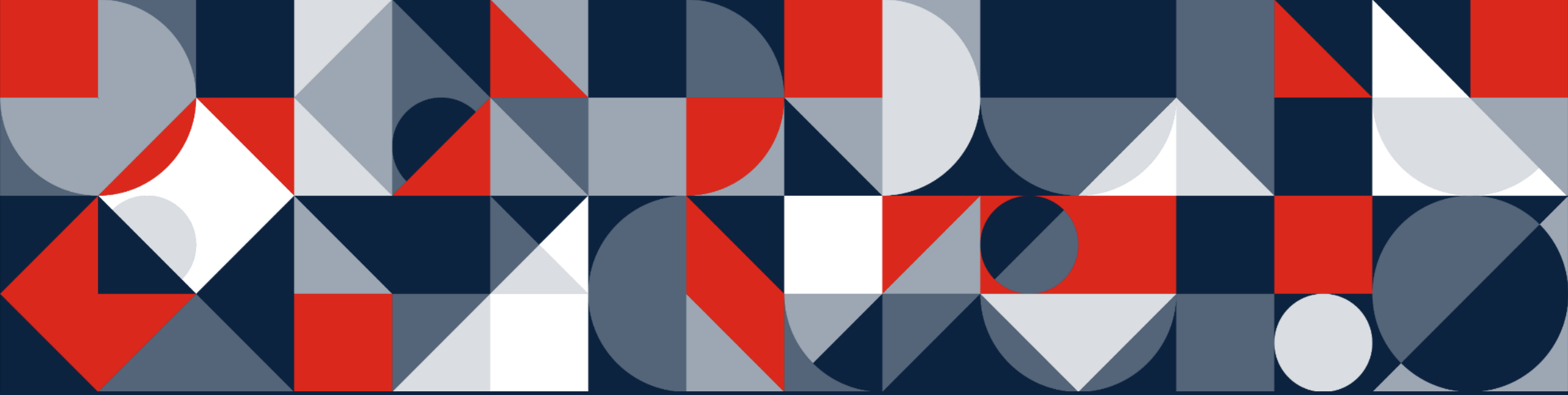


2025

Software Solutions: The Future of Intelligent, Connected & Cloud-Native Systems

bip.

HERE TO DARE

SOFTWARE SOLUTIONS

Index

The Engine of Digital Platforms

- The digital era demands **intelligent, scalable, and connected solutions.**
- From **IoT to DevOps**, modern software engineering drives efficiency, resilience, and continuous innovation.
- Modernized infrastructure **cuts costs and speeds up application development**.
- Bip Software Solutions integrates IoT, Cloud-Native, APIs, and Operational Intelligence (AIOps/MLOps) **to accelerate digital transformation across industries.**

”By 2029, more than 95% of global organizations will run containerized applications in production.”

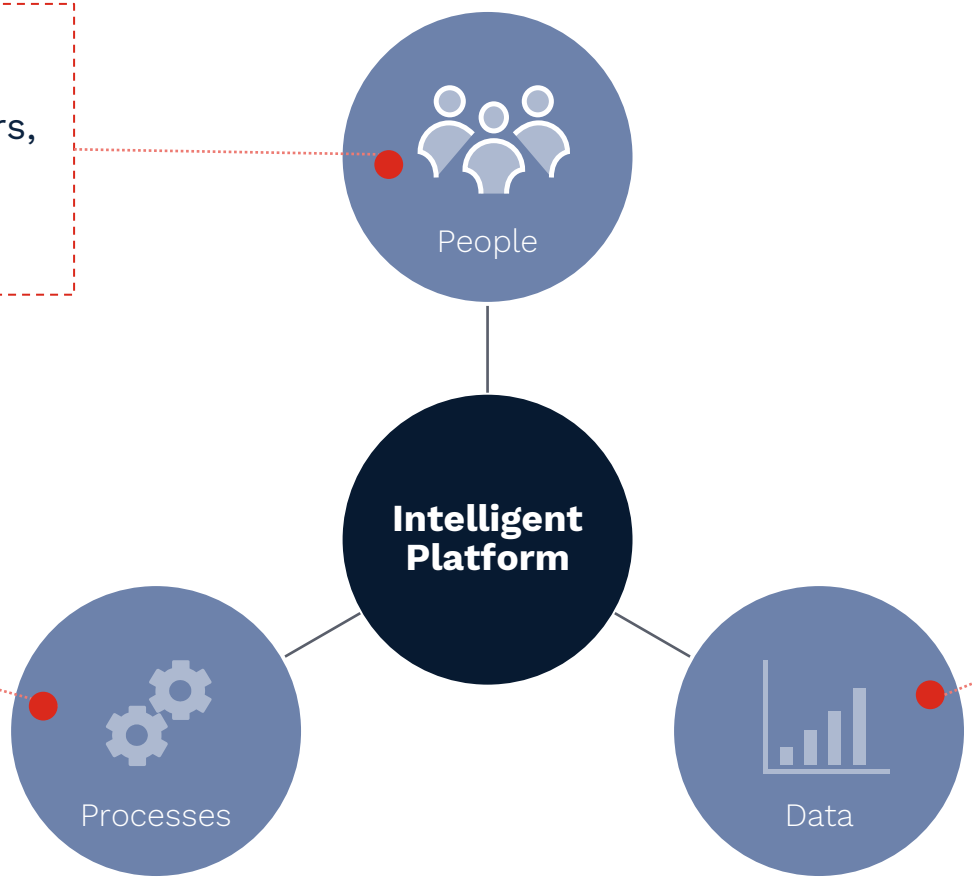
(Source: Gartner)

Building Intelligent, Connected Platforms

🧠 Connecting people, processes, and data to enable agile, intelligent, and scalable solutions

Empowered users through digital tools
End users, developers, business teams — human side of innovation

Automated and optimized workflows
Automation, DevOps, workflows



Data-driven intelligence for better decisions
Cloud, IoT, analytics, AI insights

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

01.

