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Spinek: A Design-Science Case Study of an Integrated, Locally Hosted CRM–Contact Center Platform for Managed ICT Service Delivery in Saudi Arabia

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Abstract

Managed ICT service providers in Saudi Arabia operate in a market that is expanding rapidly under Vision 2030 while being shaped by increasingly specific expectations on data residency, service-level accountability and measurable customer experience (CX). In practice, providers of managed contact center and customer-care services frequently deliver their operations across fragmented tool chains — a contact-center-as-a-service (CCaaS) engine for interaction handling, a separate CRM for case management, and disconnected analytics and reporting layers — which limits end-to-end visibility of service-level agreements (SLAs), operational-level agreements (OLAs) and the customer journey. This paper reports a design-science research (DSR) study of Spinek, an in-house platform developed by AlasilaCX that integrates CRM/ticketing, omnichannel contact center orchestration, knowledge management, SLA/OLA governance and analytics on a cloud environment hosted within the Kingdom. Following the DSR process model, we derive eight design requirements from the problem space, describe the resulting five-layer platform architecture and its managed-service operating model (informed by the reporting, dashboard and business-review practices of the COPC CX Standard), and evaluate the artefact qualitatively against the requirements. We further propose a KPI measurement framework to enable subsequent quantitative evaluation. The study contributes (i) a set of design principles for integrated managed-service platforms in regulated, data-sovereign environments, (ii) a documented reference architecture, and (iii) a practical evaluation instrument for providers and public-sector buyers. Limitations of the single-case design and a research agenda — including AI-assisted quality management and predictive engagement — are discussed.

Keywords: managed ICT services; contact center as a service; CRM; SLA/OLA governance; data residency; design-science research; customer experience; Saudi Arabia

الملخص

سباينك: دراسة حالة بمنهجية بحوث علوم التصميم لمنصة متكاملة مستضافة محليًا لإدارة علاقات العملاء ومركز الاتصال في تقديم الخدمات المدارة لتقنية المعلومات والاتصالات في المملكة العربية السعودية

يعمل مقدمو الخدمات المدارة لتقنية المعلومات والاتصالات في المملكة العربية السعودية في سوق يتوسع بسرعة في ظل رؤية 2030، ويتشكّل في الوقت ذاته بفعل توقعات متزايدة التحديد بشأن توطين البيانات، والمساءلة عن مستويات الخدمة، وقابلية تجربة العملاء (CX) للقياس. وعمليًا، كثيرًا ما يقدّم مقدمو خدمات مراكز الاتصال ورعاية العملاء المدارة عملياتهم عبر سلاسل أدوات مجزأة: محرك لمركز الاتصال كخدمة (CCaaS) لمعالجة التفاعلات، ونظام منفصل لإدارة علاقات العملاء لإدارة الحالات، وطبقات تحليل وتقارير غير مترابطة؛ وهو ما يحدّ من الرؤية الشاملة لاتفاقيات مستوى الخدمة (SLA) واتفاقيات المستوى التشغيلي (OLA) ورحلة العميل.

تعرض هذه الورقة دراسة قائمة على منهجية بحوث علوم التصميم (DSR) لمنصة «سباينك»، وهي منصة طوّرتها شركة الحلول الأصيلة المحدودة داخليًا، وتدمج إدارة علاقات العملاء والتذاكر، وتنسيق مركز الاتصال متعدد القنوات، وإدارة المعرفة، وحوكمة اتفاقيات مستوى الخدمة والمستوى التشغيلي، والتحليلات، على بيئة سحابية مستضافة داخل المملكة. وباتباع نموذج عملية بحوث علوم التصميم، نستخلص ثمانية متطلبات تصميم من فضاء المشكلة، ونصف المعمارية الناتجة المكوّنة من خمس طبقات ونموذج التشغيل الخاص بالخدمات المدارة (المستنير بممارسات التقارير ولوحات المتابعة ومراجعات الأعمال في معيار COPC لتجربة العملاء)، ونقيّم المنتج تقييمًا نوعيًا مقابل المتطلبات. كما نقترح إطارًا لقياس مؤشرات الأداء الرئيسة يمهّد لتقييم كمي لاحق.

تسهم الدراسة بما يلي: (1) مجموعة من مبادئ التصميم للمنصات المتكاملة للخدمات المدارة في البيئات المنظَّمة ذات السيادة على البيانات، (2) معمارية مرجعية موثقة، (3) أداة تقييم عملية لمقدمي الخدمات والمشترين في القطاع العام. وتناقش الورقة حدود تصميم الحالة الواحدة، وأجندة بحثية تشمل إدارة الجودة المدعومة بالذكاء الاصطناعي والمشاركة التنبؤية.

