

avenga

G-Cloud 15

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Services

G-Cloud 15 Service Overview

Modernisation & Engineering

- Cloud-Native Product Delivery for Government Services
- Legacy Application Modernisation Factory (Mainframe & Monolith to Cloud)
- Secure API & Integration Services for Cross-Government Data Sharing
- Digital Service Design & Accessibility by Default (WCAG + GOV.UK patterns)

Platforms, DevSecOps & SRE

- Government Cloud Landing Zone & Platform Engineering
- DevSecOps Pipeline Build & Secure SDLC Enablement
- SRE, Observability & Service Reliability for Critical Public Services
- FinOps & Cost Optimisation for Public Cloud (including GreenOps)

Managed Services

- Managed Cloud Operations for Critical Government Services (SLO-Led)
- Managed Data Platform Operations (Analytics, Lakehouse & Integration)
- Managed DevSecOps & Toolchain Operations

Data, Analytics & Governance

- Modern Data Platform / Lakehouse for Public Sector (Including Open Data)
- Data Governance, Privacy & Ethics for Government Data
- Data Quality, Lineage & Reporting for Regulatory and Audit Needs

AI, Automation & Agentic Workflows

- Responsible AI & GenAI Advisory for UK Public Sector
- GenAI & RAG for Knowledge-Intensive Public Services (Casework, Policy, Guidance)
- MLOps & Model Lifecycle Management for Regulated Environments
- Intelligent Automation & Agentic Workflows for Back-Office Services

Cross-cutting / Strategy & Enablement

- Cloud & Data Operating Model Design under the Procurement Act 2023
- Skills & Capability Uplift for Cloud, Data & AI (Engineers + Civil Servants)
- Assurance & Health-Checks for Cloud, Data & AI Programmes

Cloud, Data & AI Skills and Capability Uplift

Service Overview

Avenga's Skills and Capability Uplift for Cloud, Data and AI service helps public sector organisations build sustainable internal capability. It provides practical, role-based learning, mentoring and knowledge transfer embedded within live programmes, supporting engineers, delivery teams and civil servants to adopt cloud, data and AI while reducing long-term supplier dependency.

Key Features

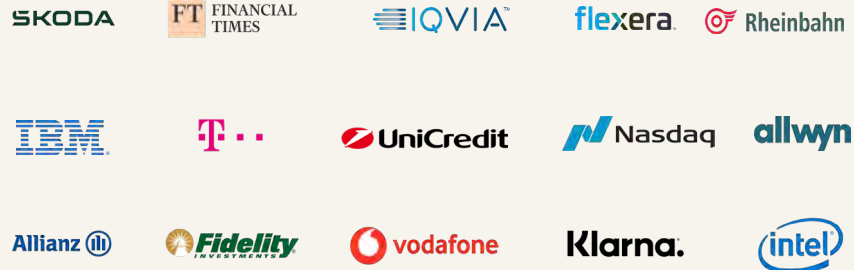
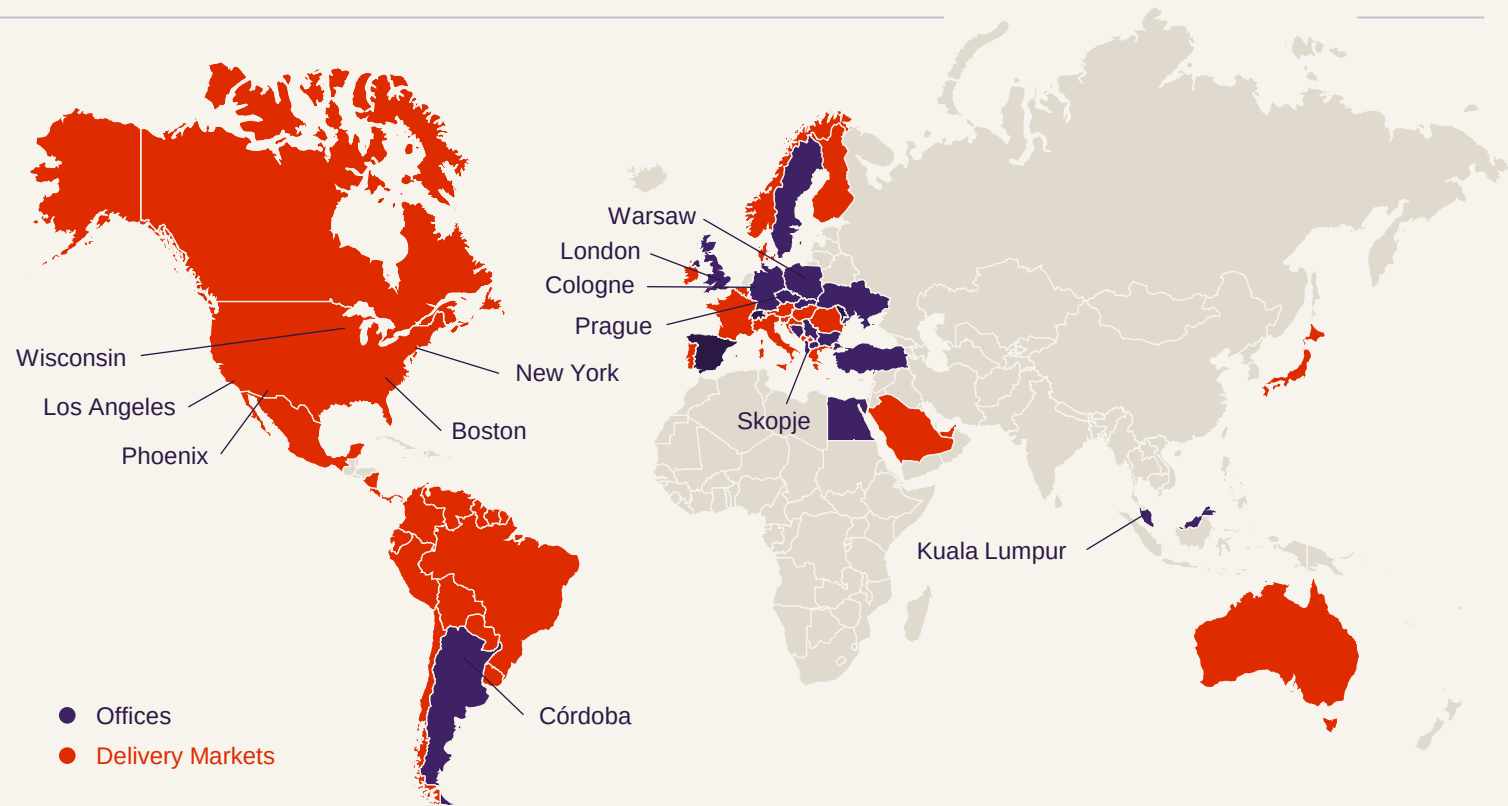
- Role-based skills development for engineers and civil servants
- Capability uplift across cloud, data, analytics, and AI
- Embedded learning within live delivery and operations
- Coaching, mentoring, and pairing approaches
- Support for technical, delivery, and governance roles
- Alignment with government digital and data standards
- Practical guidance on cloud, data, and AI adoption
- Knowledge transfer and documentation
- Support for multi-disciplinary teams
- Focus on sustainable capability and reduced supplier reliance

