

xTech @ bip.

At a glance

xTech practice

Milan, July 2021
BIP CONSULTING

HERE TO DARE



BIP Overview

BIP in a “nutshell”



* Years with BIP
(average on year 2018)

BIP Overview

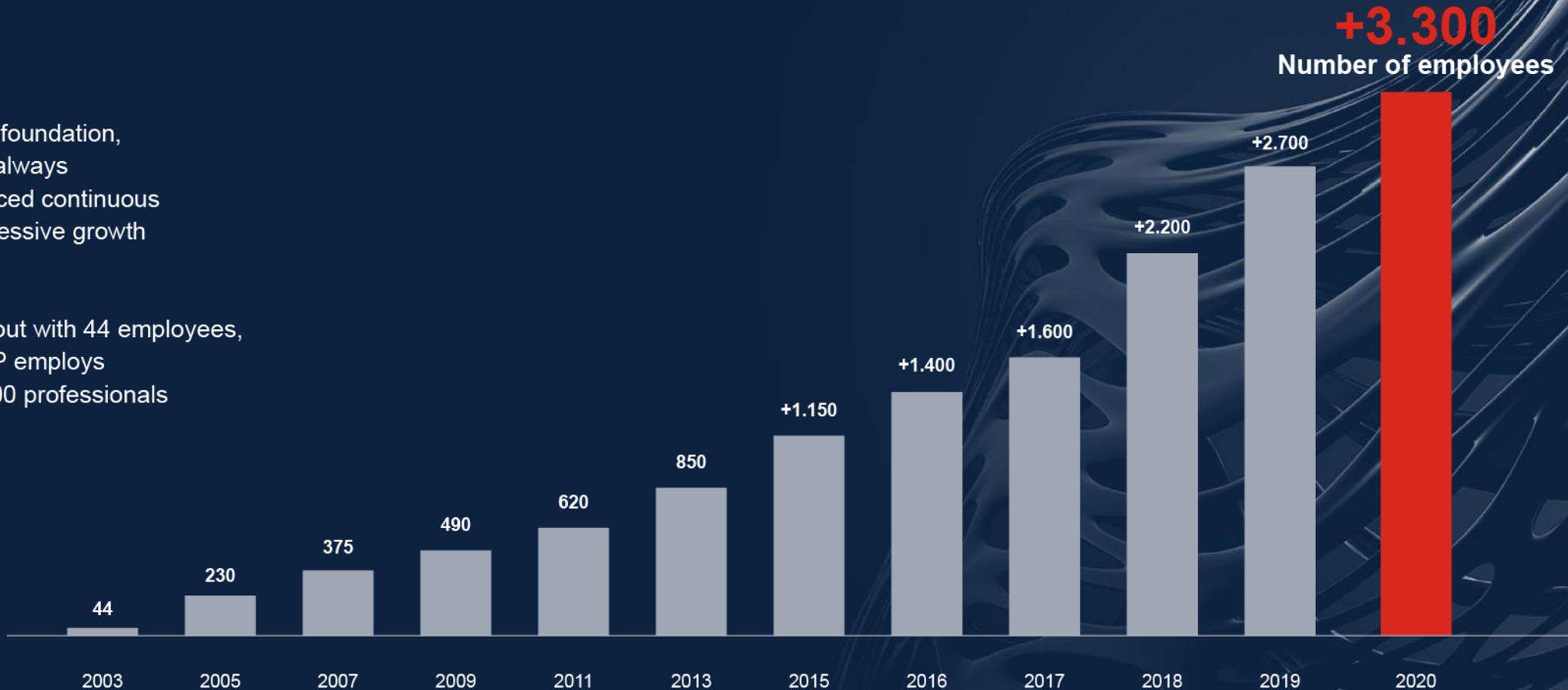
Headcount | Timeline and major growth steps

01

Since its foundation, BIP has always experienced continuous and impressive growth

02

Starting out with 44 employees, today BIP employs over 3.300 professionals



BIP Overview

Headcount | Global footprint

Our Offices:

Italy Milano, Roma,
Mogliano Veneto, Bologna

EMEA London, Madrid, Barcelona,
Bruxelles, Lugano, Wien, Zug,
Istanbul, Abu Dhabi

North America New York

South America São Paulo,
Rio de Janeiro, Santiago de Chile,
Bogotá



BIP Overview

Industries & Centre of Excellences



HERE TO DARE

- \$ Financial Services & FinTech
- 📱 Technology, Telco & Media
- ⚡ Energy & Utilities
- 🏢 Public Sector & Healthcare
- 🧬 Pharma & Biotech
- 🛒 Manufacturing
- 🏪 Retail

קול. Innovation, Design, Interaction
Change Management & Customer experience

קול. xTech
Data Services, Cloud, 5G, IoT, RPA, Solutions

קול. Transformation 4.0
Industry 4.0

קול. Cybersec
Information security & Regulatory Risk

קול. Customer Platforms
Digital Sales Transformation

Bip. xTech

the **largest**
professional

DATA SCIENTIST

community
in **Italy!**

LinkedIn
source
Talent insight March 2019



xTech @ בי.ק.