الكلمات المفتاحية: الخدمات المدارة لتقنية المعلومات والاتصالات؛ مركز الاتصال كخدمة؛ إدارة علاقات العملاء؛ حوكمة اتفاقيات مستوى الخدمة والمستوى التشغيلي؛ توطين البيانات؛ بحوث علوم التصميم؛ تجربة العملاء؛ المملكة العربية السعودية

1. Introduction

The Saudi ICT services market has grown into one of the largest in the Middle East, propelled by the national transformation agenda of Vision 2030 and by the digital-government programmes coordinated by the Digital Government Authority. A defining feature of this growth is the shift from project-based technology procurement towards managed services, in which a provider assumes ongoing responsibility for operating a business capability — most visibly customer care and contact center operations — against contractually defined service levels.

For government entities and large enterprises, outsourcing the customer-facing front line raises three intertwined concerns. First, accountability: the buyer needs continuous, verifiable evidence that SLAs and the internal OLAs that support them are being met. Second, sovereignty: interaction records, recordings and personal data must be processed and stored in accordance with the Personal Data Protection Law (PDPL) and sector cloud regulations, which in practice favours hosting within the Kingdom. Third, experience quality: the buyer expects the provider to manage the customer journey to recognised standards such as the COPC Customer Experience Standard, not merely to answer calls.

Providers have typically met these expectations by assembling best-of-breed components: a CCaaS engine for routing and voice, a commercial or bespoke CRM for ticketing, workforce and quality tools, and business-intelligence dashboards. The resulting tool chain is powerful but fragmented. Agents toggle between systems; SLA clocks live in one product while interaction evidence lives in another; and governance reporting is reconstructed after the fact. The literature on digital transformation and customer-journey management identifies exactly this integration gap as a barrier to measurable CX improvement (Lemon & Verhoef, 2016; Verhoef et al., 2021).

This paper studies how a Saudi managed-service provider addressed the gap by designing its own integration platform. Spinek is an in-house CRM and service-management platform developed by AlasilaCX, a Riyadh-based CX consultancy and managed contact center operator. Spinek was designed to sit at the centre of the provider's managed-service stack — integrating with CCaaS engines, analytics suites and third-party systems — and to be hosted on a cloud region within the Kingdom so that client data remains in-country. The platform's name and identity were registered as a trademark with the Saudi Authority for Intellectual Property (SAIP) in 1447H (2026) in Nice Class 42, which protects the company's rights in the Spinek name and mark.

We adopt design-science research (DSR) as the methodological lens (Hevner et al., 2004; Peffers et al., 2007) and structure the paper around the following research questions:

- **RQ1.** What design requirements must an integrated managed-service platform satisfy in the Saudi public-sector and enterprise context?
- **RQ2.** How can these requirements be realised architecturally in a locally hosted CRM–contact center platform?
- **RQ3.** To what extent does the resulting artefact satisfy the requirements, and how should its operational impact be measured?

The remainder of the paper is organised as follows. Section 2 reviews the background and related work. Section 3 presents the research methodology. Section 4 analyses the problem space and derives design requirements. Section 5 describes the Spinek artefact. Section 6 evaluates it against the requirements and

proposes a KPI framework. Section 7 discusses contributions and limitations, and Section 8 concludes with a research agenda.

2. Background and Related Work

2.1 Managed ICT services and service management

A managed ICT service is a business or technology capability that a provider operates on behalf of a client on a continuing basis, under agreed service levels, with the provider owning the people, processes and tooling required. Contemporary service-management frameworks — ITIL 4 (AXELOS, 2019) and ISO/IEC 20000-1:2018 — frame this relationship as a value co-creation system in which the provider must demonstrate service performance transparently. Two constructs are central: the service-level agreement (SLA) between provider and client, and the operational-level agreement (OLA) between internal teams that together deliver the SLA. In outsourced customer-care settings, SLAs typically specify answer speed, abandonment, first-contact resolution and quality scores; OLAs cover the back-office handoffs (for example, ticket escalation to a client's technical team) that determine whether the SLA can be honoured.