Benefits

- Sustainable in-house capability development
- Reduced long-term dependency on external suppliers
- Improved confidence and competence across teams
- Faster adoption of cloud, data, and AI technologies
- Better alignment between technical and policy teams
- Improved service delivery and operational outcomes
- Consistent skills and practices across the organisation
- Support for responsible and compliant technology use
- Improved staff engagement and retention
- Stronger foundations for digital transformation

Your value-driven technology partner

Avenga is a global consultancy and technology partner. We offer a suite of digital services from customer experience design to managed services.



Clients returning

97%

We're proud to see our clients returning – trust that lasts.

Experts

6000+

A dedicated global team of skilled professionals driving your success.

Years of experience

30+

Over three decades of experience delivering reliable, innovative solutions.

Data & AI Solutions are an integral part of Avenga's Service Landscape

Avenga Experience

We craft seamless digital experiences that fuse design, technology, and user insight — turning complex journeys into intuitive, engaging interactions that drive business growth.

Product Engineering

Full-cycle product development with scalable architecture, cross-functional teams, and agile delivery, enabling reliable, future-ready digital products.

Data & AI Solutions

Designing modern data platforms, advanced analytics, and AI agents-transforming generative AI pilots into scalable solutions that enhance operations, augment workforce capabilities, and drive smarter decisions across business functions.

Intelligent Automation

Automation solutions that combine AI, machine learning, and RPA to reduce manual effort, enhance accuracy, and improve operational efficiency across workflows.

AdTech / MarTech

Integrated AdTech and MarTech services that align customer data, content, and platforms to enable targeted engagement and measurable marketing performance.

Managed Services

Digitally enabled operational models that use automation, analytics, and cloud to improve process agility, visibility, and performance across enterprise functions.

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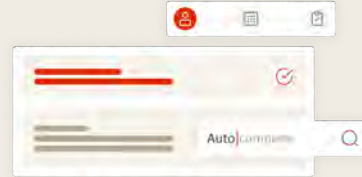
Managed Services

Digitally enabled operational models that use automation, analytics, and cloud to improve process agility, visibility, and performance across enterprise functions.

We are experts in the relevant key areas to drive a successful digital product development across all competencies



Digital Product Strategy



Guided User Journeys



Visual Data Interaction



Agentic Experiences



Data-driven Customer Engagement



Centralized Design Management



Agile CX Consulting

We deliver impactful digital product solutions based on outstanding user experiences and technical innovation that make a real difference for customers and businesses.



A user-centered approach makes the difference in customer-facing solutions



Case Studies

Modernization of a Custom ERP tailored for Machine Shops and Precision Manufacturing

Challenge

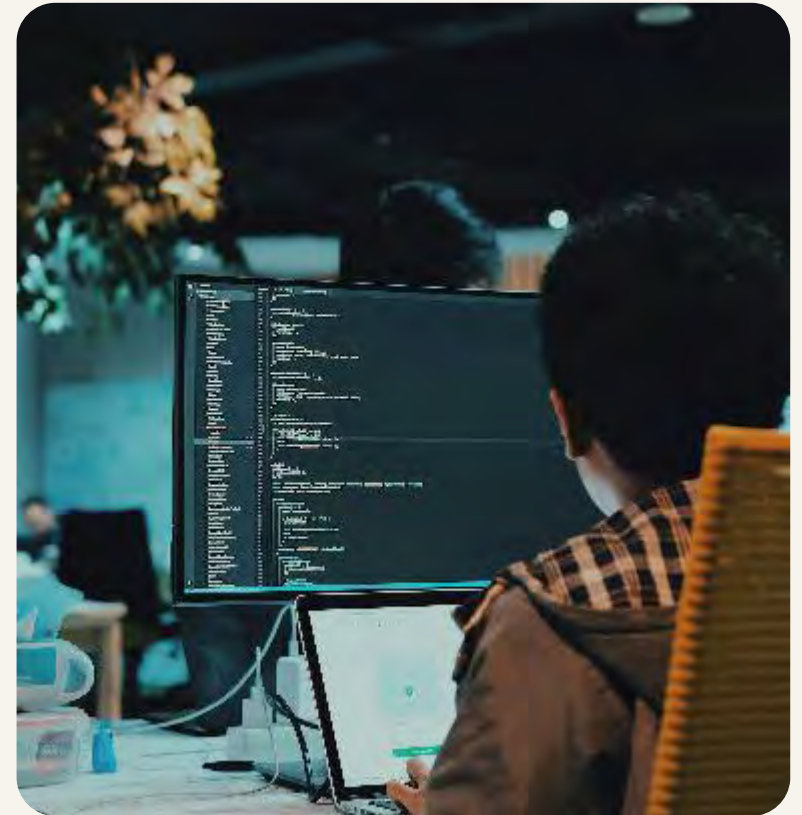
The Client, a niche ERP provider for machine shops and precision manufacturing, was acquired by Mainsail Partners, a private equity firm **looking to accelerate the company's growth**. The product, though highly specialized and deeply embedded in customer operations, was built over decades using niche and **unsupported technologies**. This technology stack not only created **significant maintenance and scalability risks** but also limited the product's future marketability. Mainsail was ready to fund a strategic **re-architecture** but lacked confidence in the internal engineering team's ability to manage such a critical transformation, engaging **Avenga as a trusted modernization partner**.