Internet of Things

Connected Systems

Connects devices, assets, and data & insights for smart operations across physical environments through IoT Hub, Edge Computing, and Digital Twins.

02.

Modernization

Cloud-Native Applications

Refactors legacy systems into scalable microservices through modular, containerized applications orchestrated with Kubernetes

03.

API's

Connected Ecosystems

Creates secure, governed integration across platforms for seamless data exchange.

04.

DevOps & AI-Powered Operations

Continuous Innovation

Implements automated CI/CD pipelines, intelligent monitoring, and AI-driven insights for predictive and self-healing operations.

05.

Infrastructure as Code

Code-Driven Cloud

Automates infrastructure deployment with compliance & observability through Terraform, Bicep, and Azure DevOps pipelines.

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

01.

Internet of Things

Connected Systems

Connects devices, assets, and data & insights for smart operations across physical environments through IoT Hub, Edge Computing, and Digital Twins.

Business Impact

Enables **real-time visibility** of operations and asset performance.

Reduces **unplanned downtime** through predictive maintenance.

Unlocks **new business models** via data-driven services (e.g., usage-based billing, remote operations).

Improves **sustainability** through optimized energy and resource consumption.

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

02.

Modernization

Cloud-Native Applications

Refactors legacy systems into scalable microservices through modular, containerized applications orchestrated with Kubernetes

Business Impact

Increases **agility and scalability** — deploy updates faster with no downtime.

Cuts **infrastructure and maintenance costs** through resource efficiency.

Improves **time-to-market** for new features and channels.

Enables **resilient operations**, preventing single points of failure.

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

03.

API's

Connected Ecosystems

Creates secure, governed integration across platforms for seamless data exchange.

Business Impact

- Establishes a **connected enterprise**, breaking data silos.
- Accelerates **innovation** by allowing partners and internal teams to co-create services.
- Improves **customer experience** through unified digital journeys.
- Ensures **governance and traceability** across integrations.

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

04.

DevOps & AI-Powered Operations

Continuous Innovation

Implements automated CI/CD pipelines, intelligent monitoring, and AI-driven insights for predictive and self-healing operations.

Business Impact

Reduces **release cycles** from weeks to hours.

Uses **AI to predict failures**, optimize infrastructure, and recommend fixes proactively.

Boosts **developer productivity** via AI copilots (e.g., GitHub Copilot, Azure DevOps Copilot).

Strengthens **reliability and quality** through automated testing, validation, and rollback.

Enables **continuous learning** loops via MLOps for deployed models, ensuring AI systems stay relevant and ethical.

Building scalable, intelligent, and resilient digital platforms through modern software engineering practices.

05.

Infrastructure as Code

Code-Driven Cloud

Automates infrastructure deployment with compliance & observability through Terraform, Bicep, and Azure DevOps pipelines.

Business Impact

Ensures **consistency, security, and compliance** across environments.

Reduces **manual configuration errors** and accelerates provisioning.

Optimizes **cloud costs** with automated scaling and governance rules.

Improves **resilience and auditability**, key for regulated industries.

The Market Landscape:
Challenges & Opportunities

Modernization and automation are no longer optional — they're the foundation for future-ready enterprises

⚠️ Challenges	🚀 Opportunities
Legacy systems slowing down innovation and scalability.	**Cloud-native architectures** enable faster time-to-market and cost efficiency.
Siloed data and poor system integration hinder decision-making.	**API ecosystems** and data integration unlock connected business models.
Manual operations increase errors and reduce agility.	**AIOps & automation** reduce downtime and improve reliability.
High infrastructure costs with limited visibility.	**IaC and observability** drive predictable, optimized cloud spending.
Talent shortages in specialized IT roles.	**Low-code & intelligent DevOps** empower teams and close the skill gap.

”The software landscape is evolving rapidly — companies that modernize and automate are achieving up to 50% faster innovation cycles and 40% lower operational costs.”

(Source: McKinsey)

📊 95% of new digital workloads will run on cloud-native platforms by 2025 — Gartner
⚙️ 50% cost reduction through automated infrastructure — McKinsey
🌐 60% of enterprises accelerating API-first strategies — Forbes

The Market Landscape:
Challenges & Opportunities

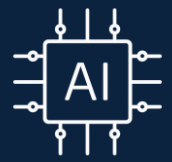
From Reactive IT to Predictive, Self-Healing Operations

70%

of enterprises will adopt AIOps by 2026

40%

faster incident resolution with AIOps



Reactive ⟶ Proactive ⟶ Intelligent AIOps maturity evolution

Organizations move from manual monitoring to autonomous, AI-driven operations

Predictive analytics and anomaly detection prevent incidents before occur

AI detects anomalous patterns and anticipates failures before they impact the business

Automated remediation increases uptime and reduces MTTR

AIOps executes corrective actions automatically

Unified observability eliminates monitoring silos

Provides visibility across infra, apps, containers, APIs and networks

Sources: Gartner, McKinsey and others

The Market Landscape:
Challenges & Opportunities

IoT & Edge Computing: Connecting the Physical and Digital Worlds

IoT + Edge computing enable real-time data processing close to the source

Lower latency, greater security, immediate decisions.