2.2 The convergence of CCaaS and CRM

Contact center as a service (CCaaS) delivers routing, IVR, voice and digital channels, workforce engagement and analytics from the cloud. CRM systems, by contrast, hold the case, customer and knowledge records that give an interaction its business meaning. The two categories are converging: CCaaS vendors add lightweight case management, and CRM vendors add telephony connectors. However, in managed-service delivery the provider frequently needs a client-agnostic system of record that sits above whichever CCaaS engine a client mandates, captures the interaction evidence (call logs, recordings, transcripts), and governs SLAs consistently across clients. This ‘provider-side integration layer’ is comparatively under-documented in the research literature, which tends to study CRM adoption from the buyer's perspective.

2.3 Customer experience standards: COPC

The COPC Customer Experience (CX) Standard for Customer Operations (COPC Inc., n.d.) is the most widely used performance-management standard in outsourced customer operations. It prescribes a management system built on leadership and planning, process control, people management and performance measurement, and it requires operators to demonstrate that metrics are collected accurately, reviewed at defined cadences and acted upon. AlasilaCX structures its managed contact center operating model with reference to this standard, using a cycle of comprehensive periodic reporting, live dashboards and face-to-face business reviews. A platform intended to support such an operating model therefore has to make metric collection and review a native capability rather than an afterthought. This paper makes no claim of COPC certification; the standard is used as a design reference.

2.4 The Saudi regulatory and policy context

Several national instruments shape how managed CX services may be delivered in the Kingdom. The Personal Data Protection Law (Royal Decree M/19 of 1443H, as amended by Royal Decree M/148 of 1444H) regulates the processing of personal data, including cross-border transfer, and places direct obligations on controllers and processors — a category that includes managed contact center operators. The Communications, Space and Technology Commission's Cloud Computing Service Provisioning Regulations govern cloud service provision in the Kingdom. The National Cybersecurity Authority's Essential Cybersecurity Controls

(ECC-2:2024) set baseline controls for national organisations and, by contractual flow-down, for their service providers. Taken together, these instruments create a strong preference — and in many contracts a requirement — for service platforms hosted in-Kingdom and designed with explicit reference to data-protection and cybersecurity obligations. In this paper these instruments are treated as sources of design requirements; conformance assessment or certification against them is outside the study's scope.

2.5 Research gap

Prior work on CRM and contact center technology has largely examined either buyer-side adoption and CX outcomes or vendor-side product capabilities. There is little published, methodologically explicit account of how a managed-service provider in a data-sovereign regulatory environment designs a provider-side integration platform, what requirements drive that design, and how such an artefact should be evaluated. This study addresses that gap with a documented DSR case.

3. Research Methodology

We follow the design-science research methodology (DSRM) process model of Peffers et al. (2007), which comprises six activities: problem identification and motivation, definition of solution objectives, design and development, demonstration, evaluation, and communication. The artefact studied — the Spinek platform — was developed by AlasilaCX as part of its ongoing research, development and innovation programme; this paper documents the design reasoning and evaluation (Figure 1). The evaluation activity is framed as a single embedded case study (Yin, 2018), with the provider as the case and the service deployments observed during the study period as embedded units of observation.

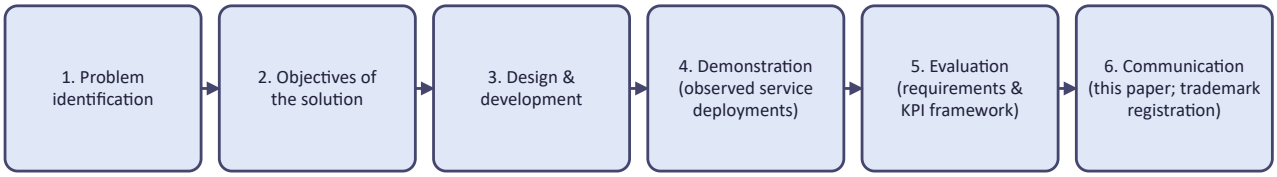

Figure 1. DSR process followed in this study (adapted from Peffers et al., 2007).

3.1 Evidence base

Table 1 lists the evidence base. Because this is an artefact-centred study, the primary sources are the platform itself and its design documentation; secondary sources are the company's service documentation and the public regulatory and standards instruments.