“We use exponential technologies to power end-to-end digital solutions, supporting data-driven transformation and scaling up responsiveness to business evolution.”

Our centre of excellence in numbers



90%

Loyal customers
– b2b service renewal



120+

Open collaborations
with clients (+10% YoY)



500+

Projects successfully
delivered in the last 3 years,
across 20+ countries



300+

Professionals



90%

Certified professionals



40+

Alliances with
tech partners



Italy, UK, Spain
& Brazil

Operations Hubs



10%

Invested in R&D/y

Our secret for the success



Led by **cutting-edge innovation**

we partner with research centres and university labs to be at the forefront of technological innovation



Leverage a **multi-perspective approach**

we work in cross-functional teams combining innovation, analytics and cloud



Manage complexity with **Agile and Lean methodologies**

we guide Clients to incorporate digital transformation via lightweight sprints



Trust in **co-creation**

we work in partnership with our Clients to infuse the spirit of data-driven organizations



Champion **information symmetry**

we strive to democratize information, removing barriers/silos within companies



Bet on **Talent**

we seek highly-talented professionals and promote a collaborative and rewarding work

Our area of interest...



Data & AI

Our Domain Experts build next generation analytics solutions, setup data-driven organizations and enhance Data Management capabilities.



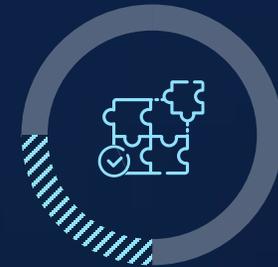
Cloud

We guide our Clients through Cloud transition, helping them to get the best value out of large transformation projects.



Tech Platforms

We experiment with, evaluate and manage innovative technologies, such as Network Automation (Virtualization & Orchestration), 5G, IoT, Blockchain, Augmented / Virtual Reality (AR/VR).



Solutions

We build and deploy software solutions, leveraging Agile and DevOps, adopting modern architectures on cloud infrastructure to realize scalable, resilient and future-proof platforms.

In our team we have



120+

Data Scientists

Data Governance Experts

Data Strategy Experts

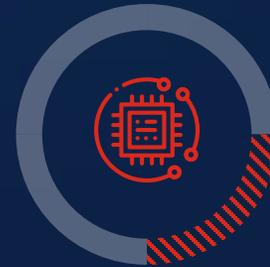
Data Analysts and Visualizers



70+

Cloud (Data) Architects

Cloud (Data) Engineers



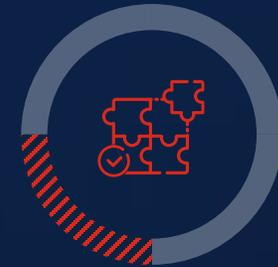
60+

IT Experts/Architects

Network Experts

IOT Experts

Blockchain Experts



50+

RPA Specialists

UI Developers

Full Stack Developers

Data & AI

Data Strategy: designing and bringing up-to-scale complex, data-driven organizations

Data Governance: defining and setting up organizational/operative models and data management practices

Data Science: conceiving and deploying Business Intelligence and AI-powered solutions at-scale to support data-driven decision making through machine learning and cognitive technologies





Cloud

Strategy and Governance: creating the foundation of the multi-cloud strategy to exploit this innovative asset; setting up frameworks and practices to optimize Cloud costs

Architecture and Optimization: designing and building scalable and future-fit business applications; defining frameworks to optimize performance, quality, security, reliability and cost

Migration: migrating applications and data platforms to the cloud adopting an action plan to prepare the organization for the transition

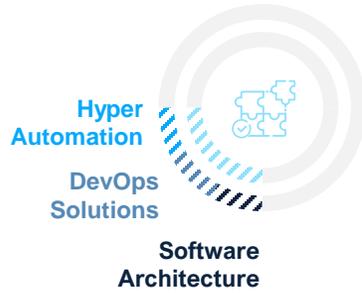
Tech Platforms

Strategy and Advisory: leading edge technology advisory; impact evaluation of innovative solutions; definition of roadmaps and migration plans

Architecture and Engineering: high- and low-level design of Digital Platforms (IT, Network, Blockchain, AR/VR,...)

