas and the Caribbean region [9].
● AI raises the trust and governance bar	The Superintendence of Industry and Commerce (SIC) requires data processing in AI systems to respect transparency, privacy, security and human accountability [6][7].

Table 1. Five executive signals reshaping customer commercial transformation in Colombia's utilities sector. Sources: Superservicios [1][2][9], CREG [3] and SIC [6][7].

B. What the evidence says

1.

The multiplication of relationships changes the unit of design

An integrated utility must recognize that the unit of relationship changes by customer profile. A small consumer or household may need to view, pay for or manage multiple utility services linked to several properties and do so through different channels. A commercial or industrial company may operate with multiple contracts, operating sites, billing accounts and legal representatives with distinct authorities. Designing the customer experience around a single contract or a single digital identity oversimplifies that reality. The shared view must model people, organizations, properties, services, roles and permissions, and define what information and actions correspond to each profile.

Scale is not only operational either. Continuity must cover the full commercial lifecycle: finding information and contracting, activating or changing a service, viewing consumption and bills, paying, managing payment arrangements, resolving incidents, completing self-service transactions and receiving confirmation of the outcome. Customer experience is determined by continuity between these steps. A channel may work correctly in isolation and the journey may still fail if context is lost between contracting, operations, billing, collections and service.



2.

Trust breaks at the handoffs

Friction appears when the commercial relationship, the operational event and support processes live in different systems, taxonomies and rhythms. A new contract may require information already provided to be repeated; a payment may not be reflected as quickly as expected; a payment arrangement may force a channel change; an outage may be resolved operationally on the grid but remain open in customer service; or a corrected meter reading may fail to propagate to the bill. None of these failures belongs to a single channel. They are losses of context across domains and moments in the commercial lifecycle.

In an integrated utility group, that loss of context multiplies when different companies or services share channels, data or service capabilities. The decisive signal is not the organizational chart of any single utility, but the sector pattern: experience must be managed as a cross-cutting corporate capability that connects domains without diluting the statutory and legal accountability of each regulated service provider.



3.

Complaint volume turns the journey into an operational obligation

Superservicios reported that Colombian service providers recorded 296,720 natural gas and electricity complaints in 2025. Seventy percent related to natural gas and 30% to electricity, mainly concerning charges for other goods or services on the bill, service suspension or disconnection, and due-process failures [2].

A second dataset, which must not be added to the provider-level figure above because it measures escalations in a distinct supervisory channel, shows 48,809 cases received through Superservicios' Te Resuelvo platform in 2025. The same official report recorded 10,559 procedures classified as positive administrative silence (21.63% of total cases) and noted that this volume may indicate legal exposure and failures to meet response deadlines [1]. The executive reading is clear: digitizing intake without industrializing end-to-end resolution merely moves the queue.

Dataset / Supervisory Channel	2025 Volume	Service Breakdown & Primary Drivers	Operational & Legal Implication
Service provider complaints (Electricity & Gas)	296,720 complaints	70% natural gas (~207,704 derived); 30% electricity (~89,016 derived). Main drivers: third-party bill charges, disconnection/suspension and due-process failures [2].	Most conflict is concentrated where field operations, billing accuracy, customer information and due process intersect.
Superservicios 'Te Resuelvo' escalations	48,809 cases	32,137 electricity (65.8%) and 6,071 natural gas (12.4%); combined 78.3% of total supervisory channel intake [1].	High escalation volume indicates unresolved handoffs between front-line intake and back-office/operational closure.
Positive administrative silence (within Te Resuelvo)	10,559 cases (21.63%)	Procedures related to positive administrative silence, indicating response-time exposure and compliance risks [1].	Digitizing intake without end-to-end case orchestration creates direct legal, financial and regulatory sanction exposure.

Figure 1 / Table 2. 2025 Colombian utility complaint and supervisory escalation metrics (non-additive channels). Sources: Superservicios [1][2]; NTT DATA derived calculations.

4.