Tech Stack

C# / .NET, AWS, React, PostgreSQL, GraphQL, Docker

Our Solution

- **3-month discovery phase** to design architecture, migration roadmap, and budget plan — enabling the CTO to **secure investor funding**.
- **Domain-partitioned modular monolith**, replacing unsupported legacy technologies with a modern stack.
- **Iterative migration**: module-by-module rewrite with the legacy system kept operational and still feature-extendable by the in-house team.
- **Flexible deployment bundles** to support diverse customer environments with varying needs.
- **Gradual onboarding** of the Client's in-house team, including training to ensure **smooth knowledge transfer** and long-term ownership.
- Structured governance with Mainsail and Client's leadership, ensuring **investor confidence**



Modernization

Re-Architecture

Custom ERP

Scalability

National Revenue Agency of Bulgaria - SOA Architecture & E-Services Portal

Challenge

NRA needed to provide reliable, secure, and continuous electronic services for Bulgarian citizens, businesses, and partner institutions, while modernizing its existing Electronic Portal with more than 150 e-service and establishing a service-oriented architecture (SOA) for integration between its existing internal and external government systems as well.

Our Solution

Starting in mid 2029, for 18 months Avenge designed and delivered a fully modernized E-Services Portal and SOA foundation, applying SOA patterns and enabling standardized services, interfaces, automated delivery, monitoring, and controlled evolution of electronic services and API layer.

18

Months build-to-production

20 / 10 / 8

Tech experts for build / post-go-live run / current contract



Outcome

NRA's tech evolution is now centered on a SOA-based service layer and e-Services Portal, with clear governance for releases, documentation, and secure deployments.

The E-Services Portal integrates both existing and new electronic services, including those delivered by third-party systems, and supports the API management processes for the public/external APIs consumers

The current Avenge engagement continues with:

- ensuring reliability, security, and continuity of e-services,
- providing maintenance and optimization to keep the platform operational,
- delivering ongoing modernization, including new and updated e-services, and APIs.

Under the hood, the target environment includes GitLab source control, Docker Swarm, API/Auth gateways, observability (Prometheus/Grafana), and centralized logging (ELK).

- **GovTech-grade SOA** & integration engineering (service layer, gateways, security, continuity)
- **Full-lifecycle execution**, from initial discovery to maintenance/support and knowledge transfer
- **Tech stack:** Java/Spring services, React FE, Oracle DB, containerized runtime, ELK

- 1 **217 electronic services** for end-clients & **600+ APIs** for internal and external usage
- 2 Over **600,000 unique portal users** and more than a **million tax entities** are served each month through NRA's e-services.
- 3 **Over hundred millions requests** are processed monthly through NRA's internal and public APIs.
- 4 Over **1 million tax and social security declarations and documents** are accepted monthly through NRA's e-services.

Modernization

Digitalization

Containerization

UX

Scalable Cloud Data Platform for Cost Efficiency



Our Solution

Avenga designed and co-developed a centralized data platform in Microsoft Azure in order to fetch data from the different operational systems and show the results in BI reports which their business users can access and analyse the data, with the aim of creating a cost-efficient solution built on scalable cloud components to serve Region Västmanlands' needs today as well as in the future. This resulted in

- Better insights and tracking of their KPIs
- Automations of reports, reducing manual processes of creating monthly reports from 3 days to almost instant reports.

99% **Uptime** regarding to failure in data pipelines and updates of daily reports since 2022

Challenge

Region Västmanland is located in the middle of Sweden. Every day 38 000 commutes are delivered by bus and trains. They are aiming for long term sustainable public transport for people and the environment.

Region Västmanland is one of the smallest public transport authorities in Sweden, but they have been in the need of data platform with the same capabilities as the larger PTAs in Sweden. This includes information about ticket sales, traffic planning, punctuality, and contract fulfilment.

Tech Stack

Azure Databricks, Lakehouse, Power BI, Azure SQL & Data Products

Cloud Data Platform

Scalable Analytics Foundation

Cloud-Native BI

Digital Transformation for a Leading German Manufacturer

Challenge

A global manufacturing company was being carved out from their parent company. Therefore, the new company had to set up a new IT infrastructure from the ground up. It had to be in place before transitional service agreements with the former parent company ended.

Avenga was tasked with the architecture and configuration of an infrastructure for identity and access management and with migration of around 1,500 users from 36 different countries from HCL Notes to Microsoft 365.

For the architecture of this new collaboration infrastructure, the client expected guidance from Avenga on industry best practices. They wanted to avoid the complexity and high management overheads of the old environment.

Tech Stack

Active Directory, Entra ID, Azure Bastion, Exchange, SharePoint, OneDrive for Business

Our Solution

Together with the client and based on industry best practices, Avenga designed and implemented a future-proof identity and access management infrastructure as well as an entirely new Microsoft 365 tenant. 1,500 users from 36 countries were migrated to this new collaboration infrastructure.



Modernizing Sunrise's IT Infrastructure to Enhance Service Reliability and Streamline Operations

Challenge

Sunrise faced frequent service disruptions and inefficiencies due to a siloed IT infrastructure.

”

An outstanding achievement, and you should be proud of what you have delivered. You are key in driving this business forward.



Duncan McDonald
CIO, Sunrise

Key results

Upgraded from 8x5 to full **24x7 support**.

Eliminated redundant tools to **streamline operations**.

30% cost savings

35% efficiency boost

3x **Accelerated** daily handling of 3,000+ tasks.

14 years of **SLA compliance** without breaches.

Key results

One-Stop-Shop for development and managed services

Partner of choice for **innovation**

6 Delivery Centers

90% Resource retention rate

Delivering since **2009**

200 Experts engaged

Cybersecurity Foundations

Network & Cloud

Identity Management

M365

ERP (SAP)

Provisioning

Unified Communications

Optimizing Satellite IoT Communication for Globalstar

Challenge

The main challenge was to thoroughly test and optimize advanced ST150 and RS200M modules, while also integrating important features like GPS, Bluetooth, and autonomous operation to support a variety of IoT applications.

Project Goals

- Validate Queue Management System for message prioritization.
- Ensure reliable data transmission.
- Verify over-the-air updates.
- Test power management, accelerometer-based event detection and real-time diagnostics.

1

Modular software - easily customizable and integrated with APIs for faster development.

2

Extensive application library - access and adapt software solutions from a growing library.

3

Hardware abstraction - simplified device management with full driver abstraction, speeding up deployment.

