

# Tusshar Kalra

Lead Solution Architect · AI & Agentic Systems · Banking Transformation

Stockholm, Sweden · +46 72 240 3490 · tussharkalra@gmail.com · tussharkalra.com · linkedin.com/in/tussharkalra

## PROFESSIONAL SUMMARY

---

Lead Solution Architect with 26 years in banking technology across Europe and Asia, specialising in lending, credit origination, KYC, and regulatory compliance at Tier 1 banks. Sole architect for the Lending domain at Länsförsäkringar Bank, where I own the end-to-end architecture of the NOVA Credit Origination System on Appian — a programme handling 200,000 annual transactions across seven lending products. Previously Senior Solutions Architect in Swedbank's Anti-Financial Crime unit, founder of Swedbank's PEGA Centre of Excellence, and delivery lead across Lloyds Banking Group, ANZ, BNP Paribas, and HSBC.

Beyond day-to-day banking architecture, I have independently designed and deployed Nexus — a production multi-agent AI system that runs 24/7 on my own infrastructure with five cooperating agents, an LLM orchestration layer, an 18-layer security posture, and automated delivery pipelines. This combination of senior banking domain depth and hands-on agentic AI delivery is the profile banks and consultancies are hiring for in 2026 AI transformation roles.

## AGENTIC AI PORTFOLIO — NEXUS

---

*Production multi-agent system built and operated solo. Architected, deployed, secured, and maintained end-to-end. Live at tussharkalra.com.*

- Five-agent architecture orchestrated through a primary LLM (GLM-5.1 on Ollama Cloud) with agents specialised for research, trading intelligence, vision, coding, and orchestration — coordinated via ACP (Agent Communication Protocol) and a shared memory layer.
- Runs 24/7 on a self-managed Ubuntu 24.04 VPS; secured across 18 enforcement layers including Telegram bot hardening, DM allowlists, group-chat sandboxing, session isolation, UFW firewall, SSH key-only access, fail2ban, loopback-only gateway, token auth, .env secret isolation, and prompt-injection detection.
- Integrated delivery stack: Tavily, Firecrawl, Notion, Gmail/Calendar OAuth, Groq Whisper, and Claude Code via ACP — orchestrated through 8 scheduled workflows delivering morning briefings, market monitoring, nightly backtests, and research pipelines to Telegram and Notion.
- Portfolio site deployed on Cloudflare Workers with custom domain, TLS, Open Graph metadata, and responsive front-end — self-designed, self-built, self-hosted.

## PROFESSIONAL EXPERIENCE

---

### Lead Solution Architect — Lending

Apr 2023 – Present

Länsförsäkringar Bank, Stockholm · Loan Modernization Programme · Appian BPM ("BPM Bank")

- Sole architect for the Lending domain, accountable for the end-to-end architecture of NOVA — the bank's new Credit Origination System replacing a 1998-era legacy platform (KRE). NOVA is the first application on LF Bank's strategic BPM platform and is the architectural blueprint for every future process application in the bank.
- Authored v2.0 of the NOVA Non-Functional Requirements specification (Sep 2025), a 28-page ISO/IEC 25010-aligned architectural standard covering performance, reliability, zero-trust security, maintainability, and compliance with GDPR, PCI-DSS, DORA, NIST Cybersecurity Framework, and EBA guidelines. Platform sized for 200,000 annual transactions across seven lending products — mortgage loans (Villa/Vacation Home and Tenant Owned), loan commitments, unsecured loans, credit cards, overdrafts.
- Delivered MLR3 (Mortgage Loans and Loan Commitment product lines) and MLR4 (Villa/Vacation Home mortgage product plus volume expansion) — both live in production. Currently leading the remediation and stabilisation phase focused on performance, scalability, maintainability, and reducing accumulated technical debt across the platform.
- Architecting the Appian platform migration strategy to address the end-of-life of non-containerised Appian deployment (Appian 25.3 is the last version supporting on-premise non-containerised architecture). Designing a phased migration from the current on-premise 25.3 estate to Kubernetes as the first target, with cloud (AKS/EKS) as the strategic target — covering environment topology across Dev-SIT-ACC-REL-PROD, zero-downtime rollover, regulatory evidence preservation, and coexistence during transition.