Regulation is making commercial quality visible

CREG's draft Resolution 701 038 of 2024 proposes a commercial-quality framework for electricity retail supply around six explicit indicators: complaints per user, response quality, telephone service, abandonment management, electronic channels and billing quality. The proposal also contemplates quarterly SUI reporting and public disclosure of historical performance [3]. Although presented as a draft framework rather than an enacted obligation, it proposes linking performance to an adjustment factor on the retail operating margin. Commercial quality, billing accuracy and digital response thereby signal a clear regulatory direction toward direct economic consequences.

Regulatory pressure continues to tighten. In December 2025, through Circular 223 of 2025, CREG opened a phased process to modernize the consumer-protection regime for electricity and gas; in March 2026, Superservicios explained that the reform seeks to strengthen procedures governing metering, suspension, reconnection, provisional billing and due process [2][4]. Statutory Law 142 of 1994 already guarantees users the right to complete, accurate and timely information and requires dedicated offices to receive and resolve petitions, complaints and appeals (PQRS) [5].



Technology can accelerate case handling, but it never reduces the legal obligation to explain a decision or accountability for its outcome.

5. Technical improvement does not replace explanation

Superservicios reported in July 2026 that during 2025 the percentage of Colombian municipalities meeting service interruption-duration (DIU) and frequency (FIU) standards increased, while significant performance gaps persisted in rural areas and the Caribbean region [9]. That coexistence matters: aggregate grid improvement can sit alongside sharply different customer experiences by territory, service and segment.

This territorial variation reinforces an essential design caution: customer-impacting decisions should not be automated at scale before comparable definitions, metrics and accountabilities are in place across operating companies. An integrated group needs a common corporate language for experience while preserving the local operational context that explains why the same customer journey produces different territorial outcomes.



“ For the customer, service quality is never the national average; it is the latest event that affected their home or business and the clarity with which it was explained and resolved.

6.

Useful AI starts with authorized knowledge and explicit accountability

Colombia approved its National Artificial Intelligence Policy (CONPES 4144) in February 2025, establishing more than 100 actions through 2030 with an explicit mandate for ethical, transparent and responsible adoption [8]. In parallel, the Superintendence of Industry and Commerce (SIC) issued External Circular 002 of 2024 on personal data processing in AI systems and its April 2025 legal guidance on AI in consumer services, reiterating mandatory principles of transparency, privacy, security, differential risk management and human accountability [6][7]. For an integrated utility, this regulatory perimeter rules out any black-box assistant that 'learns from everything.' System architecture must define explicit processing purposes, authorized knowledge sources, end-to-end traceability, human escalation rules and continuous behavior monitoring.

The promise of AI in utility customer operations is not to replace regulated judgment. It is to reduce search, classification and case-preparation effort while leaving trained specialists to validate sensitive decisions. That boundary is decisive in billing complaints, collections, service disconnections, reconnections, payment financing and any interaction with material legal or economic consequences for the user.

Figure 2

End-to-end context continuity chain



Value is lost whenever each organizational stage optimizes its own local handling time but fails to preserve context across the handoff (NTT DATA qualitative synthesis based on [3][5][6]).



7.

Why it is difficult, and why the economics of friction cross P&L boundaries

Building continuity of trust across an integrated utility is structurally complex for five reasons:

1

Asymmetric customer and asset identity

Account holder, bill payer, actual service user and physical property may be different people or legal entities across electricity, gas and water contracts.

2

Heterogeneous business rules

Each regulated service retains its own tariff rules, service catalogs, metering cadences and billing cycles.

3

Mismatched data granularity and cadence

Real-time or near-real-time operational outage and metering events arrive at a different granularity and tempo from commercial CRM records.