$1,6T

projection of IoT market value by 2030

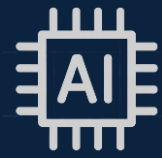
Predictive maintenance reduces downtime and costs

Data-driven models that anticipate failures in critical assets.

Digital Twins unlock contextual awareness

Digital models that replicate facilities, equipment, and processes.

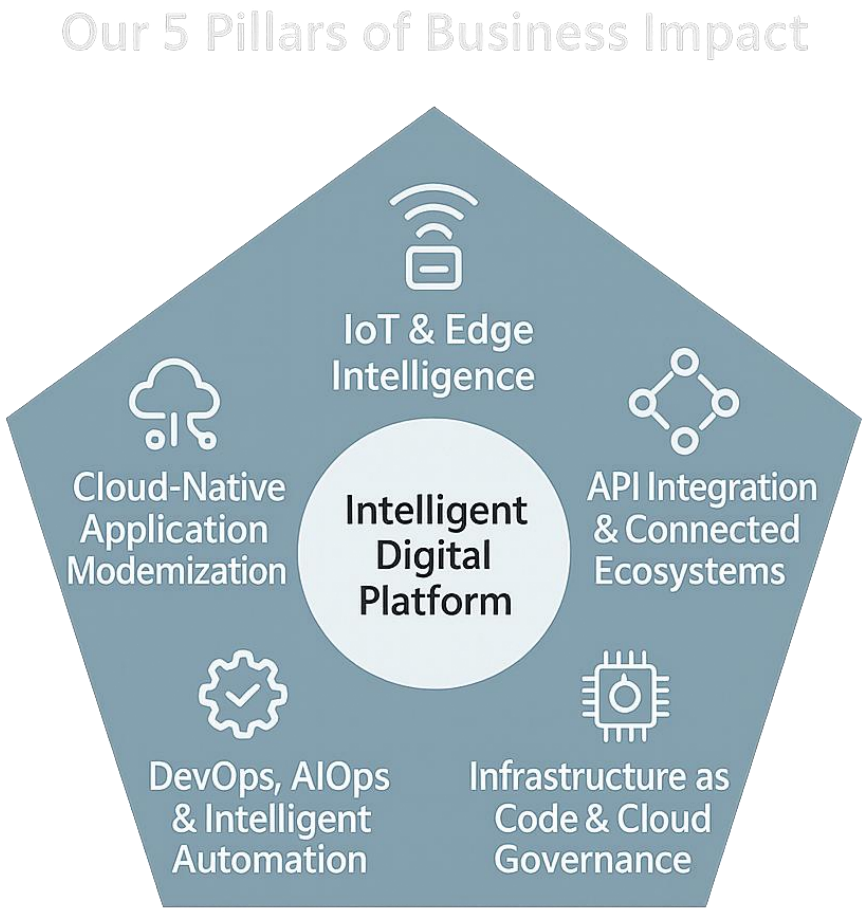
Edge AI enables offlinw intelligence and low-latency decisions



Ideal for industry, energy, healthcare, or transportation.

Sources: Statista, and others

A unified framework to drive digital acceleration and enterprise transformation.



IoT & Edge Intelligence

We design and deploy **end-to-end IoT solutions** using Azure IoT, Edge Computing, and Digital Twins **to connect assets, processes, and data in real-time**.

Cloud-Native Application Modernization

We **migrate, modernize, and rebuild applications to be cloud-native**, using microservices, containers, and AKS (Azure Kubernetes Service).

API-Driven Integration Connected Ecosystems

We **design and manage API-based ecosystems**, integrating internal systems, SaaS applications, and partners through Azure API Management, Logic Apps, and Event Grid.

DevOps, AIOps & Intelligent Automation

We **automate the software lifecycle with CI/CD, apply advanced observability, and enable AIOps** for predictive operations and self-remediation.

Infrastructure as Code (IaC) & Cloud Governance

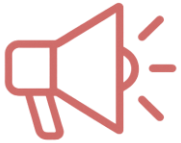
We build **automated, reproducible, and secure infrastructures** using Terraform, Bicep, Landing Zones, and Azure DevOps.

What We Do: Our 5 Pillars of Business Impact

A unified framework to drive digital acceleration and enterprise transformation.

What We Deliver

We design and deploy **end-to-end IoT solutions** using Azure IoT, Edge Computing, and Digital Twins **to connect assets, processes, and data in real-time**.



Business Impact

- ✓ **Real-Time Operations**: Continuous monitoring of equipment, plants, and critical processes.
- ✓ **Predictive Maintenance**: Reduction of failures and extension of asset lifespan through advanced analytics.
- ✓ **Operational Efficiency**: Lower operational costs thanks to actionable data.
- ✓ **Safety & Compliance**: Sensors and automatic alerts to reduce field risks.
- ✓ **New Business Models**: IoT-based services (pay-per-use, performance-as-a-service).

Typical Scenarios

- ✓ Smart Manufacturing
- ✓ Smart Facilities / Energy Monitoring
- ✓ Connected Logistics
- ✓ Utilities & Metering
- ✓ Digital Twins for complex assets

What We Do: Our 5 Pillars of Business Impact

A unified framework to drive digital acceleration and enterprise transformation.

What We Deliver

We **migrate, modernize, and rebuild applications to be cloud-native**, using microservices, containers, and AKS (Azure Kubernetes Service).