Sourcing and Roll-Out Support: analyzing and scouting the market, managing RfI/RfP and tendering, technical project management





Solutions

Software Architecture: designing software architecture at application level and platform level to meet Client requirements

Solution DevOps: developing and deploying highly-scalable full-stack solutions and replatforming legacy applications in a continuous integration and continuous testing approach

HyperAutomation: analyzing business processes and automating them by developing and deploying bots

Customer Behaviour / Experience Analytics  Customer Analytics Churn  Customer Analytics Cross Channel Analytics  Customer Analytics Clustering  User Exp / NPS Analytics				Marketing and Campaign Management  Campaign Management, analytics and optimization  Market Intelligence Analysis  Campaign Attribution Model			Process analytics and automation  Robotic Process Automation  Process Mining		Data Science Services  Data Strategy & Data Science Advisory  Data Science Training  Business Intelligence and Data Visualization
Cognitive Applications with Text, Audio, Video  Cognitive Search  Ticket Routing with Cognitive  Speech Analytics  Smart Repository Creation  Chatbot				Sales and Stores  Sales Forecasting  Sales Anomaly Detection  Store Performance  Diary Optimization					
Supply Chain and Logistics  Supply Chain Optimization  Demand Planning  Workforce Optimization  Transportation and Logistics  Yield Prediction				Finance and Cash  Credit Management  Fraud Analytics  Robo-Advisory  Cash Management					
Analytics on Technology  Predictive Maintenance / Anomaly Detection  Quality on Manufacturing  Image Recognition  Analytics for Engineering			Other Use Cases  Real Time Analytics  HR Analytics  Geo Analytics		Data Platforms Design and Data Management  Data Governance  Data Platform Architecture  Analytics Code Migration				

Cloud Strategy



Cloud Readiness
DC Assessment



Cloud Journey &
Roadmap



Cloud Provider
selection



Hybrid cloud
strategy



Multi-cloud
strategy

Cloud Migration



Data Centre
Lift & Shift



Containerized
architecture
RElocation



Datalake
REhost



Cloud migration
Automation

Cloud Foundation



Cloud
Foundation



Cloud blueprint &
Orchestration



Access control &
Monitoring



Connectivity &
Networking



Cloud for
BC/DR



Cloud infrastructure
automation - IaC



CI/CD on
Cloud

Application Modernization



Datawarehouse
modernization



Datalake
REplatforming



Event driven
Pipelines design



FaaS
based AI



App Service
Mesh design

Cloud Governance



Cloud
governance



Multi-cloud cost
management



Cloud Target
Operating Model

Cloud & Data Services

HyperAutomation



Billing Process



Insurance Clearance/
Cancellation Process



Compliance Checks Automation



Employee Onboarding Process



Testing Automation



Web Scraping



Financial Report Compilation



Asset Records Creation



Calculation & Reporting Automation

Software Architectures



Microservices



Architectural Assessment



Software Selection



IT Strategy



Refactoring on-premise data platforms



Orchestration

Solution DevOps



Integration of different data sources



IT Project reporting and KPI



Automatic Route Calculation



Forecasting System



Scheduling and Monitoring Medical Services



Maps Geolocalization



Open Source Dashboarding



Workflow management



Worldwide Budget Composition



Investment Management tracking



Calculation & Reporting Automation



RPA Custom Operations

Strategy



DC transformation vs Hybrid Cloud



Rationalization of IT infrastructures



Smart Metering



TLC Services evolution



Network Strategy



SDDC Strategy



Workplace



Contact Center migration to Cloud

Architecture



Blokchain Smart Contract



SDWAN HLD



LAN WAN architecture



Retail shops IT monitoring

Tech Sourcing



Global data connectivity



Global voice connectivity



Global WAN SD/WAN



NOC and LAN Management

Technical PM



SDN



Backbone IP



SCADA IP network



IP MAN Refresh



TLC outsourcing



UCC evolution



Fixed and mobile telephony



Contact Center and CC management

Operation & Service



Digital transformation Governance



Technology Operational Readiness



Infrastructure Change Management



Network Operation Support



Application monitoring



Workplace (EUS) management



System management



Provisioning & Maintenance

A futuristic, curved hallway with blue lighting and people walking. The hallway has a series of dark, curved arches on the left side, creating a sense of depth and perspective. The ceiling is dark with recessed lights. The floor is light-colored and reflects the ambient light. In the distance, two people are walking away from the camera. The overall atmosphere is modern and technological.