#	Source	Type	Use in the study
S1	Spinek platform (current build) and its functional documentation	Artefact	Description of capabilities and architecture (Section 5); requirements traceability (Section 6)
S2	AlasilaCX corporate service documentation (contact center, CCaaS, CX technology, managed services, CX consultancy)	Internal document	Operating-model description; problem framing
S3	Internal design and architecture review records from platform iterations	Internal document	Reconstruction of design decisions and principles

#	Source	Type	Use in the study
S4	SAIP trademark registration certificate TM-01-00-59529-25 (Spinek, Class 42)	Official record	Artefact identity, IP ownership, declared scope of services
S5	Regulatory and standards instruments: PDPL, CST Cloud Computing Service Provisioning Regulations, NCA ECC, COPC CX Standard, ITIL 4, ISO/IEC 20000-1	Public document	Derivation of external design requirements
S6	Practitioner observation of the service deployments in which the platform was used during the study period	Observation	Qualitative evaluation; identification of the KPI framework

Table 1. Evidence base.

3.2 Analysis

Requirements were derived by thematic coding of the problem descriptions in S2, S3 and S6 and cross-referenced with the obligations in S5, producing the requirement set in Section 4. Architecture description followed a layered decomposition of S1. Evaluation used requirements traceability (each requirement mapped to the platform features that satisfy it) complemented by qualitative practitioner judgement. Consistent with the DSR knowledge-contribution framework of Gregor and Hevner (2013), the outputs are positioned as an ‘improvement’ contribution — a new solution to a known problem — expressed as a reference architecture and nascent design principles.

3.3 Rigour and limitations

The study is a single case conducted by the organisation that owns the artefact. Researcher independence is therefore limited, and findings are analytical rather than statistical generalisations. Several safeguards were applied. Requirements were anchored in external, publicly available instruments wherever possible. Evaluation claims are confined to capabilities directly observable in the artefact and its documentation. No quantitative performance results are reported, because no controlled baseline and post-integration measurements were available at the time of writing; the KPI framework in Section 6.3 is proposed precisely so that a subsequent, independently verifiable quantitative evaluation can be conducted. Finally, references to regulatory instruments and standards describe design intent — what the artefact was designed with reference to — and are not claims of conformance assessment, certification or legal compliance, none of which was undertaken as part of this study.

4. Problem Analysis and Design Requirements

Analysis of the evidence base surfaced four recurring problem themes in managed CX delivery: (a) fragmentation of agent tooling and interaction evidence across CCaaS, CRM and analytics products; (b) weak or reconstructed SLA/OLA visibility, especially for handoffs into client back offices; (c) constraints on where and how interaction data — recordings, transcripts, personal data — may be hosted and processed; and (d) the cost and lead time of configuring a new client operation, given that each client brings different forms, workflows, escalation paths and reporting needs. From these themes, and from the regulatory and standards obligations reviewed in Section 2, eight design requirements were defined (Table 2).

ID	Design requirement	Rationale / source
R1	Single agent workspace that presents customer information, interaction history, ticket detail, SLA/OLA status and call/recording data in one view	Fragmentation theme (a); COPC process-control practices
R2	Omnichannel interaction capture across voice, chat, social media, email and SMS, integrated with the client-mandated CCaaS engine	Theme (a); CCaaS–CRM convergence (Section 2.2)
R3	Native SLA and OLA engine with configurable clocks, escalation rules and real-time attainment reporting	Theme (b); ITIL 4 / ISO/IEC 20000-1 service-level management
R4	Configurable ticket lifecycle, dynamic workflow and form builder enabling client onboarding without code changes	Theme (d); managed-service scalability
R5	Integrated knowledge base and bilingual (Arabic/English) user and customer experience	Saudi market context; COPC people and process practices
R6	Hosting on a cloud region within the Kingdom, with role-based access and audit logging, designed with reference to the requirements of PDPL, the CST Cloud Computing Service Provisioning Regulations and NCA ECC	Theme (c); Section 2.4 instruments
R7	Built-in reporting and dashboards supporting periodic reporting and business reviews of the kind prescribed by the COPC CX Standard, with data-warehouse export	COPC performance-measurement practices; theme (b)
R8	Open integration (APIs/connectors) with CCaaS, analytics, workforce and client systems, supporting multi-client operation	Themes (a), (d); provider-side integration layer

Table 2. Design requirements for an integrated managed-service platform.

5. The Spinek Artefact

5.1 Overview and intellectual property

Spinek (Arabic: سباينك) is AlasilaCX's in-house CRM and service-management platform for managed contact center operations. It was conceived as the provider's system of record and governance layer, deliberately independent of any single CCaaS vendor so that it can be deployed above the engine a client mandates. The platform's word-and-device mark was registered with SAIP on 19/09/1447H with protection running from 18/06/1447H to 18/06/1457H. The Class 42 registration (TM-01-00-59529-25) lists services including software as a service, platform as a service, software design and development, hosting, data processing, cloud computing, information-technology and computer-security consultancy, artificial-intelligence consultancy and research, telecommunications-technology consultancy and user-authentication services. The scope stated here is limited to the services enumerated in the certificate.