4

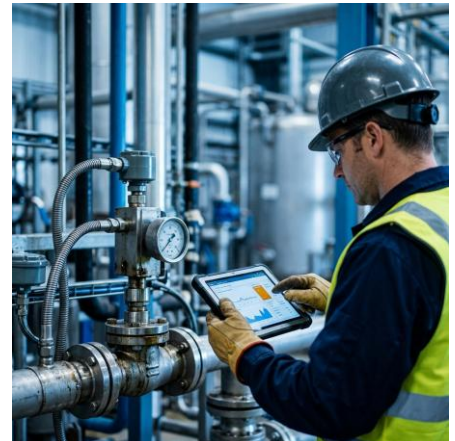
Evidentiary burden of explanation

Regulatory due process requires understandable language backed by verifiable meter, field or billing evidence, not a probabilistic prediction.

5

Multi-entity governance

A corporate utility group requires common service standards without blurring the distinct legal accountability of each licensed operating company.



This explains why wholesale platform replacement is not the right starting point. A utility can preserve valid core transactional systems and build an incremental common layer for identity, events, knowledge and case tracking. The governing architectural criterion should be continuity of context, not technological uniformity for its own sake.



Furthermore, the economics of friction rarely appear in financial statements as the cost of an incomplete journey. Its effects are distributed across departments that do not share a single P&L: abandonment during contracting or self-service, incomplete payments, repeated customer contacts, back-office referrals, manual billing corrections, avoidable field truck rolls, specialist review time, regulatory penalty exposure and resolution delays. Each functional area may meet its local SLA while the end-to-end customer journey remains slow, opaque or repetitive. Transformation must therefore measure the cost and outcome of the complete journey, not only cost per contact channel or raw PQRS volume.

The business case should never rest on a generic promise of customer satisfaction or assume unproven causal links. Each priority journey must connect experience improvement with observable operational outcomes: completion of contracting or payment, total time to resolution, channel abandonment, internal re-routing, incomplete case files, classification errors, digital adoption and recurrence, repeat contacts for the same root cause, and statutory deadline compliance. From a verified baseline, directional impact on cost to serve, agent productivity, collections, regulatory risk or retention can be estimated, recognizing that fewer contacts do not automatically imply higher collections unless verified with journey-specific attribution.

This discipline reverses the traditional order of investment: first identify the journey and the operational cause that destroys value; next define the minimum context contract required to resolve it; and only then decide what process change, data integration, workflow automation or AI model is justified.

8.

Four structural tensions specific to an integrated utility

These structural tensions explain why commercial transformation cannot belong solely to the CIO, Commercial or Customer Experience teams. It requires a joint governance forum bringing together field operations, billing, customer service, data, enterprise architecture, legal and business units. The CIO provides the capability to connect domains and enforce architectural controls; the business and operational owners provide domain semantics, statutory accountability and the definition of resolution success.

Structural Tension	Risk if Managed Separately	Target Design Response
Service vs. relationship	Each utility product optimizes its own vertical process, forcing the customer to repeat identity, context and documentary evidence.	Linked cross-service identity and unified case tracking without erasing each operating provider's legal accountability.
Operations vs. commercial	The technical grid or field event closes operationally before the bill, customer channel and service case reflect its financial or status effect.	Common event model, shared lifecycle statuses and automated cross-domain propagation rules.
Standardization vs. territory	A uniform corporate policy ignores material differences in local grid topology, channel access, rurality and applicable regulation.	Common group-wide context standards paired with local operational parameters and territorial ownership.
Automation vs. due process	Front-line response speed increases without improving explanation quality, evidentiary traceability or the user's statutory right to challenge.	Traceable AI assistance, explicit human validation controls, and sensitive regulated decisions kept outside autonomous execution.

Table 3. Four structural design tensions in integrated multi-service utilities and their architectural resolution.

C. Implications and scenarios

For executive committees, the strategic choice is not between 'digital' and 'non-digital' channels. It is deciding how far cross-domain coordination should go. The four-level maturity ladder below distinguishes comparable operating positions and isolates where sustainable value is created.