- Owned the integration architecture connecting BPM Bank to the bank's core ecosystem: BaNCs core banking (TCS), DSL Bank services (Tieto/Evry), GEMI authentication, APIP API platform, CSP Customer Service Platform, UC credit bureau, LMV, Capitek. Defined API contracts, authentication flows, and data patterns across all of them.
- Drove the zero-trust authorization architecture for BPM Bank (JWT/OAuth for customer APIs, SAML SSO with ticket-based role authentication for internal officers, proxy authentication with user-ID traceability for downstream calls); led architectural response to the Truesec penetration test of NOVA — remediation prioritisation, input sanitisation, context-specific output encoding, file-upload whitelist controls, and OWASP Top 10 alignment. Authored the Azure DevOps CI/CD pipeline design for Appian deployments across Dev → SIT → ACC → REL → PROD using Appian Export/Deploy Package APIs and Nexus artefact versioning.

### Senior Solutions Architect — Anti-Financial Crime

Aug 2020 – Apr 2023

Swedbank, Stockholm · Next Generation KYC Programme (NGKYC) · PEGA CLM/KYC

- Solutions Architect in Swedbank's Anti-Financial Crime unit, established in 2019 to rebuild the bank's KYC, AML, and sanctions capabilities across retail, private, and corporate segments following the Baltic AML investigations. NGKYC was the group's strategic KYC platform replacing fragmented legacy systems across Nordic and Baltic entities.
- Architected the end-to-end PEGA CLM/KYC solution — client onboarding, periodic review, risk classification, customer due diligence, enhanced due diligence for high-risk segments, and continuous monitoring — covering both corporate and private customer journeys.
- Owned the translation of regulatory requirements into platform-configurable rules across EU AML Directives (4AMLD, 5AMLD, 6AMLD), FATCA, CRS, sanctions screening, and PEP/RCA handling. Designed the rules governance model so compliance and legal teams could update regulatory changes without development cycles.
- Delivered the corporate KYC solution to production in 2021. Led the architecture definition for the private customer KYC solution through its inception phase — establishing case orchestration patterns, ownership structure handling for complex corporate entities, workflow routing, segregation-of-duties controls, and audit trails for regulatory examination.
- Drove the integration architecture connecting NGKYC to Swedbank's customer master, core banking, transaction monitoring, sanctions screening engines, and document archives — defining API contracts and data flows across the bank's core landscape.
- Worked as the technical counterpart for compliance, legal, risk, and front-office stakeholders across the AFC unit, translating business and regulatory requirements into architectural decisions. Recognised internally as the PEGA architecture authority for the programme.

### PEGA Centre of Excellence Founder & Product Owner

Aug 2018 – Aug 2020

Swedbank, Stockholm · Enterprise PEGA Platform · SAFe delivery

- Founded Swedbank's PEGA Centre of Excellence in 2018, standing up the enterprise governance body for all PEGA-based initiatives across the Group from zero — no prior CoE existed at the bank. Built and led a team of 5-10, establishing the charter, operating model, and authority model for architectural standards and reuse governance. Became the internal escalation point for PEGA design decisions across delivery programmes and mentored Lead System Architects across teams.
- Designed and introduced the enterprise Situational Layer Cake architecture for Swedbank — the shared class structure enabling PEGA applications across the bank to reuse data definitions, integrations, and business rules while remaining independently deployable. Enabled cross-application communication between new PEGA applications and legacy systems, and eliminated duplication across delivery streams.
- Defined the enterprise reuse strategy — shared integration services, reusable components for common business patterns (correspondence, document handling, case routing, audit) — reducing per-project development cost and accelerating time-to-value for subsequent PEGA programmes across the bank.
- Architected the PEGA Cloud migration strategy for Swedbank's PEGA estate — target architecture, migration patterns, environment topology, security posture, and cost model — establishing the blueprint for moving off on-premise infrastructure.
- Introduced Pega Predictive Diagnostic Cloud (PDC) across the estate — continuous platform health monitoring, performance and quality telemetry, guardrail compliance, and preventative remediation — raising delivery quality and surfacing architectural issues before they reached production.
- Led the CoE as Product Owner — owned the CoE backlog, prioritised capability investments by business value, facilitated SAFe ceremonies, represented the CoE to executive sponsors, and acted as voice of the customer for internal teams consuming CoE services. Certified SAFe POPM.