5.2 Architecture

Figure 2 presents the platform's reference architecture as five layers. The decomposition is analytical: it separates concerns that, in the fragmented tool chains described in Section 4, are typically scattered across products with no shared data model.

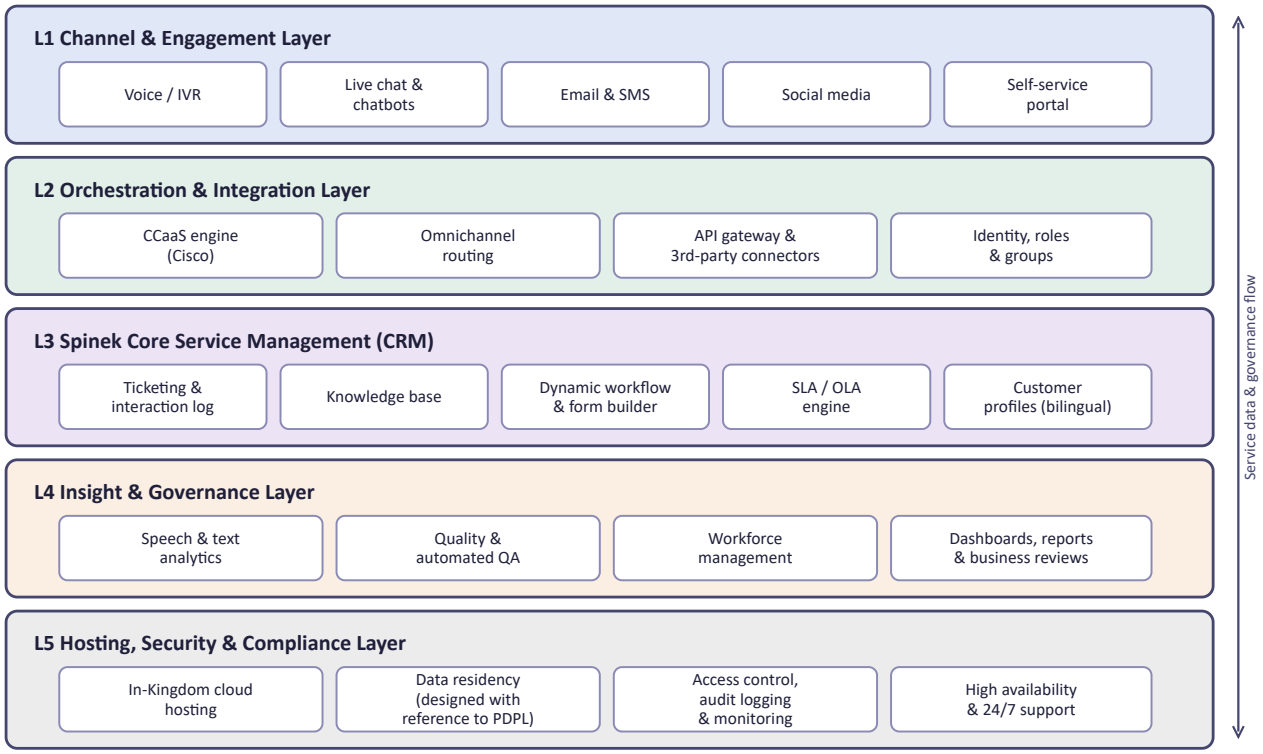

Figure 2. Spinek five-layer reference architecture for managed CX service delivery.

- **L1 – Channel and engagement layer.** Voice and IVR, live chat and chatbots, email, SMS, social media and self-service entry points. Channel handling itself is delegated to the CCaaS engine; Spinek consumes the resulting interaction events.
- **L2 – Orchestration and integration layer.** Connectors to the CCaaS engine (including Cisco, which is used in the provider's operations), omnichannel routing context, an API gateway for third-party integrations, and identity, roles and groups management. This layer implements R2 and R8.
- **L3 – Core service management (CRM).** Ticketing and interaction logging, knowledge base, dynamic workflow and form builder, the SLA/OLA engine, customer profiles and bilingual user management. This is the Spinek system of record and implements R1, R3, R4 and R5.
- **L4 – Insight and governance layer.** Speech and text analytics and quality management (through integration with the provider's analytics and quality-management tools), workforce-management inputs, and the reporting, dashboard and business-review tooling that operationalise the review cycle. This layer implements R7. At present, speech and text analytics and quality management come through integration with the provider's existing tools; native AI-assisted quality management, speech and text analytics and predictive engagement are future work (Section 8).
- **L5 – Hosting, security and compliance layer.** Deployment on the provider's cloud environment hosted within the Kingdom (an Alibaba Cloud Saudi region), data-residency controls, role-based access and audit logging, high availability and 24/7 support. This layer implements R6 at the design level.