Figure 3 / Table 4. Four-level continuity-of-trust maturity ladder. The decisive leap occurs between connecting a single journey (Level 2) and sharing the operational and commercial context required to resolve it (Level 3). Source: NTT DATA qualitative assessment.

Recommended executive direction

Consolidate Level 3 (Common context) across two high-volume, high-friction journeys—one reactive and one planned—and test Level 4 (Trust orchestration) elements only where authorized knowledge sources, evidentiary traceability and explicit escalation criteria already exist. Moving directly to a generative AI assistant without a common context contract risks accelerating the wrong answer.

D. NTT DATA point of view

Govern customer experience with the same discipline as operational continuity

At NTT DATA, our view is that the customer experience of an integrated utility should be governed with the same engineering and managerial discipline as grid operational continuity, not because a customer conversation is identical to operating a substation or pipeline, but because both depend on reliable information, explicit accountabilities and the ability to recover cleanly when something fails.

The starting point is a continuity-of-trust operating model applicable across the full commercial lifecycle: correctly recognize who is interacting and in what authority role, retrieve authorized operational and billing context, enable the transaction to be completed, explain the outcome with verifiable evidence, and return structured learning to the process that generated the friction. This sequence prevents omnichannel, Customer 360, analytics and AI from fragmenting into isolated technology initiatives. It also makes business benefits observable: more completed transactions, lower abandonment and repetition, faster resolution, higher digital adoption and fewer avoidable escalations to supervisory channels. Because these represent directional deltas, every deployment requires a validated local baseline before quantitative targets are committed.

Artificial intelligence should enter precisely where work is classifiable and verifiable: authorized knowledge retrieval, interaction history summarization, preliminary PQRS classification and draft response preparation. The responsible approach is to design bounded pilots with explicit data contracts, quality criteria and human controls, without importing unverified metrics from other geographies into the local regulatory context.

For an anchor urban market such as Medellín and integrated Colombian utilities more broadly, the value of this approach is institutional as well as economic. A public-service utility must be able to demonstrate why a recommendation or billing adjustment was produced, what operational and metering information it used, who validated it and how any error was corrected. Continuity of trust protects institutional legitimacy with the citizen while reducing internal operational friction. That balance, rather than channel novelty, should govern capital allocation.



What NTT DATA brings: six integrated transformation capabilities

NTT DATA's contribution is not to sell an isolated channel, CRM license, data lake or standalone conversational assistant. NTT DATA orchestrates end-to-end transformation programs connecting commercial strategy, customer journeys, Customer 360, operating processes, enterprise architecture, data governance, omnichannel contact centers, responsible AI and business adoption. NTT DATA's Utilities practice combines integrated digital platforms, operational data and intelligent systems to bridge grid operations and systems of engagement, complemented by global Customer Experience and omnichannel contact-center capabilities [11][12]. Within our BizTalks Utilities framework on customer orientation with business impact, five core levers structure this integration: Voice of Customer (VoC), journey analytics, closed-loop processes, CX governance and direct alignment with business strategy [10].