Our Solution

Our scope of work included rigorous testing of firmware, modular message handling, GPS integrations, and BLE-based security features. Avenga's experts conducted robust validation processes for queue management, real-time diagnostics, and over-the-air mechanisms to ensure system reliability and performance.

35%

better resource use

50%

less IoT OPEX

25%

fewer support requests

40%

faster device activation

99%

success rate in multi-network switching

30%

less onboarding failures



Kotlin

APIs

Cloud integration

ST150 & RS200M modules

GPS integration

BLE communication protocols

Transforming Research with a Scalable Digital Laboratory Platform



Challenge

The research community of a global biotech required a unified digital platform to modernize the way experimental data is captured, managed, and shared. Their legacy laboratory systems, including a traditional Laboratory Information Management System (LIMS), limited efficiency, scalability, data integrity, and collaboration. Our client is the world's number 1 in biotech, with 17 biopharmaceuticals on the market developing medicines in oncology, immunology, infectious diseases, ophthalmology, and diseases of the central nervous system. To accelerate discovery in these areas, they needed a secure and scalable scientific platform that could support future growth and innovation.

Tech Stack

.NET, SAP, MS SQL, SharePoint, Oracle, EPMS, Tibco, HPSM, Security Compliance

Our Solution

- Designed and rolled out a **scientific Platform-as-a-Service (PaaS)** for the global research teams
- **Core component:** Electronic Laboratory Notebook
- Supplemented with **laboratory registry, inventory, requests management, and molecular biology tools**
- Built on a **scalable, cloud-ready architecture** to enable secure integrations, reliability, and workflow customization

Client Benefits

- Ensured data integrity and regulatory compliance across global research operations
- Accelerated drug discovery and development by reducing bottlenecks in laboratory workflows
- Seamless collaboration among research teams worldwide through unified data access
- Scalable, future-ready platform to support research

Managed Services

Platform-as-a-Service

Compliance & data integrity

Cloud-native architecture

Scalable Cloud Data Platform for Cost Efficiency



Our Solution

Avenga designed and co-developed a centralized data platform in Microsoft Azure in order to fetch data from the different operational systems and show the results in BI reports which their business users can access and analyse the data, with the aim of creating a cost-efficient solution built on scalable cloud components to serve Region Västmanlands' needs today as well as in the future. This resulted in

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Tech Stack

Azure Databricks, Lakehouse, Power BI, Azure SQL & Data Products

Cloud Data Platform

Scalable Analytics Foundation

Cloud-Native BI

Predictive Occupancy and Pandemic Preventions for Necessary Travellers



Challenge

Skånetrafiken is the third largest public transport authority in Sweden. Every day 465.000 commutes are delivered by bus, train and trams. There are 14.000 daily possible journeys.

Skånetrafiken lost appr. 40% of their daily number of passengers during 2020-2021 due to the Covid Pandemic. The aim was to offer Covid safe travels to passengers by giving them visual information regarding a real-time predictive occupancy levels on each possible trip presented in SKÅ-appen, the journey planner and ticketing app.

This had to equip the travellers who *had* to travel during the pandemic (for examples healthcare personnel) with data to make informed decisions, like “can I take a later trip which is less crowded?”

Our Solution

The project went live in the app in just 3 months after the start. The solution was built in Azure Databricks with a real time connection to the ticket validation system, which re-calculated the predictions based on the boarding and validations of each prior stop on the bus trip.

Skånetrafiken was the first PTA in Sweden offering this service to their passengers. The more flexible ticket was launched. It was created from analysing the data and better insight on how to use Machine Learning to deliver business value. The solution was decommissioned post pandemic 2024 due to no demand for occupancy prognoses.

Benefits

A tool for identifying less crowded trips in real time.

End users got **real time prediction** every trip, based on the actual boarding on said trip.

Tech Stack

Azure Databricks, Azure Web Services, Azure Cosmos DB

Enabling Strategic Cloud Transformation for a Niche Bank



Challenge

The Bank's cloud journey faces challenges in integrating legacy systems, ensuring regulatory compliance across jurisdictions, and managing cloud costs and operational scalability.

Tech Stack

Azure / CI/CD / Atlassian /
Opsgenie / terraform

Enterprise Solution

Azure Cloud

Risk & Compliance

Security Operations

IT Help Desk

Atlassian ITSM

24/7 Cloud
Operations

20+

Experts
engaged

2

Delivery Centers
involved

Client Benefits

- Provision of round-the-clock monitoring and management services for Azure environment.
- Migration of the Bank's infrastructure and applications to the Azure cloud platform.
- Implementation of DevOps practices to streamline software development and deployment processes.
- Licensing and maintenance of Atlassian tools
- Implementation of robust security measures to protect the Bank's infrastructure and data.

Full Remote Concept

SLA Operations services

Service Delivery Management

Partnership Model

Reinventing, Supporting, and Security a Core Banking System

Enterprise Solutions

Azure Cloud	Data Warehouse	DevOps Consultancy
Infrastructure as Code	24/7 IT Operations / Sys Admin	Service Desk Support
Monitoring/ logging automation	Database security	Data governance
Automated deployment	Database automation	L1/L2/L3 Technical Support

- IT Operations and System Admin services (24x7)
- Continuous consultancy for DevOps services
- Guaranteed incident and Problem resolution **without SLA breach**
- Database administration and operation
- Core Banking Migration Assistance
- Cloud Operations

Tech Stack

Azure, Client benefits, IaC, Cloud, Kubernetes Terraform, Database security, CI/CD, Database automation

Delivering since 2019

2019

3

Delivery centers



Full Remote Concept

20+ Experts Engaged

Partnership Model

SLA Operations Services

Service Delivery Management

Overcoming Cloud Migration Challenges at Enterprise Scale

Enterprise Solution

Azure Cloud

AWS Cloud

DevOps

Penetration Testing

Cyber Security
Assessment

DevSecOps

Atlassian Migrations

Azure Apps
Operations

Challenge

A global technology and engineering company, recognized as an industry leader across a broad spectrum of sectors needed cloud transformation. The Client faces key challenges, including transforming legacy applications, ensuring compliance across diverse regulatory landscapes, and balancing cost efficiency with scalable cloud infrastructure.