5.3 Core capabilities

Table 3 summarises the platform's principal functional capabilities as documented in S1 and S2.

Capability	Description	Layer
Unified ticket view	Ticket detail, SLA charts, customer information, interaction logs, call information and recordings, comments and ticket action log presented in a single screen	L3 / L1
Omnichannel capture	Calls, chat, social media, email and SMS interactions linked to the customer record and ticket	L1 / L2
SLA / OLA management	Service-level and operational-level agreement definitions with real-time attainment indicators on the ticket and in dashboards	L3
Dynamic workflow & form builder	Client-specific ticket types, forms, statuses and routing configured by administrators	L3
Knowledge base management	Structured articles surfaced to agents in context	L3
Users, roles & groups	Role-based access control with group-level assignment and permissions	L2
Customer profiles	Consolidated customer record with history across channels	L3
Bilingual support	Arabic and English interface and content	L3
SMS configuration	Templated outbound notifications tied to ticket events	L1 / L3
Reports & dashboards	Operational and governance reporting; export to data warehouse for business reviews	L4
Third-party integrations	APIs and connectors to CCaaS, analytics and client systems	L2

Table 3. Principal capabilities of the Spinek platform.

5.4 Managed-service operating model

Spinek is not intended as stand-alone software; it is the instrument through which the provider runs a managed service structured with reference to the COPC CX Standard. Three governance artefacts are produced from the platform on a defined cadence. Comprehensive periodic reports give the client a full account of volumes, service levels and quality for the period. Live dashboards expose the same metrics continuously, so that deviations are visible to both provider and client as they occur rather than at month-end. Structured business reviews use the reports and dashboards to agree corrective actions and improvement targets. Because the SLA/OLA engine and the interaction evidence live in the same system, the provider can demonstrate — not merely assert — attainment, and can trace a missed service level to a specific handoff or queue.

5.5 Design principles

Reflecting on the design decisions recorded in S3, we articulate five principles that shaped the artefact and that we propose as transferable to other provider-side platforms:

- **DP1 – Engine independence.** Treat the CCaaS engine as a replaceable component; keep the system of record and governance logic in a provider-owned layer.

- **DP2 – Evidence adjacency.** Store SLA/OLA state alongside the interaction evidence (logs, recordings, transcripts) so that attainment is auditable from the ticket itself.
- **DP3 – Configuration over customisation.** Onboard each client through workflow, form and SLA configuration rather than code, to keep multi-client operation economical.
- **DP4 – Sovereignty by default.** Host in-Kingdom, enforce role-based access and audit logging, and design data flows so that no personal data must leave the jurisdiction to deliver the service.
- **DP5 – Governance as a product feature.** Make the reports, dashboards and review packs that the operating model requires a native output of the platform.

6. Evaluation

6.1 Requirements traceability

Table 4 maps each design requirement to the platform capabilities that satisfy it and records a qualitative judgement of the degree of satisfaction observed in the current build.

Req.	Satisfying capabilities (Table 3)	Assessment
R1 Single agent workspace	Unified ticket view; customer profiles; call & recording data	Satisfied — one screen presents customer, ticket, SLA and interaction evidence
R2 Omnichannel capture	Omnichannel capture; third-party integrations	Satisfied for voice, chat, social, email and SMS via CCaaS connectors
R3 SLA/OLA engine	SLA/OLA management; reports & dashboards	Partly satisfied — configurable definitions and real-time indicators are in place; automated escalation is still in development
R4 Configurable lifecycle	Dynamic workflow & form builder	Satisfied — client onboarding achieved through configuration
R5 Knowledge & bilingual UX	Knowledge base; bilingual support	Satisfied
R6 In-Kingdom hosting & controls	Hosting on in-Kingdom cloud region; roles & groups; audit logging	Satisfied at the design level for residency and access control. No conformance assessment or third-party certification against PDPL, the CST Cloud Computing Service Provisioning Regulations or NCA ECC is claimed; independent assurance of the hosted environment is recommended
R7 Governance reporting	Reports & dashboards; DWH export; business-review cycle	Satisfied — supports the periodic reporting, dashboard and review cadence
R8 Open integration	Third-party integrations; API gateway	Largely satisfied — connectors to the provider's CCaaS and analytics stack exist; a published API specification would strengthen this requirement

Table 4. Requirements traceability and qualitative assessment.