1. Direction, prioritization and verifiable value case

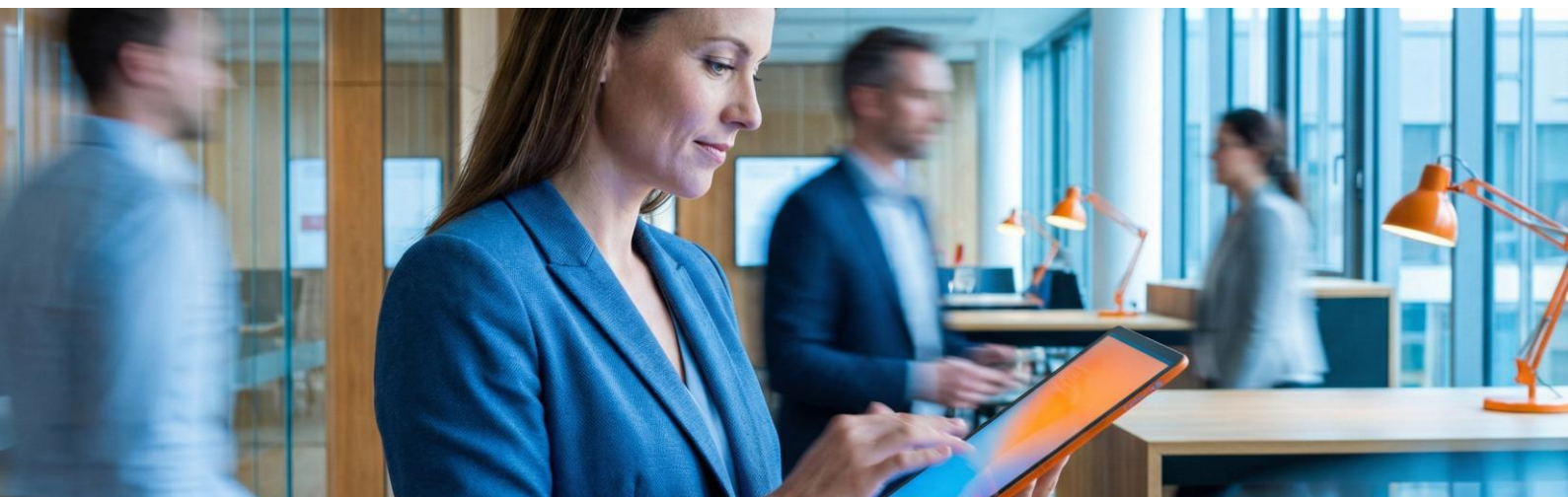
NTT DATA helps executive committees translate a broad customer-transformation ambition into a disciplined portfolio of decisions. The work begins with a verifiable North Star: which specific journey, which customer population, which source of friction and which operational or regulatory outcome is expected to move. From there, the baseline is established, the main pools of effort and legal risk are quantified, and a business case is structured with directional benefits, total costs, architectural dependencies and explicit stop criteria.

The deliverable is not a catalog of software tools. It is a prioritized opportunity map with two selected journeys, explicit value hypotheses, named business owners and a transparent scoring model covering economic impact, technical feasibility, regulatory risk and cross-service reuse. This enables the executive committee to decide where to invest now, what to defer and what baseline data must be captured before committing to large-scale rollout.

2. End-to-end journey and operating-model redesign

For the selected priority journeys, NTT DATA maps the actual path from initial customer intent to final confirmation and root-cause learning, spanning contracting, payments, financing arrangements, account changes, self-service, outage/incident reporting and PQRS resolution. The diagnostic examines workflow steps, regulated decisions, back-office queues, internal re-routing, IT systems, documentary evidence, statutory deadlines and process owners to pinpoint exactly where context is lost, work is duplicated, transactions are abandoned or local functional SLAs mask poor end-to-end outcomes.

The target redesign defines what must be resolved at the front line, what requires specialized back-office intervention, what minimum context package must travel with the case, and what operational event must return to field or billing teams. It also establishes clear governance: who owns the end-to-end journey, who owns the data contract, who is accountable for the regulated decision and who drives continuous improvement [\[10\]](#).



3. Customer 360, common context contract and incremental architecture

The third capability builds a Customer 360 view engineered to execute journeys rather than merely display screens. NTT DATA defines master sources of truth for individuals, corporate entities, properties, contracts, services, authorized representatives and data-processing consents; establishes identity-resolution and deduplication rules; sets data-quality and latency controls; and enforces profile-based access permissions. On that foundation, a formal context contract is specified encompassing the operational event, bill, payment status, service case, authorized knowledge article and transaction state. A unified relationship experience can thus operate across multiple existing core systems provided they share the context required to complete each journey.

The resulting deliverable is an incremental Customer 360 and integration blueprint detailing data domains, authorized sources, matching rules, update cadences, permissions, audit traceability and domain ownership. The architecture prioritizes reuse through APIs, event brokers and shared data services so that the same resolved identity and context model serves contracting, billing inquiries, self-service and contact-center agents without forcing premature core-system replacement [11].