Business Impact

- ✓ **Agility:** Faster releases (CI/CD) and seamless deployments.
- ✓ **Cost Optimization:** Elastic and more efficient infrastructure compared to legacy monoliths.
- ✓ **Resilience:** Fault tolerance based on distributed design.
- ✓ **Scalability:** Automatic scaling according to demand and traffic spikes.
- ✓ **Future-proof Architecture:** Modern technologies that reduce technical debt.

Typical Scenarios

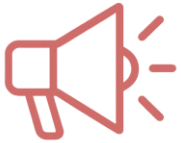
- ✓ Modernization of legacy .NET / Java applications
- ✓ Refactoring towards microservices
- ✓ API-based architecture
- ✓ Migration to containers (AKS / ACI)

What We Do: Our 5 Pillars of Business Impact

A unified framework to drive digital acceleration and enterprise transformation.

What We Deliver

We **design and manage API-based ecosystems**, integrating internal systems, SaaS applications, and partners through Azure API Management, Logic Apps, and Event Grid.



Business Impact

- ✓ **Interoperability:** Integrated ecosystems that break down data silos.
- ✓ **Speed to Innovate:** APIs allow for the rapid creation of new digital products.
- ✓ **Governance & Security:** Access control, versioning, monitoring, and regulatory compliance.
- ✓ **Partner Enablement:** Exposing APIs facilitates partnerships and business expansion.
- ✓ **Consistent Digital Experiences:** Robust integrations for unified journeys across any channel.

Typical Scenarios

- ✓ ERP ↔ CRM ↔ Supply Chain integration
- ✓ API Management Gateway for internal & external consumers
- ✓ Event-driven architectures
- ✓ B2B integrations

What We Do: Our 5 Pillars of Business Impact

A unified framework to drive digital acceleration and enterprise transformation.

What We Deliver

We **automate the software lifecycle with CI/CD, apply advanced observability, and enable AIOps** for predictive operations and self-remediation.

Business Impact

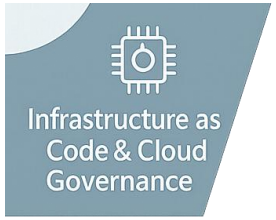
- ✓ **Faster Time-to-Market**: Reduction of the development and deployment cycle.
- ✓ **Reliability**: Fewer incidents and drastically reduced MTTR.
- ✓ **AI-Augmented Teams**: Copilots, assisted code generation, and operations automation.
- ✓ **Proactive Detection**: Anomaly algorithms detect issues before they have an impact.
- ✓ **Continuous Improvement**: Operational insights to optimize performance and stability.

Typical Scenarios

- ✓ CI/CD Pipelines with Azure DevOps or GitHub
- ✓ Observability (logs, metrics, traces)
- ✓ Intelligent alerts + runbook automation
- ✓ MLOps for AI models in production

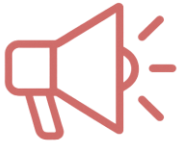
What We Do: Our 5 Pillars of Business Impact

A unified framework to drive digital acceleration and enterprise transformation.



What We Deliver

We build **automated, reproducible, and secure infrastructures** using Terraform, Bicep, Landing Zones, and Azure DevOps.



Business Impact

- ✓ **Security & Compliance by Design:** Automated compliance through policies and controls.
- ✓ **Speed:** Rapid provisioning of environments in minutes, not weeks.
- ✓ **Consistency:** Homogeneous infra and free of manual errors.
- ✓ **Cost Control:** Resource management, labeling, and automation of shutdowns/adjustments.
- ✓ **Scalability:** Infrastructure ready to grow with the business.

Typical Scenarios

- ✓ Azure Landing Zones
- ✓ Terraform Enterprise / GitOps
- ✓ Zero Trust & RBAC governance
- ✓ Policy-as-Code (Azure Policy)

Real-World Success Stories

Intelligent Manufacturing Process

IoT Edge platform enabling real-time visibility, energy optimization, and predictive maintenance across manufacturing operations.

Needs

The client, a global family-owned Spanish manufacturing company producing sustainable high-value surfaces for architecture and design, needed to extract reliable operational data from its production lines. Although machines exposed signals through SCADAs and local sensors, critical information remained siloed, unavailable for real-time monitoring, analytics, or preventive decision-making. The organization required a unified, modern, and scalable way to capture data from heterogeneous industrial systems and make it actionable across production, maintenance, and energy management processes.

Solution

We deployed a Microsoft IoT Edge–based architecture capable of ingesting, processing, and enriching signals from SCADAs, machine sensors, and industrial profilers.

Several custom Edge modules were implemented to deliver advanced capabilities, including Smart Notifications, a signal enrichment engine that merges telemetry with contextual data from external sources, and an electrical consumption module integrated with Dexma via API.

The solution enables real-time insights, edge-level automation, and seamless communication with cloud and third-party platforms to support predictive and operational decision workflows.

Stack

Azure IoT Edge; Custom IoT Edge Modules; SCADA Integrations; Dexma API; Azure IoT Hub; Industrial Sensor Interfaces

Features

Smart Notifications
Automated alerts when machine sensor thresholds are reached, enabling preventive maintenance and reducing unplanned downtime.

Signal Enrichment Engine
Combines raw telemetry with contextual production data to improve decision-making and process understanding.

Energy Consumption Integration
Real-time electrical usage data sent to Dexma for advanced energy analytics, helping optimize resource consumption.