## PEGA Delivery Lead

Mar 2016 – Aug 2018

Capgemini (on-site at Swedbank), Stockholm · Future Lending Platform (FLP) · PEGA PRPC

- Delivery Lead for Swedbank's Future Lending Platform programme — the PEGA-based Credit Origination System replacing legacy lending workflows across the bank's unsecured consumer lending and mortgage products. Accountable for end-to-end delivery from requirements through production handover, working as the primary Capgemini delivery point to Swedbank stakeholders.
- Delivered FLP to production for Blanco, Swedbank's unsecured consumer loan product, as the programme's first go-live. Continued leading delivery of mortgage product lines (Mortgage MVP, Mortgage More, Mortgage New), which were in active development at the point of role transition. The Blanco launch is publicly reported by Swedbank and Pega as achieving an over 80% reduction in end-to-end processing time with 65% of consumer loans receiving an instant response.
- Orchestrated delivery across business analysis, development, testing, and integration teams — running SAFe/Agile cadences, sprint planning, show-and-tell demos after each iteration, and continuous stakeholder feedback loops to reduce late-stage rework.
- Established and led Capgemini's offshore PEGA development centre in Kolkata supporting the Swedbank programme, scaled to approximately 50 seats — defined the engagement model, blended onshore/offshore operating cadence, knowledge-transfer approach, and quality controls.
- Owned the technical quality bar — introduced build standards, peer and lead code review gates, PEGA Best Practices checklists, and guardrail enforcement — reducing post-release defect rates. Produced Statements of Work, Terms of Reference, vendor evaluation reports, senior-management dashboards, and delivered the application maintenance handover package to the run-the-bank team.
- Led integration coordination across Swedbank's core landscape — sequencing integration delivery timelines against Credit Origination development milestones, managing dependency risk across parallel workstreams. Key integrations included Capitek (Vitec) for KALP affordability calculations, the bank's customer master, credit bureau services, and document archive.

## Delivery Manager

Jul 2013 – Mar 2016

Wipro Technologies, Bangalore · Lloyds TSB & ANZ Bank · PEGA PRPC 6.x / 7.x

- Delivery Manager accountable for the end-to-end delivery of two parallel Tier 1 bank PEGA engagements for Wipro — Lloyds TSB's Integrated Credit Risk System in the UK, and ANZ Bank's customer and account service workflow platform across Australia, New Zealand, and Asia-Pacific.
- Led the Lloyds TSB Integrated Credit Risk System delivery — a PEGA PRPC-based credit risk workflow platform supporting the bank's post-merger integration programme. Owned requirements translation, PEGA design governance, build quality, and the UAT-to-production path, working directly with Lloyds architects and credit-risk business stakeholders.
- Led the ANZ delivery across four PEGA applications — CSW, ASW, HLP, and SBOS — part of ANZ's super-regional PEGA transformation consolidating customer service and origination workflows across multiple geographies and product lines.
- Managed blended onshore-offshore delivery teams across both engagements — running Wipro's offshore development and QA capacity from Bangalore in parallel with onshore architect and BA teams at Lloyds (UK) and ANZ (Australia), across PRPC 6.x and 7.x platforms.
- Owned the engagement commercial model — Statements of Work, change requests, SLAs, milestone acceptance, and monthly steering committee reporting to both client stakeholders and Wipro leadership. Delivered both programmes within committed timelines and scope.
- Introduced PEGA best-practice checklists, guardrails enforcement, peer review gates, and defect-trend reporting across both engagements — raising delivery quality and reducing late-stage defect escape to UAT. Mentored Wipro's growing PEGA practice during a high-growth period, onboarding Lead and Senior System Architects and establishing reusable delivery assets across the account portfolio.