Partnership
since
2017

30+Experts
engaged**4**Delivery Centers
involved

Client Benefits

- Cover Azure and AWS applications and systems with 24x7 service
- Guaranteed incident and Problem resolution without SLA breach in the past 5 years
- Implementing different monitoring tools and develop a monitoring strategy
- Increase efficiency and faster time to market
- Having a Technology advisor partner to keep up with latest trends and innovations



Full Remote Concept

SLA Operations services

Service Delivery Management

Partnership Model

Reinventing R&DIUM CAPITAL's Client-side Operations Using Salesforce Experience Cloud

Challenge

The company's legacy .NET solution ceased to deliver to R&DIUM Capital's business needs and became a blocker in increasing the number of processed clients

Tech Stack

Salesforce Experience Cloud, Rest & Soap API, LWC & Aura, Bulk API, Green ID, Equifax

Our Solution

Avenga helped R&DIUM shape their tech vision and smoothly migrate data to Experience Cloud, automating data processes and integrating instant exchange with the Australian Tax Office.

Green ID integration eliminated ID scans, and clients can now manage documents securely with Salesforce, Conga, and Box. **Result: 50% increase in processed loans, 60% increase in client satisfaction.**

“

Avenga always has the skills available and also the capability to deliver.

Ron Holmes
CTO – Radium Capital



Salesforce

Automated Data Processing

Full-Spectrum Security for a Digital Bank: From Annual Audits to 24/7 Protection

Our Solution

- Delivered **White Box penetration tests** for online payment systems, including web, API and mobile apps
- Performed **Grey Box testing** on critical internal servers and applications
- Provided **continuous testing service** over 3 years, including retesting and immediate reporting of critical vulnerabilities
- Established a **24/7 Security Operations Center (SOC)** for continuous monitoring, alerting, and incident response
- Combined first-level SOC monitoring with second-level investigation by senior security engineers

Tech Stack

Penetration Testing Tools
SIEM Systems, Incident
Response Frameworks, 24/7
SOC Infrastructure

Challenge

Ensure continuous compliance, system resilience, and fast threat detection through penetration testing and a full-scale Security Operations Center. The client needed both technical audits and real-time incident response to meet internal and regulatory requirements.

Continuous Testing

Proactive Threat Response

Scalable SOC Operations



Key Data Acceleration with a Central Cloud Data Lake

Challenge

Separate CRM, product and risk systems left relationship managers with partial views, manual reports and slow responses. Cross-selling stalled, churn rose, and early warning on credit exposures relied on overnight batches.

Tech Stack

Azure Data Lake /
Databricks / Kafka /
Synapse Analytics

12

Months

12

Tech Experts

Our Solution

Avenga delivered a cloud-native data lake on Azure that streams operational events in real time, then layers Python-based machine-learning services for churn prediction, next-best-offer targeting and early credit-risk alerts. All surfaced through secure APIs and Power BI dashboards.



Full-Stack Execution

Complete Data Consolidation

Personalized Recommendations

Predictive Occupancy and Pandemic Preventions for Necessary Travellers



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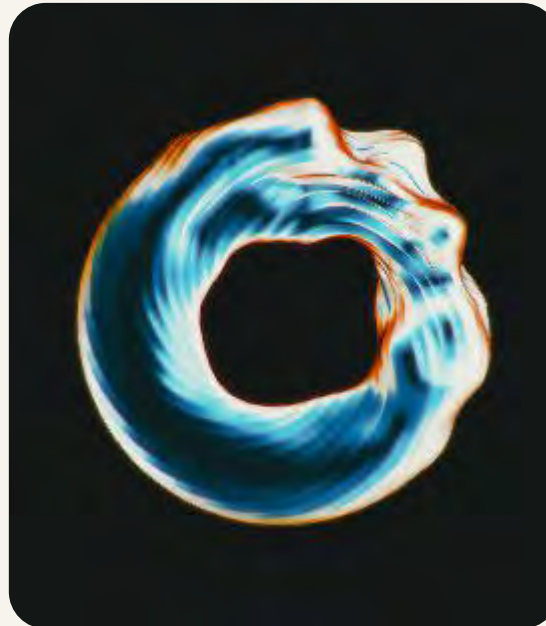
DevSecOps transformation through AI

Challenge

Our client, a leading telecom provider, sought external expertise to efficiently identify relevant information from internal systems during production incident troubleshooting.

Our Solution

- Developed a virtual assistant that operates both as a standalone app and a participant in ITOps group chats.
- Implemented regular data loads to aggregate key information from diverse sources.
- Utilized Generative AI to provide proactive assistance and relevant insights to specialists during troubleshooting.
- Designed a flexible, multi-model architecture with a supervisor agent that orchestrates specialized agents for different use cases.



70%

efficiency is gained during the troubleshooting of reference incidents.

Use Cases



Incident troubleshooting

Provision of immediate access to aggregated information from various sources for DevSecOps specialists to enable faster production issue resolution.



Knowledge aggregation

Consolidation of data from different platforms like Atlassian Confluence, ALM Octane, and BMC Remedy into a single, accessible interface.



ITOps communication

Integration of a virtual assistant directly into MS Teams for group chat discussion assistance and real-time support delivery.

Outcome

The client achieved a substantial efficiency improvement in troubleshooting reference incidents, which enabled them to meet SLA targets and reduce the number of specialists required per incident.

Generative AI

Intelligent Automation

Collaborative AI

Agentic AI for Domain-Specific Intelligence



Challenge

A client in a data-intensive industry needed an AI assistant with a deep understanding of domain-specific data to provide insights, answer complex questions, summarize reports, and build 3D models.

Use Cases



Intelligent Q&A system

Domain-specific question answering and complex query resolution with technical expertise.



Automated report processing

Streamlined report summarization and analysis to reduce manual review time.



3D model generation

Automated creation of 3D models based on technical input data and specifications.



Enterprise data integration

Multi-source data retrieval and integration across disparate enterprise systems.

Our Solution

- Built a comprehensive data collection and processing pipeline that integrates multiple data sources for downstream AI tasks.
- Developed custom vector database infrastructure for efficient data retrieval and knowledge management.
- Implemented Agentic AI architecture with autonomous agents for proactive planning and dynamic data retrieval from multiple APIs.
- Delivered an integrated AI assistant capable of handling complex domain-specific tasks and 3D modelling.

Outcome

The domain-specific virtual assistant successfully streamlined workflows and enhanced decision-making capabilities for our client.

50%

faster creation of 3D models from input data.