6.2 Demonstration

AlasilaCX delivers managed contact center and customer-care services to public-sector and enterprise clients in the Kingdom. In the service deployments observed during the study period (S6), Spinek was used as the ticketing and governance layer above the client-mandated CCaaS engine. Practitioner observation indicates three recurring benefits attributable to the integrated design: reduced agent effort from eliminating system toggling; earlier detection of SLA risk because attainment indicators are visible on the ticket and dashboard rather than only in periodic reports; and faster client onboarding because workflows, forms and SLA definitions are configured rather than developed. These observations were not captured as dated observation records. They are indicative only, and are to be tested with the framework in Section 6.3.

6.3 Proposed KPI measurement framework

To enable an independently verifiable quantitative evaluation in subsequent work, we propose the measurement framework in Table 5. Each metric is defined, its source within the platform identified, and its linkage to the governance model indicated. The framework is intended to be applied per deployment over a baseline and a post-integration period of at least one quarter each.

Metric	Definition	Platform source	Governance linkage
SLA attainment rate	Share of tickets resolved within the contracted SLA target in the period	SLA/OLA engine	SLA reporting; COPC service-level metrics
OLA breach rate	Share of back-office handoffs exceeding the internal OLA target	SLA/OLA engine; workflow log	Root-cause analysis in business reviews
First-contact resolution (FCR)	Share of interactions resolved without a follow-up contact within a defined window	Ticket & interaction log	COPC efficiency/quality metrics
Average handling time (AHT)	Mean talk + hold + after-call work per interaction	CCaaS connector; ticket log	COPC efficiency metrics
Ticket backlog age	Distribution of open tickets by age band	Ticket log	Process control
Quality score	Mean evaluated quality score from automated and manual QA	Analytics / QA integration	COPC quality management
Customer satisfaction (CSAT)	Post-interaction survey score	Survey channel; customer profile	COPC customer-experience metrics
Onboarding lead time	Elapsed time from client contract to production-ready configuration	Configuration log	Managed-service scalability (R4)
Distinct applications per interaction	Number of distinct applications an agent uses per interaction	Desktop analytics / observation	Fragmentation reduction (R1)

Table 5. Proposed KPI framework for quantitative evaluation of integrated managed-service platforms.

7. Discussion

7.1 Contributions

The study makes three contributions. For research, it documents a provider-side integration artefact and derives five design principles (DP1–DP5) that constitute a nascent design theory for integrated managed-service platforms in data-sovereign environments (Gregor & Hevner, 2013). For practice, the five-layer reference architecture and the requirements set (R1–R8) give managed-service providers a structured basis for build-or-buy decisions and for positioning their own platforms above client-mandated engines. For public-sector buyers, the KPI framework offers a concrete instrument for specifying and auditing managed CX contracts.

7.2 Implications for the Saudi managed-services market

Three implications follow. First, engine independence (DP1) is particularly valuable where public-sector clients standardise on different CCaaS platforms; a provider that owns its governance layer can serve all of them without duplicating its operating model. Second, sovereignty by default (DP4) converts a regulatory constraint into a design advantage: hosting on an in-Kingdom cloud region and keeping the system of record in-country simplifies the provider's and the client's path to meeting data-protection and cloud-regulation obligations, although it does not by itself establish conformance. Third, treating governance as a product feature (DP5) aligns the platform with the evidence-based service management that standards and public-sector procurement increasingly expect.

7.3 Limitations

The limitations noted in Section 3.3 apply. The study is a single case, conducted by the artefact's owner, and reports qualitative evaluation only. The traceability assessment in Table 4 reflects the current build and will require revision as the platform evolves. External validity is bounded to managed CX services in regulated, data-sovereign markets; transfer to other service domains should be treated as a hypothesis.

8. Conclusion and Future Work

This paper has presented a design-science account of Spinek, an integrated, locally hosted CRM–contact center platform developed by AlasilaCX to deliver managed ICT services in Saudi Arabia. Starting from four recurring problems in managed CX delivery, we derived eight design requirements, described a five-layer reference architecture and operating model that realise them, evaluated the artefact against the requirements, and proposed a KPI framework for subsequent quantitative study. The registration of the Spinek mark with SAIP in Class 42 protects the company's rights in the Spinek name and mark.