Our case histories



Delivered Gas Forecasting

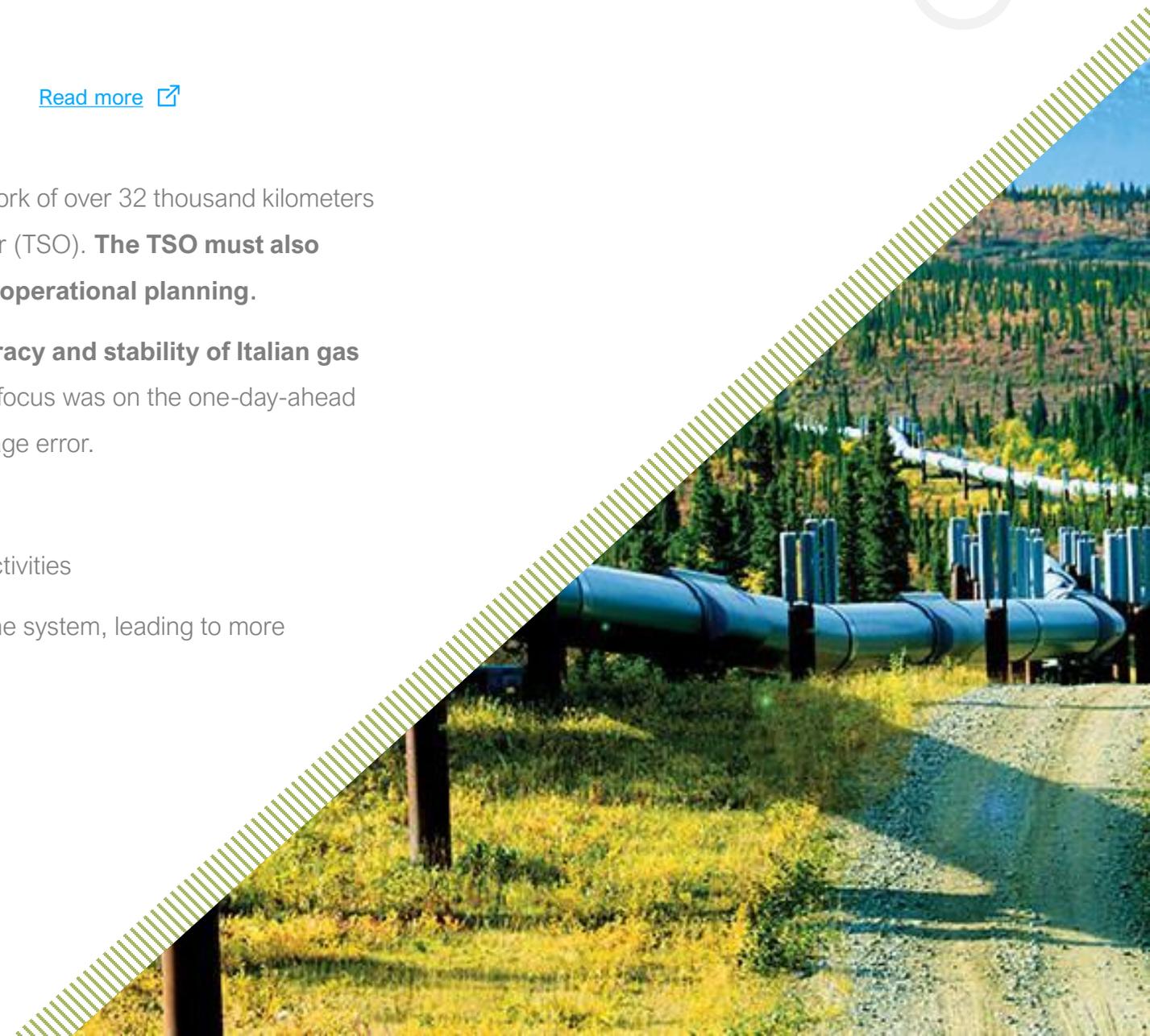
[Read more](#) 

Background: In Italy the transport of natural gas is guaranteed by a network of over 32 thousand kilometers of pipelines, with the activity entrusted to the transmission system operator (TSO). **The TSO must also provide gas demand forecasts to ensure safe, reliable and efficient operational planning.**

Our proposal: A forecasting system capable of increasing the accuracy and stability of Italian gas demand forecasts through a Machine Learning approach. The main focus was on the one-day-ahead model, subject to an economic incentive proportional to the daily percentage error.