Industrial Profiling & Data Capture
Unified ingestion of profiler data across machines, improving operational visibility end-to-end.

In numbers

25%	reduction in unplanned maintenance interventions
100+	alarms and notification based on signals.
100k+	signals retrieved and managed from the different manufacturing plants

Real-World Success Stories

Sector: Energy & Petrochemical

IoT & Edge Engineering for Scalable Industrial Asset Monitoring

IoT and Edge engineering enabling rapid delivery of new digital use cases and scalable asset monitoring across the energy value chain.

Needs

A major Spanish energy and petrochemical multinational required a robust IoT platform capable of supporting advanced asset monitoring across exploration, production, transportation, and refining activities. The organization needed to integrate device telemetry with its corporate Data Platform to enable a wide variety of digital use cases. Ensuring reliable cloud–edge communication, scalable data ingestion, and the ability to rapidly develop and operationalize new IoT-driven scenarios was essential to advancing their digital transformation roadmap.

Solution

Working through our IoT engineering team and in collaboration with internal stakeholders, we delivered end-to-end development, maintenance, and operation of cloud and edge applications on the client's IoT Platform. Our work included the design and deployment of solutions based on Azure IoT Edge, IoT Hub, Event Hub, Stream Analytics, IoT Central, and Digital Twin technologies to support real-time data ingestion and processing across industrial assets. We developed and maintained containerized modules (Docker), APIs, Linux/Unix images, and custom applications using C#, JSON, and other scripting tools. This unified architecture enables scalable edge processing, seamless cloud integration, and tailored solutions for a wide range of digital use cases.

Stack

Azure IoT Hub; IoT Edge; Event Hub; Stream Analytics; IoT Central; Azure Digital Twins; Docker Containers; Linux/Unix Images; Custom APIs; C#; JSON; Azure Cloud Services

Features

End-to-End IoT & Edge Application Delivery
Architecture design, development, deployment, and operation of modules supporting diverse industrial scenarios.

Advanced Azure IoT Integration
Seamless ingestion and processing of asset telemetry using IoT Hub, Event Hub, Stream Analytics, IoT Central, and Digital Twins.

Cloud-Edge Scalability & Reliability
Containerized solutions on Azure IoT Edge ensure secure, resilient, and scalable data flows for mission-critical operations.

Cross-Team Collaboration for Digital Use Cases
Embedded support enables business and technical teams to rapidly define, develop, and operationalize new digital cases from design to deployment.

In numbers

20-30% faster delivery of new IoT digital use cases

25-40% improvement in asset data availability

30%+ Higher operational visibility across assets

Sector: Legal Services

Real-World Success Stories

Workflow Automation Platform for National Legal Operations

Cloud-native workflow platform enabling automated legal processes, unified expedient management, and nationwide operational consistency.

Needs

A leading Spanish law firm specializing in consumer law, coordinating a large network of collaborating law offices across the country, needed to streamline and automate complex legal workflows. Their operations required orchestrating interactions between multiple parties — clients, procurators, courts, and internal teams — while ensuring compliance, traceability, and efficiency across thousands of active legal expedients. Manual workflows caused delays, limited visibility, and inconsistent execution across their distributed legal network.

Solution

We delivered a cloud-native microservices platform built on Azure Kubernetes Services (AKS), .NET 8, SQL Server, and Angular, enabling the creation and execution of highly customizable legal workflows. The solution provides a dynamic web interface that allows users to define workflows with multiple steps, actions, conditions, data fields, and automated transitions. The architecture ensures scalability, secure data processing, and seamless integration with external legal systems and actors across Spain.

Stack

Azure Kubernetes Service (AKS); .NET 8 Microservices; SQL Server; Angular; Azure DevOps; API Integrations; Identity & Access Control

Features

Dynamic Workflow Orchestration
Users can design and automate multi-step legal processes, reducing manual coordination and ensuring procedural consistency.

Operational Efficiency & Expedients Performance
Faster handling of legal cases thanks to automated actions, improved routing, and reduced administrative overhead.

Centralized Visibility & Control
Complete, real-time traceability of every expedient, its status, responsible parties, and next required actions.

Scalable Microservices Architecture
AKS-based foundation ensures resilience, growth capacity, and seamless integration with courts, procurators, and external systems.

In numbers

30-40% improvement in workflow execution accuracy

100% traceability of all expedients and workflow actions

20-30% increase in productivity of legal teams

Real-World Success Stories

End-to-End Asset Management Platform for Energy Plant Optimization

Cloud-native asset management platform enabling energy optimization, operational excellence, and end-to-end plant traceability.

Needs

A major national energy operator — the second-largest company in the gas distribution sector — required an end-to-end asset management system to optimize the performance, reliability, and energy efficiency of its plant operations. The organization needed a unified platform to maximize energy delivery, streamline logistics, improve maintenance operations, and ensure total traceability across thousands of critical assets. Reducing energy consumption by identifying optimal equipment operating conditions and automating documentation for both regulatory and operational compliance were strategic priorities.

Solution

We delivered a cloud-native microservices platform built on Azure Kubernetes Service (AKS), .NET 9, SQL Server, Angular, and Azure Machine Learning. The solution enables centralized management of plant master data, operational inputs/outputs, asset documentation, and maintenance workflows. Integrated machine learning models provide insights into optimal operating conditions and asset performance. The platform offers a unified digital environment to streamline operations, improve visibility, and support decision-making across logistics, maintenance, and plant management activities.