4. Voice of Customer (VoC) and operational closed loop

Listening to customers produces little value if signals end in a passive dashboard. NTT DATA designs a unified friction taxonomy, consolidates signals across post-interaction surveys, formal PQRS complaints, digital channels and field operations, and establishes an operational closed loop with explicit prioritization and escalation rules. Every recurring insight is converted into a corrective action, a named owner, a target deadline and an outcome verification.

This governance connects individual case resolution with systemic root-cause elimination: customer service closes the immediate case; the continuous-improvement team isolates the recurring operational or billing trigger; grid operations, metering, billing or product teams fix the upstream source; and the executive committee tracks whether repeat contact, resolution cycle time and regulatory escalation rates actually decline [10].



5. Assisted automation, modern contact center and omnichannel continuity

Once context and authorized knowledge are governed, NTT DATA modernizes channel execution and automates bounded tasks across self-service, contact center and back office: retrieving customer history, summarizing multi-touch cases, performing preliminary PQRS classification, recommending verified knowledge articles, drafting compliant responses and routing complex cases. Self-service channels are engineered so customers can complete transactions end-to-end and receive verifiable confirmation. When human escalation is required, the channel handoff preserves verified identity, submitted documents, permissions, transaction progress and operational evidence [12].

Automation and AI are governed by four explicit boundaries: (1) which tasks are AI-assisted versus strictly human-decided; (2) which authorized knowledge sources each assistant may query and how currency is validated; (3) which regulated decisions require formal explanation, supervisory review or user right-to-challenge; and (4) how front-line adoption is embedded. Contact-center agents, back-office specialists and process owners participate directly in testing, know when to rely on a system recommendation and have a frictionless mechanism to flag and correct errors. Every MVP logs input, recommendation, supporting evidence, human validation action and final case outcome for full regulatory auditability.

6. Data and AI governance, business adoption and journey-by-journey scaling

Sustaining value requires institutionalizing governance across business units, customer experience, enterprise architecture, data management, cybersecurity, legal/compliance and operations. NTT DATA establishes an official inventory of AI-assisted decisions, data-source stewards, quality controls, human escalation thresholds, model-drift monitoring, incident response protocols and a monthly review cadence balancing economic value and compliance risk.

Business adoption is managed as a core precondition for value realization. NTT DATA combines workflow redesign, specialist co-design, role-specific training, floor support during early rollout, knowledge lifecycle management and an operational champions network tracked via behavioral and outcome metrics. In digital self-service, primary metrics include transaction completion rate, abandonment, repeat usage and subsequent contacts for the same issue; in assisted AI, metrics track agent adoption, recommendation acceptance versus correction rates, handling/preparation time saved, response quality compliance and exception rates. True scaling means proving the operating model in two priority journeys and reusing the validated context contracts, integration components and governance controls in subsequent journeys, never multiplying disconnected pilots.

A six-week diagnostic with concrete decision products

To move from strategy to disciplined execution without premature platform commitments, NTT DATA proposes a structured six-week Customer Operations diagnostic. At the end of week six, the executive committee can answer five decisive questions with empirical evidence: which specific friction will be addressed first, which baseline metric governs success, what minimum context contract must be preserved across systems, which tasks technology may safely assist, and what verified evidence package will justify scaling. Where any of those prerequisites remains unverified, the disciplined executive decision is to establish the context foundation before automating.