Results:

- Better network balancing, increased efficiency of gas transportation activities
- Improvement of the quality of the information about the imbalance of the system, leading to more accurate market interventions
- **+40% performance boost** with the day-ahead model achieving a 2.9% yearly average percentage error





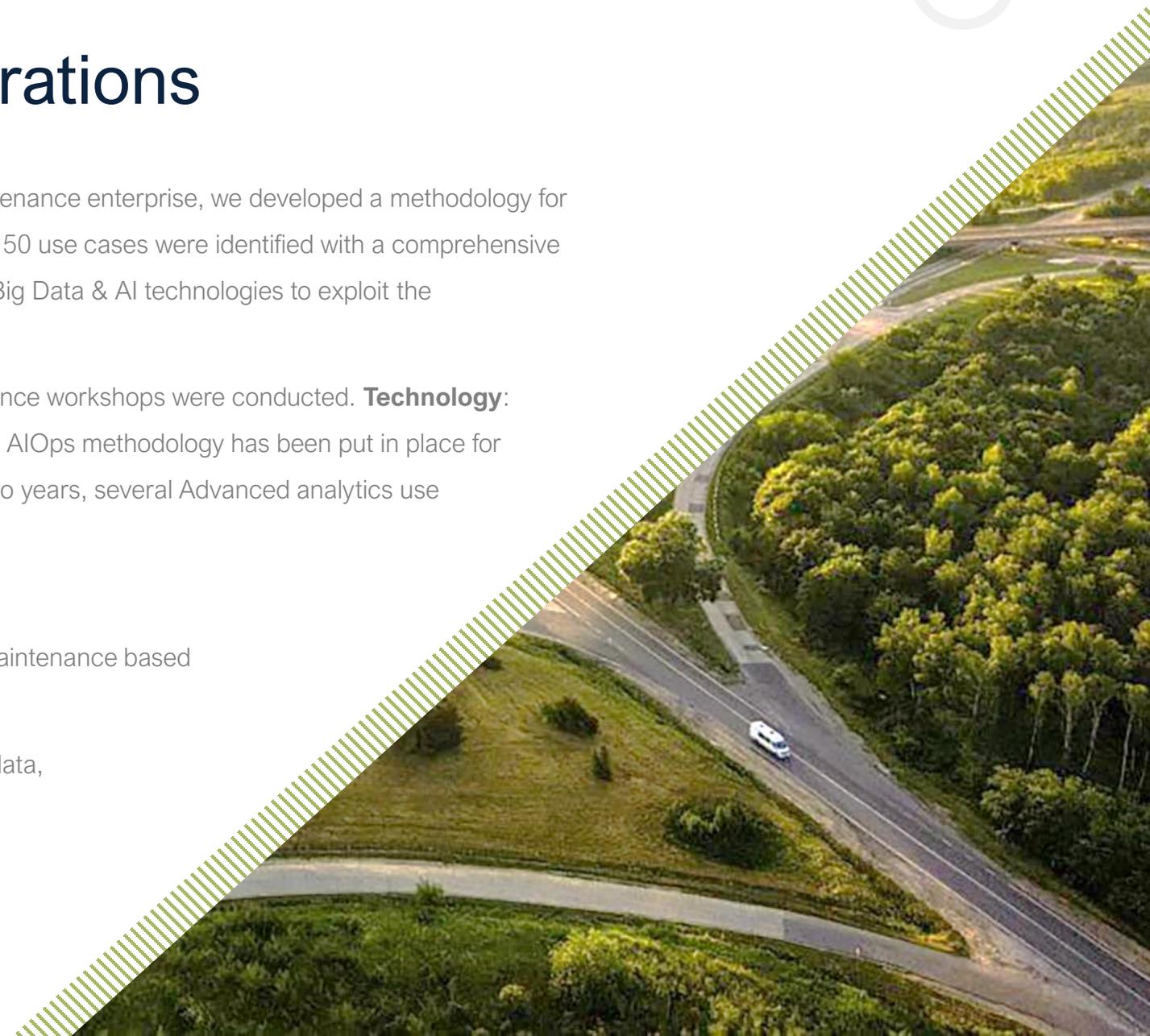
Data Science on Road operations

Background: Jointly with a Southern Europe road construction and maintenance enterprise, we developed a methodology for driving its transformation program into a data-driven Company. More than 50 use cases were identified with a comprehensive approach across the operations department, leveraging on cutting-edge Big Data & AI technologies to exploit the heterogenous and valuable data asset of the Company.