Stack

Azure Kubernetes Service (AKS); .NET 9 Microservices; SQL Server; Angular; Azure Machine Learning; Azure DevOps; API Integrations

Features

Energy Optimization with AI
Azure ML identifies ideal operating conditions, reducing energy consumption and improving equipment performance.

Unified Asset & Operations Management
Centralized platform for logistics, maintenance, documentation, and plant operations.

Regulatory & Operational Traceability
Automated documentation flows ensure compliance and provide full lifecycle traceability.

Scalable Microservices Architecture
AKS-based foundation supports continuous evolution, performance, security, and seamless integration with enterprise systems.

In numbers

15-25% improvement in operational efficiency

20-30% reduction in maintenance incidents

100% traceability of documentation and regulatory compliance processes

Sector: Energy

Real-World Success Stories

Modular Digital Platform Architecture for Virtual Office & Web Order Modernization

Modular cloud-ready architecture enabling faster evolution, scalable digital services, and seamless integration with the new CRM.

Needs

A leading energy company specializing in electricity, gas, and renewable energy solutions in Spain launched a strategic modernization program to renew its core digital assets: the Virtual Office and Web Order platforms. As part of a broader transformation initiative and CRM migration to Kraken, the client needed a modular, scalable, and future-proof architecture capable of enabling fast feature delivery, integrating third-party systems, and supporting evolving customer journeys for contracting, self-consumption, and digital services.

Solution

We redesigned the existing architecture into a multi-layer, modular, cloud-ready model that separates front-end and back-end logic for greater agility and maintainability. The back-end services were rebuilt using .NET 9, Azure Functions, Liquid Maps, and Azure Key Vault, enabling secure, API-driven integration with the new CRM (Kraken) and external systems such as payments or contracting services. The front-end layer was modernized using React to deliver a responsive, performant and decoupled user interface. The new architecture enables fast evolution, consistent governance, and a clean separation of concerns for long-term scalability.

Stack

.NET 9 APIs; Azure Functions; Liquid Maps; Azure Key Vault; React Front-End; CRM Kraken; Integration Layer (Payments & Third-Party Systems)

Features

Modular & Scalable Architecture
Redesign ensures high scalability and enables the platform to evolve as new digital capabilities and customer journeys emerge.

API-Driven Separation of Layers
Clear isolation between front-end and back-end via .NET 9 and Azure Functions enhances maintainability and reduces coupling.

Accelerated Integration with Third-Party Systems
Flexible API layer simplifies connections with CRM, payment systems, and future external partners.

Modern Front-End Experience
React-based front-end improves performance, adaptability, and development speed.

In numbers

30-40% faster integration with third-party systems

20-30% improvement in platform scalability and performance

25-35% reduction in time-to-market for new features

Sector: Energy

Real-World Success Stories

Optimization Platform for Industrial Participation in the Continuous Intraday Market (CIM)

Scenario-based optimization platform enabling industrial facilities to maximize value in the Continuous Intraday Market.

Needs

The first independent energy marketer in the Iberian market — serving clients across Spain and Portugal — needed a modern, scalable digital solution to optimize industrial facilities' participation in the Continuous Intraday Market (CIM). After purchasing electricity volumes in the day-ahead market, industrial users can shift consumption and resell energy in the CIM. The client required a tool that could evaluate multiple optimization scenarios, provide actionable insights, and support better decision-making on volume shifting to maximize value in both spot and forward markets.

Solution

We developed a web-based optimization platform built in Angular, supported by a Python-based API containerized in Azure Container Apps and secured through Microsoft Graph. The platform allows users to execute and compare different consumption-shift scenarios, store and reuse baselines, visualize optimization outcomes, and review CIM participation strategies. The architecture ensures scalability, secure access, and fast execution of computational scenarios while offering a modern front-end experience for energy analysts and industrial customers.

Stack

Angular Web Application; Python API; Azure Container Apps; Microsoft Graph Authentication; Scenario Optimization Engine

Features

Multi-Scenario Optimization
Users can run multiple CIM participation scenarios and identify the most profitable consumption-shift strategy.

Data-Driven Decision Support
Python optimization engine provides detailed performance insights to support trading and operational decisions.

Secure & Scalable Architecture
Microsoft Graph authentication and containerized APIs ensure reliable, scalable, and secure access for all users.

Advanced Visualization & Baseline Management
Interactive dashboards help compare results, store baselines, and track optimization performance over time.

In numbers

10-20% improvement in potential revenue from optimized CIM participation

25-35% reduction in analysis time

20-25% faster decision-making cycles

Real-World Success Stories

Enterprise Observability Platform for Copilot AI & Microsoft Teams Usage

Observability platform enabling enterprise-wide visibility into Copilot AI interactions and Microsoft Teams usage.

Needs

A global leader in the development, maintenance, and operation of energy infrastructure required a unified observability solution to monitor how employees interact with Copilot AI and Microsoft Teams. The organization needed detailed insights into AI-assisted interactions, call activity, and meeting diagnostics to improve governance, support operational excellence, and ensure the responsible and efficient adoption of Microsoft 365 collaboration and AI capabilities across all business units.

Solution

We implemented an observability platform based on Microsoft Graph integrations, delivering multiple APIs built with Azure Functions in Python that gather and store interaction and diagnostic data. The solution subscribes to Microsoft Graph webhooks to capture Copilot AI interactions (/interactionHistory/getAllEnterpriseInteractions) and Teams usage and call records (communications/callRecords). All data is securely stored in Azure Blob Storage, leveraging Azure Key Vault for secret management. The platform provides a reliable data foundation that enables the client's analytics teams to monitor usage patterns, governance metrics, and operational performance across the entire organization.