Agentic AI

Vector DB

3D Modeling

AI-powered Insights Automation for Client Support

Challenge

As a global lottery and sports betting company, the client held vast amounts of structured and unstructured data and was focused on improving their ability to act quickly in identifying trends and patterns.

Our Solution

- Began with a discovery phase to understand the client's data landscape and key challenges.
- Extracted insights from unstructured data using a Retrieval-Augmented Generation (RAG) architecture.
- Uncovered insights from structured data through a Text-to-SQL solution and integrated them with unstructured findings.
- Trained machine learning models to detect trends and patterns in structured data, delivering timely notifications to relevant business user groups.



35%

fewer ad-hoc analytics requests: faster responses and more team capacity.

Use Cases



Customer Behavior Analysis

Enabled marketing teams to identify emerging customer preferences and sentiment trends by analyzing survey responses and gameplay feedback alongside structured behavioral data.



Personalized Campaign Targeting

Combined structured customer segmentation with unstructured insights to tailor marketing campaigns more effectively improving engagement and conversion rates



Product Performance Monitoring

Provided real-time insights into game performance across regions and demographics allowing product managers to make data-driven decisions on game enhancements or retirements.

Outcome

The solution empowered business users to explore data through natural language, reduced reliance on analytics teams, and enabled proactive trend detection across data of varying complexity.

AI-Powered Precision for Extreme Rail Line Monitoring: Magic Eye 2.0

Enterprise Solution

Cameras for images recognition

GPIO and 3 PCIe card slots, max. flexibility of connections

Temperature measuring

Local buffering + delayed sending if necessary

Incremental distance measuring

Ready for connectivity with LAN USB RS232 RS485 and more

Challenge

To develop a durable, intelligent platform capable of complete visual and sensor-based inspection of rail lines — even under harsh industrial conditions such as heat, wax, and paint exposure.

Tech Stack

Edge AI / Visual Inspection
/ Thermal Sensors / IP67
Hardware / Remote Data
Transfer / Embedded
Systems

100%

visual rail coverage
under all lighting and
surface conditions

IP67

-rated hardware for harsh
industrial environments

Our Solution

We designed an AI-enabled inspection platform that performs full visual analysis of rails from all angles, including temperature, position, and electrical monitoring. With IP67 protection and resistance to temperatures up to 150°C for over 15 minutes per cycle, the system ensures fault detection in any environment. It operates on low-powered hardware with edge AI, enabling real-time fault detection and seamless remote data transfer.



Modern Data Platform to Enable Critical Information Within Public Transport

Challenge

The client needed assistance for the development of a modern data platform to handle all the data about their journeys, the passengers etc. The data is used real time in customer apps, in critical decision making and in long term planning. It's critical to deliver on their promise to the citizens.

Our Solution

Avengea have designed and co-developed a centralized data platform in Microsoft Azure in order to fetch data from the different operational systems and show the results in BI reports which their business users can access and analyse the data.

Key Benefits

- Better insights and tracking of their KPIs
- Data delivered and updated on a daily basis
- Infrastructure which enables streaming data and AI/ML models.

This modern platform serves

360°

of the organization, data reports to finance, traffic operations, sales, customer service etc.



Streaming Analytics

Unified Data Platform

Operational Intelligence

Customer Care Transformative Solution for a Multinational Financial Management Organization

We've seen a fantastic impact on the team; turnaround time on our customer messages has been reduced, the quality has been high, and AI has helped to define our quality standards. Our team are overwhelmingly positive, and the proof of concept has been so successful, it's now an established and important part of the Client Services tool kit! We can't wait to utilise AI for further items in the future and are constantly looking for those opportunities!

Head of Client Servicing



60%

improved efficiency
through automation

30 →
10min

Response time
decreased by

384k

Revenue

3x

more AI enhancement
requests across FIL

Shifted perception: AI
as a practical asset

AI-Driven Service Automation

Operational Velocity Boost

Scalable Intelligence Enablement

Customer Care Transformative Solution

Challenge

Our client – a globally leading investment management company – faced growing volumes of customer inquiries submitted via a secure messaging system. Processing these messages manually was time-consuming and inefficient. The organization needed to streamline and automate routine communication to improve responsiveness.

Our Solution

After thorough evaluation, Avenga proposed the use of generative AI. Our team developed an intelligent virtual assistant capable of:

- understanding free-form text
- retrieving relevant information from internal systems
- delivering human-like, real-time responses



Tech Stack

Generative AI (LLMs),
Natural Language
Understanding (NLU),
Integration with internal
knowledge bases and
CRM systems

3x

reduction in response time
to end-user inquiries

Conversational AI

Process Automation

Response Time Optimization

Strategic Collaboration with Global Telekom

Overview

Our 18+ year partnership with the Telekom Group spans entire value chains – from smart home devices to large-scale communication platforms – where we co-create, operate, and scale end-to-end digital ecosystems that reach millions of users across the world.

350+

Experts Engaged

2012

Approved vendor at Group level

1M+

Smart Home apps users

18+

Year partnership

40M+

Users served across apps

300+

Smart devices supported

Strategic Projects

MagentaZuhause APP, MagentaOne APP, Voicemail APP, Smart Home and Media Ecosystem, DeskBot, Virtual Reality Conference Room, People@Work (Workforce Management system), MedienCenter