## BPM Project Manager

Sep 2012 – Apr 2013

Virtusa Consulting Services, Hyderabad · BNP Paribas (PEMSA) · Corner Banca · PEGA PRPC 6.1 / 6.2

- Project Manager accountable for two concurrent PEGA PRPC engagements delivered from Virtusa's Hyderabad offshore centre: BNP Paribas' PEMSAs payment exceptions platform and Corner Banca's (Switzerland) case and workflow management solution.

- Led the BNP Paribas PEMSA engagement — BPM-based payment exceptions processing for international wire transfer investigation, sanction screening exceptions, and reconciliation workflows — coordinating with BNP's onshore architects and operations stakeholders.
- Led the Corner Banca case and workflow management implementation for the Swiss private bank — delivered PRPC 6.1/6.2 case management for client servicing workflows, managing the onshore-offshore delivery model and client reporting cadence.
- Managed the end-to-end delivery lifecycle across both engagements — requirements refinement, sprint planning, build quality, UAT, and production handover — along with commercial governance (SOWs, change requests, milestone sign-off) and client escalations.

## IT Project Manager

Oct 2007 – Aug 2012

HSBC Software Development India, Pune · Global Banking & Markets · Group Service Centre · PEGA PRPC 5.x / 6.x

- Delivered PEGA-based workflow and case management platforms for HSBC's Global Banking & Markets trade finance products — Supplier Invoice Finance, Receivables Finance, and Loan Application — and for enterprise operational workflows including IT Service Request and Group Service Request processes.
- Managed end-to-end project delivery across multiple concurrent PEGA engagements within HSBC's captive software development centre — requirements, design governance, offshore build and test, integration with HSBC's core banking and document systems, UAT, and production handover.
- Established delivery practices across HSBC's growing PEGA footprint during the early PRPC 5.x and 6.x era — build standards, release management, and the knowledge-transfer patterns that supported HSBC's PEGA capability ramp-up across Global Banking & Markets and retail support functions.

## EARLIER CAREER

---

Prior experience as Project Lead at Mphasis (An HP Company), Bangalore — delivering IT service management, infrastructure support, and network operations platforms (RIH Supp, GIH Supp, GENIUS Supp, GSP Supp, Network Control) for global enterprise customers. This period established the foundation in large-enterprise delivery, team leadership, and process discipline that carries through the subsequent banking technology career.

## CORE SKILLS

---

**Architecture & Platforms** Appian BPM · PEGA PRPC & CLM/KYC · Kubernetes (OpenShift, AKS, EKS) · Cloud migration strategy · Azure DevOps · On-premise to containerised migration

**Banking Domain** Lending & Credit Origination · KYC / AML / CDD / EDD · Digital Onboarding · Sanctions & PEP screening · Regulatory programme architecture · Core banking integration (BaNCs, DSL Bank)

**AI & Agentic Systems** Multi-agent orchestration · LLM integration (Claude, GLM, Ollama Cloud) · Agent Communication Protocol (ACP) · Prompt engineering · Production agent hardening · Self-hosted inference

**Security & Compliance** Zero-trust architecture · OAuth/JWT · SAML SSO · GDPR · PCI-DSS · DORA · EBA guidelines · NIST CSF · ISO/IEC 25010 · OWASP Top 10 · Penetration-test remediation

**Delivery & Leadership** SAFe · Agile / Scrum · Product Ownership · Centre of Excellence founding · Multi-vendor programme coordination · Offshore / onshore blended delivery · Stakeholder management at C-suite and Chief Architect level

**Technical** Python · SQL · Unix / Linux administration · Docker · Nginx · REST / OpenAPI · CI/CD · Git · Cloudflare Workers (working proficiency from independent Nexus build)

## CERTIFICATIONS & EDUCATION

---

- SAFe POPM (Scaled Agile Product Owner / Product Manager)
- PEGA PRPC Certified System Architect
- Bachelor of Commerce — Nagpur University, India (2000)

## LANGUAGES & WORK AUTHORISATION

---

**Languages** English (fluent, native professional) · Hindi (native)

**Work Authorisation** Swedish citizen · EU/EEA work rights · Available for roles in Sweden, the Nordics, EU, UK, and selected international markets