Stack

Azure Functions (Python); Microsoft Graph Webhooks; Azure Key Vault; Azure Blob Storage; Microsoft 365 (Copilot & Teams)

Features

End-to-End Governance of AI Interactions
Provides full visibility into Copilot AI usage patterns to ensure responsible adoption and alignment with organizational policies.

Teams Usage & Call Diagnostics Monitoring
Captures detailed information on calls and meetings to improve service reliability, support operations, and identify performance issues.

Secure & Scalable Data Integration
Azure Functions, Blob Storage, and Key Vault ensure secure, resilient, and scalable data processing.

Analytics-Ready Data for Decision-Making
Delivers structured observability data enabling the client to analyze trends and optimize collaboration and AI tooling across the enterprise.

In numbers

100%	visibility of Copilot AI interactions across the enterprise
90-100%	capture of Teams call and meeting diagnostics
20-30%	reduction in time spent diagnosing Teams-related issues

Sector: Energy

Real-World Success Stories

Cloud-Native Commission Settlement Platform for SME Energy Commercialization

Cloud-native platform enabling secure, scalable and high-performance commission settlement across 90 SME sales channels.

Needs

A global leader in renewable energy — with operations in more than 16 countries and 5.75 GW of installed capacity in Spain — is experiencing rapid growth in its SME energy commercialization business. More than 90 independent sales channels collaborate with the company, each generating commissions per contract. Commission settlement was being managed manually through an Excel-based tool, which became increasingly slow and unstable as contract volumes grew. To support business expansion, the organization needed a secure, scalable, and high-performance digital solution.

Solution

We modernized the existing settlement process by redesigning the system as a fully cloud-native architecture running on Azure-managed services. The new platform consists of an Angular web application and a .NET 8 Web API responsible for computing commissions efficiently and securely. Commission data is pulled from the CRM through encrypted Databricks APIs and persisted in PostgreSQL for optimal performance and reliability. Azure Key Vault ensures secure management of secrets and credentials. This architecture replaces the static Excel/Power BI workflow with an interactive, auditable and scalable digital platform.

Stack

Angular Web Application; .NET 8 Web API; PostgreSQL; Azure Key Vault; Databricks Encrypted APIs; Azure App Services; Cloud-Native Architecture

Features

Interactive Web Application Experience
Replaces a manual Excel tool with a modern Angular platform supporting real-time interaction, scenario evaluation and commission review.

High-Performance & Reliable Calculations
.NET 8 and PostgreSQL significantly improve processing speed and stability, supporting large volumes of SME contracts.

Secure CRM Data Integration
Encrypted Databricks APIs and Azure Key Vault ensure secure and compliant access to sensitive commercial data.

Azure-Managed Cloud Architecture
Standardized governance, improved scalability and reduced operational overhead through Azure IT-managed services.

In numbers

40-60% commission calculation cycles

30-40% reduction in manual administration workload

25-35% improvement in overall platform performance

Real-World Success Stories

Sector: Technology / Cloud Services

AI-Driven Cloud Operations Platform for Scalable, Autonomous Infrastructure Management

AI-driven AIOps platform enabling autonomous cloud operations, intelligent decision support and scalable infrastructure management.

Needs

A leading technology and cloud services provider required a modernized operational model to manage increasingly complex cloud environments. The organization faced growing operational workload, limited real-time visibility across infrastructure components, and a lack of intelligent tools to support technicians in fast, high-stakes decision-making. Manual processes slowed delivery cycles and hindered scalability, while the absence of automated pull request (PR) management and infrastructure-as-code workflows created friction in day-to-day operations.

Solution

We designed and implemented an AI-powered cloud operations platform based on Microsoft Cloud technologies, MCP servers and Microsoft-native tooling. The solution introduced a new architecture of autonomous AIOps agents capable of proposing infrastructure changes, generating and validating PRs, and assisting technicians during operational workflows. Deployed on Kubernetes for elasticity and resilience, the platform provides real-time observability, automated insights, and decision support across cloud workloads. Our team delivered model development, AI agent engineering and a complete end-to-end reference architecture for intelligent cloud automation.

Stack

Microsoft Cloud; MCP Servers; Kubernetes; Azure-native Observability; AI Agents; Infrastructure-as-Code Workflows; Git-based PR Automation

Features

Autonomous AIOps Agents
AI agents propose PRs, automate workflows, and support technicians in complex decisions, reducing manual intervention.

Real-Time Observability & Decision Intelligence
High observability across infrastructure enables proactive detection, faster incident resolution, and operational insight.

Scalable & Resilient Architecture
Kubernetes-based deployment ensures horizontal scaling, high availability, and continuous support for expanding workloads.

Accelerated Delivery & Cloud Automation
Automated changes and workflow orchestration improve development velocity and reduce operational cycle times.

In numbers

30-40% reduction in manual cloud operations

20-35% faster operational decision-making

~50% improvement in incident detection speed

Real-World Success Stories

Cloud-Native Tolling Platform for Intelligent Traffic Optimization

Cloud-native architecture enabling dynamic pricing, real-time traffic optimization and resilient tolling operations.

Needs

A strategic U.S. tolling operator responsible for critical highway infrastructure needed to modernize its mobility platform to handle rapidly increasing traffic density. The organization required a scalable, secure, and resilient cloud model capable of supporting dynamic pricing, real-time inference, and operational continuity in a mission-critical environment. Improving traffic flow, reducing congestion, and enabling data-driven decision intelligence were key priorities to ensure safe, efficient and reliable mobility services.