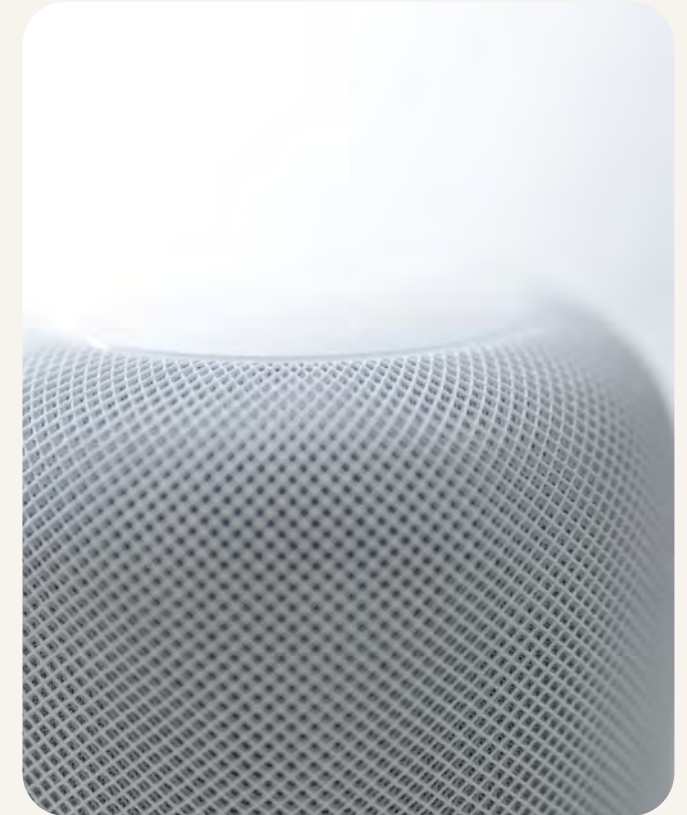
Technology Enablement & Ownership

- End-to-end ownership: architecture, development, QA, release
- Cross-platform solutions: iOS, Android, Web, CPE, voice
- Partnering across the whole IT stack: OSS, BSS, Frontend and Mobile, Data Analytics
- Smart device & IoT integration
- Full-cycle testing including automation & edge-case simulation

Scalable Digital Ecosystems

End-to-End Technology Ownership

Cross-Platform Innovation



Scaling Digital Quality Across 30+ Brands at a Global FMCG Enterprise

Challenge

The Client manages digital projects for over 30 brands, coordinated by its Digital Transformation Services (DTS) unit. Each brand had its own ways of working, budgets, and delivery partners, making it difficult to ensure consistent quality across all initiatives. Without a shared framework, projects risked delays, inconsistent user experiences, and an increased number of defects reaching production. DTS required unified QA standards, streamlined processes, and scalable quality assurance across its diverse digital ecosystem.

Partnership
since
2016

Tech Stack

Jira, Jenkins & Typescript, standard web technologies (aligned with the Client's platforms)

1k+

Automated tests running nightly across multiple brands

Our Solution

Avenga supported DTS with a blend of consulting, hands-on execution, and automation. We embedded directly with the client to understand workflows and co-created a QA strategy tailored to the Client's needs. This included:

- Establishing **uniform QA guidelines** to bring consistency across all brands
- Building a **scalable regression suite** with over 1,000 nightly tests to catch defects early
- Combining **manual and automated testing methods** for full coverage
- Delivering **continuous reporting and feedback** to speed up decisions

Today, QA is a reliable foundation of the Client's digital ecosystem, enabling consistent, efficient, and high-quality delivery across brands.



Quality Assurance

Automation at Scale

Multi-Brand Delivery

Process Optimization

Ticketing Ecosystem for Skånetrafiken



Our Solution

- Built on the Azure cloud
- Microservice architecture with over 50 specialized and fully scalable services and applications
- Continuous delivery every Monday morning during rush hour
- Fully automated quality assurance
- Developing partnership with other PTAs
- Solutions are also used by two other PTAs, Blekingetrafiken and Östgötatrafiken

Challenge

Skånetrafiken is a 3rd largest public transport authority in Sweden with 175 million passengers per year. It provides travels with 220 trains, 7 trams, 1000 buses and 340 special transport vehicles, which travel within Skåne county, to/from nearby counties and transit between Sweden and Denmark.

Skånetrafiken was looking for ways to develop a complex ticketing system that would serve all the passengers flawlessly every Monday during rush hours without a downtime.

Benefits

Ticketing system available via Skånetrafiken mobile app and had over 1 000 000 downloads.

More than 80% of all ticket sales happened in the mobile app.

Tech Stack

Sales channels B2C, sales channels B2B, traffic information, products and prices, tickets, validation, accounting, national ticketing system, customer service tools, sales and payments, bearer (ID based)

Cloud Enablement for a Leading Paint Manufacturer



Tech Stack

Active Directory, Entra ID, Azure Bastion, Exchange, SharePoint, OneDrive for Business

Our Solution

We created landing zones, identity and access management, network, operational standards for backups and disaster recovery all within Azure best practices. Intune became an integral part of the new cloud environment, allowing for efficient mobile device access management. As we migrated users to a unified Azure space, we ensured L2 and L3 support for all users.

Challenge

Our client is a frontrunner in manufacturing dyes, pigments, and specialty materials. The client has a global production and sales network with 19 production sites. In addition, 3,000 employees ensure on-site support to the group's customers with individual technical advice, short delivery times, and stocks that meet local requirements. They were creating a new IT infrastructure on Azure environment and Microsoft platforms. Azure was the place for everything. We helped them do it.

Our client suffered from the excessiveness of various infrastructures and tools based on Linux and Microsoft. They were looking to unify the toolset and migrate to a unified software operational ecosystem.

Our Clients Say

“We have evolved as trust was built, and the team has started making an impact in other areas.”

Alexander Bibighaus
VP of Product & Engineering

klara



“Affordability and depth of expertise have made them a critical development partner.”

Suhail Mughal
CTO

QPharma

“The ability to adapt to project specifications was a hallmark of their work and contributed to the recent expansion of their role.”

Mick Davison
VP of Software Development



One-Stop Partner for Your Successful Business Journey

We will help you shape your vision, implement it, and support its success.

Our experts will help you shape the best technology-business success.

Solution Vision

We implement the designed solution following the best software delivery practices.

Engineering

We oversee the process of successfully launching the solution.