Our actions: Organization: In 2018 a series Big Data & Artificial Intelligence workshops were conducted. **Technology:** In July 2018 a Big Data Platform has been implemented on Cloud; in 2019 AIOps methodology has been put in place for Artificial Intelligence development and deploy. **Advanced analytics:** In two years, several Advanced analytics use cases have been tested and deployed into production.

Results:

- Development of a management system for programming road asset maintenance based on structural engineering analytics
- A Big Data Platform on Cloud is available to store all relevant mobility data, to support the development of future AI application
- **78.000** road segment **with low error traffic estimations** all over the country



Re-factoring data platforms in the cloud

Background: Within a cloud transformation program aimed at moving the on-prem Big Data Platform and related applications to a Cloud Platform, Client was looking for technical advisory to design and to prototype a cloud-native scalable and portable core-solution that takes full advantage of cloud native capabilities and optimize operational costs.

Our decisions: Bip xTech partnered the Client on a transformation journey of all the data platform through a re-platforming and re-factoring approach.

Results:

- Blending of the **best of breed open source** technologies for data processing with cloud-native functions and capabilities
- Full **automation of resource provisioning and decommissioning** based on data storage and consumption needs
- **35%** reduction of running costs for the data hub



Modernizing the Data Warehouse

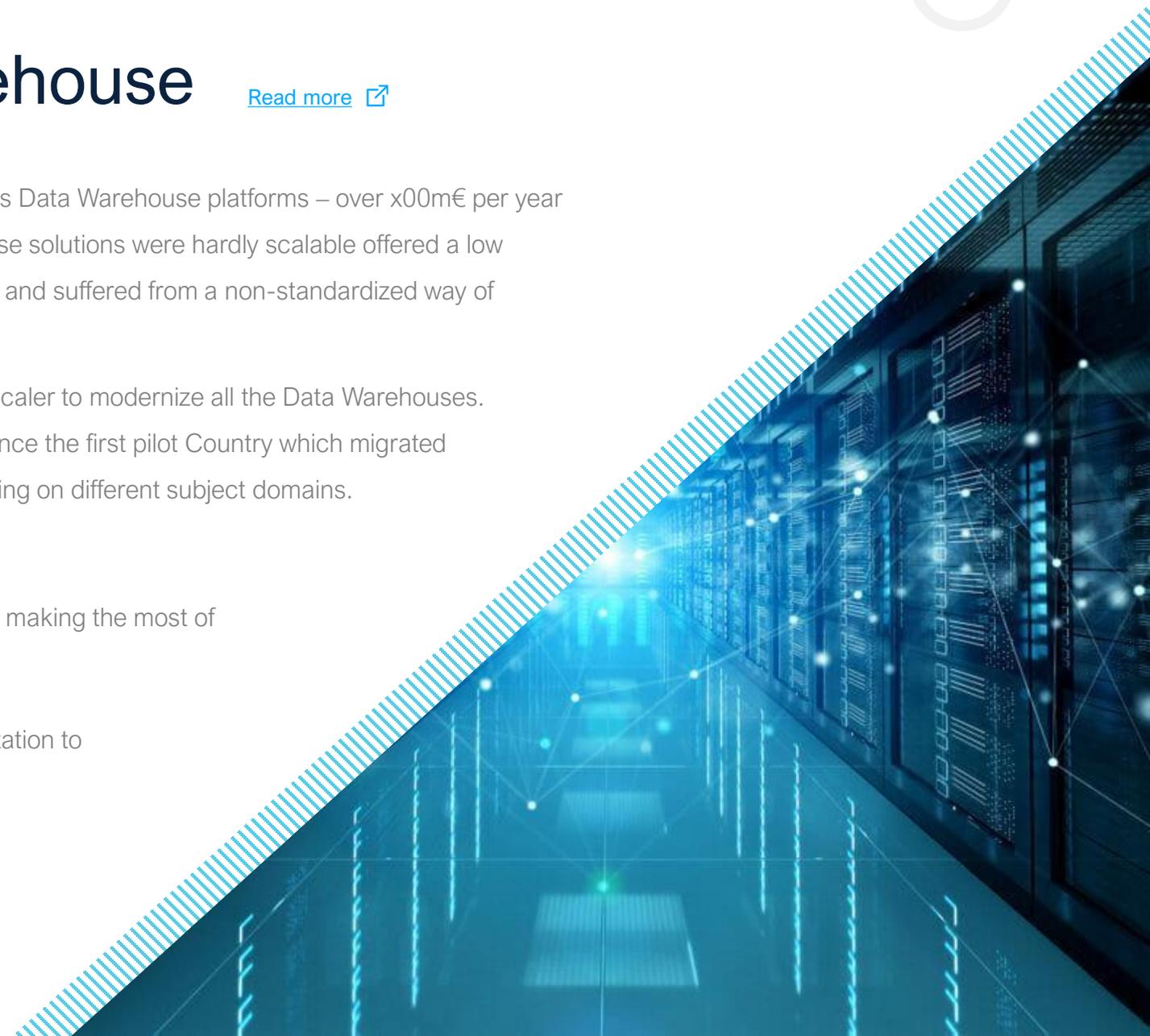
[Read more](#) 