Solution

We designed and are implementing a cloud-native architecture that enables intelligent tolling through advanced inference models, secure data ingestion, high-availability infrastructure and seamless integration with on-premise and operational systems. The platform provides elastic scalability for traffic surges, supports dynamic pricing logic, and ensures continuous, resilient operations through distributed services, event-driven capabilities, and automated DevOps pipelines.

Stack

Azure Kubernetes Service (AKS); Azure Event Hub; Azure Functions; Azure API Management; Azure SQL / Cosmos DB; Azure Monitor; DevOps Pipelines (Azure DevOps / GitHub)

Features

Dynamic Pricing & Traffic Optimization
Enables real-time toll adjustments to reduce congestion and balance highway traffic loads.

Scalable & Resilient Architecture
Cloud-native design ensures continuous operations, elastic scaling during peak hours and high availability for mission-critical services.

Advanced Inference & Decision Intelligence
Supports predictive models and real-time analytics to improve traffic efficiency and operational decision-making.

Secure Data Processing & Integration
Provides a compliant, encrypted and interoperable data environment that integrates seamlessly with roadside and enterprise systems.

In numbers

15-25% improvement in traffic flow efficiency

30-40% increase in platform scalability during traffic surges

99.9% service availability for mission-critical tolling operations

Real-World Success Stories

Multi-Country Cloud Governance & Managed Operations for a Digital Platform Ecosystem

Centralized cloud governance and managed operations ensuring reliability, scalability and continuous evolution across a multi-country digital platform.

Needs

A leading multi-country digital platform required centralized governance and unified cloud operations to support consistent service delivery across several national instances. The organization faced challenges maintaining operational standards, resolving incidents efficiently, and evolving the platform while coordinating multidisciplinary teams across different regions. Ensuring seamless integration of Azure, AKS, O365, Argo CD, DevOps pipelines and other Microsoft Cloud technologies was essential to achieving operational excellence and platform scalability.

Solution

We delivered a comprehensive managed service model built on the Microsoft Cloud ecosystem, deploying and governing cloud infrastructure across multiple countries. The solution includes centralized operational oversight, 24/7 incident management, platform evolution workflows and coordinated support for multidisciplinary teams. We integrated Azure DevOps, AKS, Argo CD, O365 and observability tools to establish standardized governance, improve reliability and ensure continuous platform improvement. Automated CI/CD pipelines and deployment controls enable consistent, secure and scalable platform operations.

Stack

Azure Cloud; Azure Kubernetes Service (AKS); Argo CD; Azure DevOps; Microsoft 365; Observability Tools; Automated Deployment Pipelines

Features

Unified Multi-Country Governance
Standardized cloud operations and governance frameworks ensure consistent performance and compliance across all regions.

Managed Operations & Incident Management
Proactive monitoring, rapid incident resolution and continuous support reduce operational friction and improve service availability.

Enhanced Reliability & Observability
Operational dashboards and telemetry provide real-time visibility, enabling data-driven decision-making and improved platform stability.

Automated CI/CD & Platform Evolution
Streamlined pipelines and deployment automation accelerate feature delivery and ensure controlled, scalable platform evolution.

In numbers

20-30% reduction in operational incidents

30-50% faster incident resolution

25-35% increase in platform reliability & uptime

Real-World Success Stories

Centralized Cloud Governance & High-Quality Infrastructure Delivery Through Modular Terraform

Cloud governance and modular Terraform foundation enabling high-quality infrastructure delivery, consistent operations and scalable platform evolution.

Needs

A digital platform operator required centralized governance and cloud infrastructure management to ensure consistent, high-quality delivery across environments. The organization faced challenges maintaining control over infrastructure deployments, managing incidents efficiently and coordinating multidisciplinary teams. Ensuring strong delivery standards, platform scalability, observability and seamless integration across Microsoft Cloud technologies (Azure, O365, AKS, Argo CD, DevOps pipelines) was critical to achieving operational excellence.

Solution

We implemented a managed cloud governance model centered on modular Terraform deployments and Microsoft Cloud services. The solution enables standardized, repeatable and controlled infrastructure provisioning while improving the quality and reliability of deliverables. Our team provides ongoing operational oversight, incident management and platform evolution support, integrating Azure DevOps, AKS, Argo CD and O365 into unified workflows. Observability dashboards ensure compliance, performance and traceability across cloud environments. Automated CI/CD pipelines and reusable Terraform modules streamline deployments, reducing errors and improving efficiency.

Stack

Azure Cloud; Terraform Modular Architecture; Azure DevOps; AKS; Argo CD; Microsoft 365; Observability Dashboards; Automated CI/CD Pipelines

Features

Standardized & High-Quality Infrastructure Delivery
Modular Terraform ensures consistent, reliable and auditable deployments across environments.

Managed Operations & Incident Handling
Centralized governance and multidisciplinary teams improve resolution times and operational stability.

Enhanced Observability & Compliance
Operational dashboards provide real-time visibility into performance, reliability and regulatory adherence.

Optimized CI/CD & Deployment Workflows
Automated pipelines reduce rework, improve quality control and accelerate platform evolution.

In numbers

25-40% reduction in deployment errors

30-50% faster infrastructure delivery cycles

20-30% improvement in incident resolution times

bip.xTech

Thank You

Website | LinkedIn | Instagram