Week	Core Diagnostic Workstream	Executive Decision Product / Deliverable
● Week 1	Align executive ambition, select two candidate journeys (one reactive, one planned) and confirm domain owners.	Approved diagnostic mandate, journey scope, success criteria and cross-functional governance charter.
● Week 2	Construct quantitative baseline and map actual end-to-end journey execution across channels, queues and systems.	Baseline metrics pack, handoff pain points, queue/re-routing map and regulatory exposure hotspots.
● Week 3	Analyze operational root causes of friction and specify the minimum cross-domain context contract.	Unified friction taxonomy, minimum context data contract, master source inventory and integration gap assessment.
● Week 4	Design target TO-BE operating workflow, human/regulatory controls and incremental reference architecture.	Redesigned process specification, API/event integration blueprint, data governance rules and AI boundary controls.
● Week 5	Prioritize assisted-resolution use cases and quantify directional value, cost and implementation effort.	Baseline-anchored directional business case, risk mitigation matrix and prioritized 90-day MVP backlog.
● Week 6	Agree bounded 90-day pilot scope, execution roadmap, RACI accountability and outcome measurement model.	90-day pilot execution plan, cross-domain RACI, audit control checklist and formal Go / No-Go stage gate criteria.

Figure 4 / Table 5. Six-week Customer Operations diagnostic sequence and weekly executive decision products. Source: NTT DATA positioning [10][11][12].

E. What leaders should do

Five immediate leadership actions to establish continuity of trust

01 **Select two anchor journeys with distinct volumes and regulatory consequences**

Pair one high-friction reactive journey (such as a billing dispute, disconnection claim or damage complaint) with one high-value planned journey (such as a new service connection, payment financing arrangement or contract modification).

02 **Anchor the baseline around five end-to-end journey measures**

Track repeat contact for the same root cause, end-to-end time to resolution, internal reclassification or re-routing volume, digital transaction completion rate, and proportion of cases escalated to regulatory or supervisory channels (including CREG commercial-quality and positive-administrative-silence exposure).

03 **Enforce a minimum cross-domain context contract**

Standardize the nine mandatory data elements that must travel intact across every channel and departmental handoff: verified identity, property/premise, utility service, operational event, bill/account state, data consent, authorized knowledge used, accountable owner and current resolution status.

04 **Separate AI assistance from regulated decision-making**

Deploy AI to search authorized repositories, summarize interaction history, classify incoming cases and draft responses; keep decisions with contractual, billing, service-continuity or statutory due-process consequences under explicit business rules, full evidentiary traceability and human sign-off.

05 **Institutionalize a monthly closed-loop governance cadence**

Connect Voice of Customer and PQRS analytics directly with grid operations, metering and billing leadership, closing every root-cause initiative only when a named owner verifies observed reductions in repeat friction and residual regulatory risk.



Four questions for the executive committee

Question 1

Cross-company context loss

In which specific customer journey does our utility group currently lose the most operational and commercial context between one operating company, business unit or service channel and another?

Question 2

Evidentiary explainability

Which customer-facing service, billing or collections decisions cannot be explained clearly today using the data immediately available to our front-line agents and digital channels?

Question 3

Operational vs. channel root causes

Where does high repeat contact or Te Resuelvo escalation reveal an upstream operational, metering or billing break rather than a front-end channel design problem?

Question 4

Stage-gate scaling evidence

What verifiable economic, operational and regulatory-compliance outcomes must a 90-day pilot demonstrate to justify scaling across additional journeys and utility services?

Proposed next step & stage-gate governance

Launch a six-week Customer Operations diagnostic to select two priority journeys, establish the empirical baseline, map cross-domain context breaks and design a 90-day assisted-resolution MVP with built-in data and AI controls. The decision to scale after the pilot must never depend on a technology demo: it should require a minimum evidence package demonstrating observed reductions in repeat contact and internal re-routing, faster end-to-end resolution, a higher share of cases with complete context, verified classification quality, full regulatory control compliance and positive operational adoption by front-line and back-office teams.

Bibliography

Research cut-off: 5 October 2026 | All external regulatory, supervisory and positioning sources verified and accessed 5 October 2026.