Background: Our global Client wanted to tackle the unbearable TCO of its Data Warehouse platforms – over x00m€ per year – that was weighting down all Countries IT budgets. The existing on-premise solutions were hardly scalable offered a low quality of business intelligence varying a lot from one Country to the other, and suffered from a non-standardized way of working resulting in a high cost/slow pace for change.

Our decisions: The Client signed a global deal with a public cloud hyperscaler to modernize all the Data Warehouses. Bip xTech is supporting the Client on the global modernization program, since the first pilot Country which migrated to the cloud through a project organized in 9 Releases and 18 Epics focusing on different subject domains.

Results:

- A **complete Data Warehouse** solution on cloud-native products, making the most of **serverless and managed functions** (PaaS & FaaS)
- **Low code approach** to data ingestion, transformation and visualization to **reduce TTM** and ultimately to enable **AI ready-to-wear**
- **35%** reduction of TCO for the DWH globally



A Blockchain accessible to the entire production chain

Background: Our client in the Food & Beverage sector has decided to strengthen their loyalty initiative aimed at producers and intermediaries, spread a culture of quality-based segregation of raw materials and goods, and promote best practices through a digital solution that aims to: increase product traceability, increase stakeholder accountability, encourage and improve stakeholder loyalty.

Our decisions: The company has decided to develop and implement, with our help, a solution developed on Blockchain technology that is accessible to all stakeholders. Studying the business processes and behaviors along the production chain, an easily manageable and implementable solution was identified. We have ideated, conceptualized and developed a web app that interacts with the blockchain to collect and store information concerning the production flows and transactions between stakeholders of both a physical and digital nature.

Results:

- Deep visibility of the supply chain without affecting the **privacy of stakeholders**
- increase in efficiency in the production chain and reduction of information asymmetry
- Easy, impartial and **automated reward disbursements** to stakeholders who adhere to the parameters set forth in the initiative

Renewing Global Data and Voice network

Background: Manufacturing Company is going through the renewal process for its **Global data and Voice network**. Security, increasing availability and cost reduction are key goals. Customer is looking for the introduction of breaking-through solutions such as **SD-WAN** and **Cloud-based Voice**.

Our decisions and actions: Bip xTech has supported the Customer in the full sourcing journey from market scouting and technology decisions to the contract negotiation: International Players Scouting for Technology supplier and Connectivity Services, As-Is analysis, RFI tender preparation to best define SD-WAN technology requirements, Pre-RFP tender preparation to identify needs: as-is services and to-be scenario, Global WAN infrastructure Assessment, Market benchmarking analysis based on requirements, Support to architecture and strategy definition, Support to tender RFP preparation, Support to vendor selection: evaluation criteria, KPIs, SLAs, gates, Support to contract negotiation.

Results:

- **16 M€** Value of 5-years contract
- Coverage of **60 sites** in **16 Countries**
- **25%** Estimated savings on a yearly basis thanks to new technologies and negotiation process