Deployment

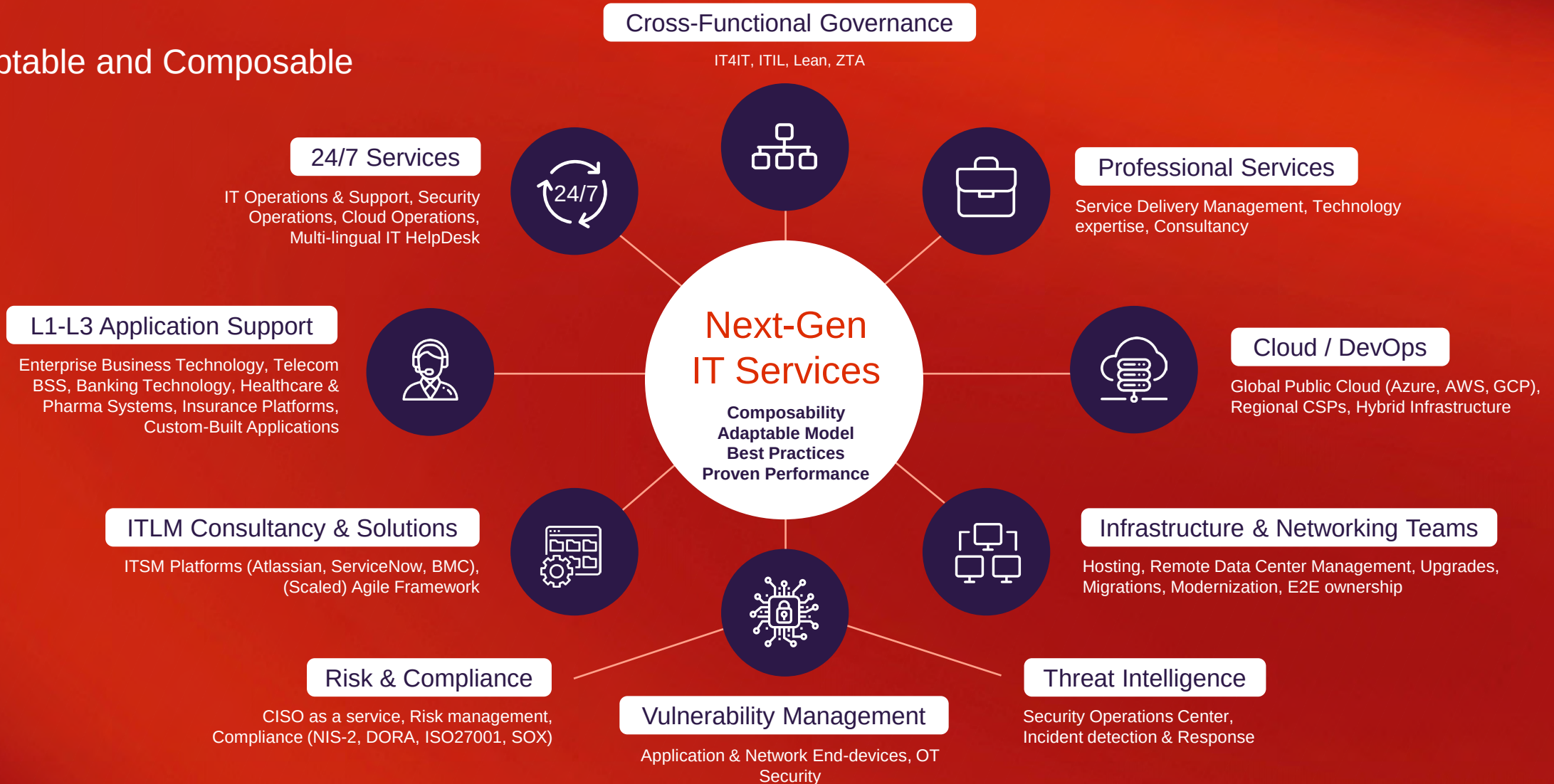
Our experts are there for you to ensure the solution's longevity and flexibility.

Support



Managed Services Models

Adaptable and Composable



Key Technologies

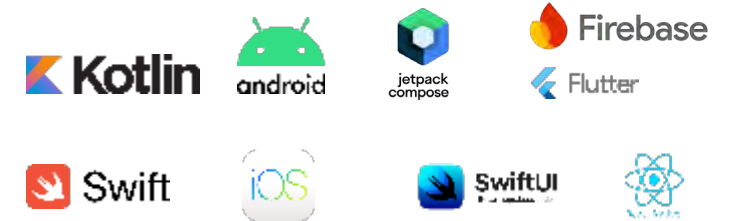
Backend



Frontend



Mobile



Automated Testing



Data Analytics



Cloud & Containers



Artificial Intelligence



Integration



Platforms



Extensive Toolkit for Your Success

RDBMS



TERADATA

ORACLE
DATABASE

OS



UNIX®



Containers & Orchestration



AWS ECS



OPENSIFT



kubernetes



docker

ITSM & Doc Management



Acquired by Ivanti



Hosting



ON-PREMISE

amazon
web services

IaaS

AWS
CloudFormation

Pulumi



Monitoring



Grafana



Amazon CloudWatch



Prometheus



New Relic



DATADOG



dynatrace



ZABBIX



Application Insights

Logs & Scripting



kibana



elasticsearch



PowerShell



RANCHER



AWS Lambda



PowerShell



Ruby



python



BASH

CD/CI



ANSIBLE



Bitbucket



GitHub



Octopus Deploy



Jenkins



GitLab

Atlassian
BambooAzure
DevOps

AWS CodeDeploy



TeamCity

Delivery Models

IBM Product Development

- IBM Tivoli Directory Integrator (TDI)
- IBM Watson Oncology Expert Advisor
- IBM Watson AskMDA
- IBM Sterling Supply Chain Insights
- Augmented Remote Assist (AR4TSS)

Benefits

23 years of collaboration successfully building competence teams with skilled experts by providing technological and domain expertise, stability and customized processes to bring higher project execution effectiveness.

Client Project Implementation



Internal Systems Development

- Your Learning
- SkillsBuild
- Lighthouse Learning & Knowledge Portal
- SE&TS Marketing Platform
- INSIGHT Sales Management Dashboard
- Worldwide Business Intelligence Enablement
- Ask Watson Incentives
- Web Membership (IWM)
- New Horizon
- Cloud Managed Services



Delivering since 2001



Partner of choice as Core supplier



50+ successful projects delivered



45+ experts engaged



3 delivery centers



Full Remote Concept

Full Remote Concept

One Stop Shop Vendor

90% Resource retention rate

Partner of choice for innovation

The Three Things That Make Avenga Experience Different

Embedded Strategy – from User to Business

We combine customer perspective with business goals from day one. Strategy is not an add-on, it's deeply integrated into every step.



Cross-Industry Expertise & Feasibility Focus

We bring deep experience across industries and ensure every idea can be executed. Innovation meets real-world delivery.



Local Expertise with Global Scalability

Our local teams understand your context—while our international network ensures scale, speed, and consistency.



How can we help your business?



Markus Stuhr, Director Avenga Experience
markus.stuhr@avenga.com

How Can We Help Your Business?

Making complex projects feel effortless

Hana Chundelova Sulcova
VP Emerging at Avenga



Shaping strategy into smart solutions

Thorsten May
Managing Director at Avenga Germany



Where collaboration meets results

Fabian Haase
Senior Business Development Manager at Avenga



+ A global team of skilled professionals driving your success.



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