[1] Superintendencia de Servicios Públicos Domiciliarios — Superservicios (March 2026). Informe de Canales de Atención — Vigencia Segundo Semestre 2025 (2025 full-year Te Resuelvo supervisory channel and positive administrative silence statistics). <https://www.superservicios.gov.co/sites/default/files/2026-03/Informe-de-canales-de-atencion-vigencia-segundo-semester-2025.pdf>

[2] Superintendencia de Servicios Públicos Domiciliarios — Superservicios (12 March 2026). Gobierno Nacional prepara nuevo régimen para proteger a usuarios de los servicios de energía y gas (2025 service-provider complaint totals and 70/30 gas-electricity split). <https://www.superservicios.gov.co/Sala-de-prensa/noticias/gobierno-nacional-prepara-nuevo-regimen-para-protoger-usuarios-de-los-servicios-de-energia-y-gas>

[3] Comisión de Regulación de Energía y Gas — CREG (2024). Proyecto de Resolución CREG 701 038 de 2024: Indicadores de calidad comercial del servicio de energía eléctrica, reporte trimestral SUI y factor de ajuste al margen operacional de comercialización. https://gestornormativo.creg.gov.co/gestor/entorno/docs/resolucion_creg_701-38_2024.htm

[4] Comisión de Regulación de Energía y Gas — CREG (30 December 2025). Circular CREG 223 de 2025: Proceso por etapas para la modernización del régimen de protección al usuario de energía eléctrica y gas combustible. https://gestornormativo.creg.gov.co/gestor/entorno/docs/originales/Circular_CREG_223_2025/

[5] Congreso de la República de Colombia (1994). Ley 142 de 1994: Por la cual se establece el régimen de los servicios públicos domiciliarios y se dictan otras disposiciones. Gestor Normativo de Función Pública. https://www1.funcionpublica.gov.co/eva/gestornormativo/norma_pdf.php?i=2752

[6] Superintendencia de Industria y Comercio — SIC (21 August 2024). Circular Externa 002 de 2024: Lineamientos sobre el tratamiento de datos personales en sistemas de inteligencia artificial. <https://sedeelectronica.sic.gov.co/transparencia/normativa/circular-externa-2-de-2024-de-la-superintendencia-de-industria-y-comercio-lineamientos-sobre-el-tratamiento-de-datos>

[7] Superintendencia de Industria y Comercio — SIC (16 April 2025). Lineamientos sobre el uso de inteligencia artificial en servicios de atención al consumidor (Boletín Jurídico / Concepto). <https://sedeelectronica.sic.gov.co/publicaciones/boletin-juridico/concepto/lineamientos-sobre-uso-de-inteligencia-artificial-en-servicios-al-consumidor>

[8] Departamento Nacional de Planeación — DNP (14 February 2025). Documento CONPES 4144: Política Nacional de Inteligencia Artificial — Hoja de ruta de Colombia hacia el 2030. <https://dnp.gov.co/publicaciones/Planeacion/Paginas/conpes-4144-hoja-de-ruta-colombia-inteligencia-artificial-retos-actuales-transformacion-futura.aspx>

[9] Superintendencia de Servicios Públicos Domiciliarios — Superservicios (8 July 2026). Superservicios reporta mejoras en la calidad del servicio de energía (2025 municipal continuity compliance and territorial gap assessment). <https://www.superservicios.gov.co/Sala-de-prensa/noticias/superservicios-reporta-mejoras-en-la-calidad-del-servicio-de-energia>

[10] NTT DATA BizTalks Utilities (27 April 2026). Customer Orientation with Business Impact: Voice of Customer, Journey Analytics, Closed-Loop Processes and CX Governance in Utilities. NTT DATA Utilities Practice Positioning.

[11] NTT DATA BizTalks (2026). Utilities — Gas & Power: How We Help (Integrated digital platforms, operational data and customer engagement). <https://www.biztalksnttdata.com/industry/utilities-gas-power/>

[12] NTT DATA Group (2026). Customer Experience and Omnichannel Services (End-to-end journey transformation and modern contact-center capabilities). <https://www.nttdata.com/global/en/services/cx-digital-products/customer-experience-omnichannel>