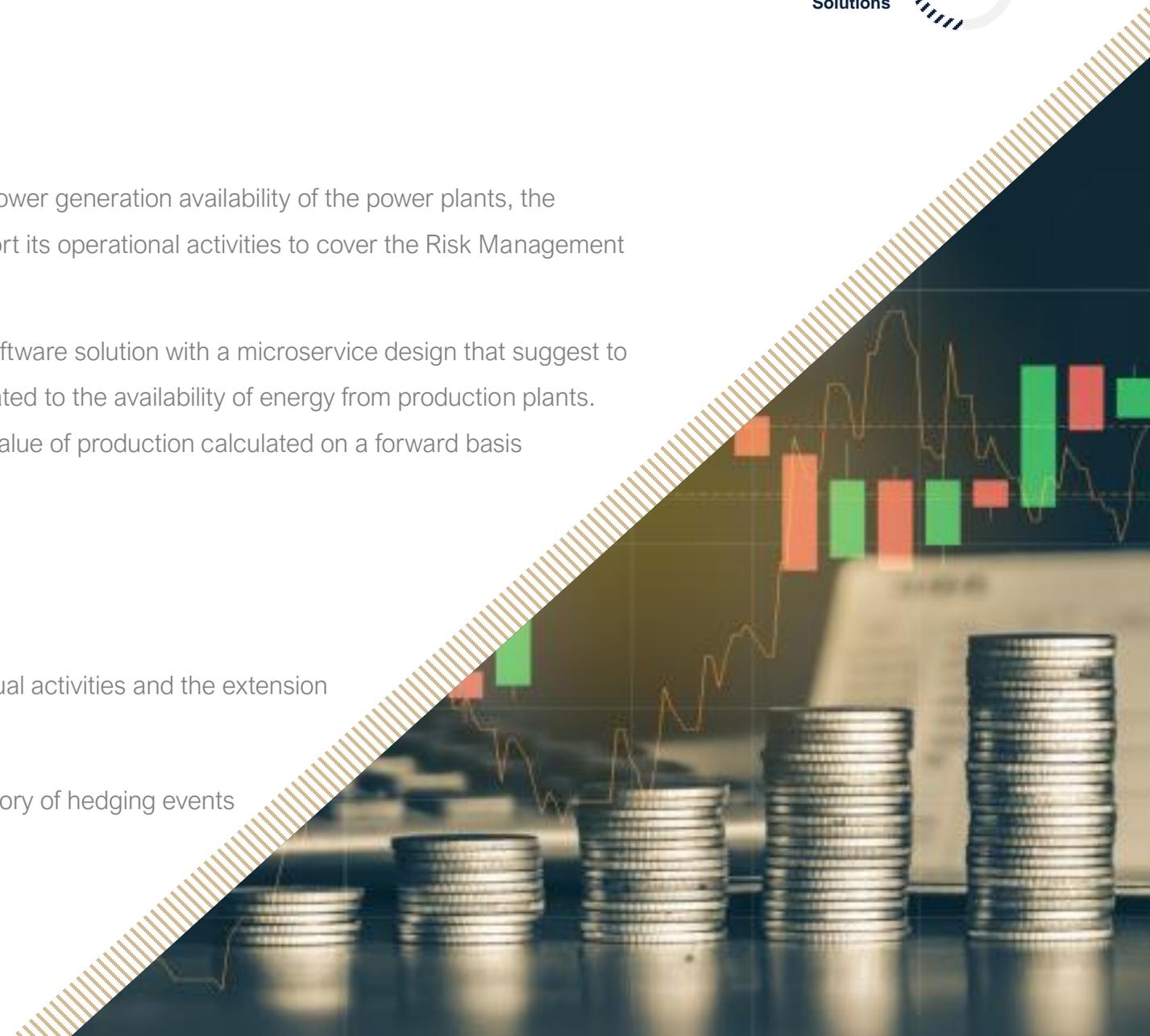
Risk Management Power

Background: As part of the management of positions deriving from the power generation availability of the power plants, the Portfolio Power unit needs to equip itself with a dedicated system to support its operational activities to cover the Risk Management process.

Our decisions and actions: Bip xTech has designed and developed a software solution with a microservice design that suggest to traders the strategies aimed at "hedging" (financial) the exposure risks related to the availability of energy from production plants. The opportunity for these actions arises from a comparison between the value of production calculated on a forward basis and the objectives defined by the Power Business Unit.

Results:

- **Securing** the risk management process by replacing a shared excel
- **Improvement** of the entire process through the automation of manual activities and the extension of the functional perimeter constrained by the limits of the excel
- **Capitalization of information** through the acquisition of the history of hedging events
- **Tracking** traders' actions in relation to risk hedging



Scaling up Robotic Process Automation

Background: After a number of piloting experiences, the Company Board of Directors launched a Robotic Process Automations program whose purpose was to identify at least 30 best candidate processes for automation to implement at least 15 bots within 12 months.

Our decisions and actions: Bip xTech has been selected as partner for automation, supporting the client on the end-to-end project scope, from business analysis to bot development and deployment.

Results:

- **150+** target processes for automation in a large insurance company
- The full roadmap and the deployment to operations of **21 bots delivered in 9 months**
- **720 k€** Estimated savings on a yearly basis thanks to reduced effort and errors





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