Future work proceeds on three tracks. Empirical: apply the KPI framework across deployments to produce baseline and post-integration measurements. Technical: extend the insight layer with native AI-assisted quality management, speech and text analytics and predictive engagement, and publish an API specification for the integration layer. Assurance: pursue independent assessment of the hosted environment against the applicable data-protection, cloud and cybersecurity instruments. These tracks form part of the company's multi-year research, development and innovation roadmap.

Declarations

Funding. This research was funded internally by Alasila Solutions Limited as part of its research, development and innovation programme.

Competing interests. The authors are employees of the organisation that owns the artefact studied. No external competing interests are declared.

Data and materials. Platform documentation and architecture materials are proprietary. Aggregated evaluation data generated under the framework in Section 6.3 may be made available to bona fide researchers upon request, subject to client confidentiality.

Conformance statements. References in this paper to PDPL, the CST Cloud Computing Service Provisioning Regulations, NCA ECC, the COPC CX Standard, ITIL 4 and ISO/IEC 20000-1 describe design references only. No certification, conformance assessment or legal-compliance claim is made against any of these instruments.

Intellectual property. Spinek™ is a registered trademark of Alasila Solutions Limited (SAIP Reg. No. TM-01-00-59529-25). Cisco, Alibaba Cloud, COPC and ITIL are trademarks of their respective owners.

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Appendix A. Research Summary / ملخص البحث

Field	English	العربية
Research topic	Design and evaluation of an integrated, locally hosted CRM–contact center platform (Spinek) for managed ICT service delivery	تصميم وتقييم منصة متكاملة مستضافة محليًا لإدارة علاقات العملاء ومركز الاتصال (سباينك) لتقديم الخدمات المدارة لتقنية المعلومات والاتصالات
Research field	Managed ICT services; CCaaS; CRM; service governance (SLA/OLA); data residency	الخدمات المدارة لتقنية المعلومات والاتصالات؛ مركز الاتصال كخدمة؛ إدارة علاقات العملاء؛ حوكمة مستويات الخدمة (SLA/OLA)؛ توطين البيانات
Methodology	Design-science research (Peffers et al., 2007) with a single embedded case study	بحوث علوم التصميم (Peffers et al., 2007) مع دراسة حالة واحدة متضمَّنة
Research period	Q4 2024 – Q3 2026	الربع الرابع 2024 – الربع الثالث 2026
Completion date	September 2026	سبتمبر 2026
Conducted by	Research and Development Department, Alasila Solutions Limited (AlasilaCX), Riyadh	قسم البحث والتطوير، شركة الحلول الأصيلة المحدودة (AlasilaCX)، الرياض
Document reference	ALSL-RDI-RP-2026-001, v1.1	ALSL-RDI-RP-2026-001، الإصدار 1.1
Intellectual property	Spinek™ registered trademark — SAIP TM-01-00-59529-25 (Class 42); © 2026 Alasila Solutions Limited.	«سباينك» علامة تجارية مسجلة لدى الهيئة السعودية للملكية الفكرية بالرقم TM-01-00-59529-25 (الفئة 42)؛ حقوق النشر 2026 محفوظة لشركة الحلول الأصيلة المحدودة
Key outputs	8 design requirements; 5-layer reference architecture; 5 design principles; requirements traceability; KPI measurement framework (9 metrics)	ثمانية متطلبات تصميم؛ معمارية مرجعية من خمس طبقات؛ خمسة مبادئ تصميم؛ تتبع المتطلبات؛ إطار قياس مؤشرات الأداء الرئيسة (9 مؤشرات)

Table A1. Research summary.

Appendix B. Intellectual Property Registration Details

Item	Certificate
Registration number	TM-01-00-59529-25
Mark	Spinek / سباينك (word and device)
Nice Classification (12-2023)	Class 42
Registration date	19/09/1447H
Protection period	18/06/1447H – 18/06/1457H
Owner	Alasila Solutions Limited, Riyadh, Saudi Arabia
Issuing authority	Saudi Authority for Intellectual Property (SAIP)
Scope (as enumerated in the certificate)	Services in Class 42 including SaaS, PaaS, software design and development, hosting, data processing, cloud computing, IT and computer-security consultancy, AI consultancy and research, telecommunications-technology consultancy, user authentication

Table B1. Trademark registration details (source: SAIP certificate).