



## Balfegó Grup leverages AuraQuantic to create a world-first bluefin tuna traceability system



YEAR OF CREATION:

NUMBER OF EMPLOYEES:

2001

300

#### **COMPANY DATA**

Balfegó Grup. commonly known as Balfegó, world leader in fishing, aquaculture, research, commercialization bluefin tuna. This recognition is based on an innovative traceability system, a strong commitment to R&D&I, and a responsible management model that guarantees the sustainability of bluefin tuna and fishing.

**Sector:** Fishing and commercialization of bluefin tuna.

**Location:** L'Ametlla de Mar, Tarragona, Spain

#### www.balfego.com

## 01 General information about Balfegó Grup

Founded by the fifth generation of fishermen of the Balfegó family, this business group has become a benchmark for quality in over 40 countries, **including Brazil**, **South Korea**, **the USA**, **the United Arab Emirates**, **Japan**, **and the United Kingdom**.

The company's facilities in L'Ametlla de Mar (Tarragona) include a specialized area dedicated to the aquaculture of wild tuna caught in the Mediterranean during the prime fishing season, between May and June. After capture, the tuna are fed a diet of blue fish, ensuring they reach the ideal fat content for market. This process allows the company to supply fresh bluefin tuna year-round, tailored to customer demand and renowned for its exceptional gastronomic quality.

In 2024, Balfegó became the first Spanish fishing company to achieve B Corp certification, a prestigious recognition awarded to companies committed to sustainability, social and environmental responsibility, public transparency, and exemplary corporate Governance.





"AuraQuantic has greatly benefited our operational efficiency and day-to-day management of the processing plant. It has remarkably increased our agility and expedited production times."

**ELOI MELICH BONANCIA** 

ICT Manager

## **02 Situation**

In 2007, Juan Serrano became CEO at Balfegó, spearheading a major transformation in the company's innovation, efficiency, sustainability, quality, and compliance management through a series of strategic reforms.

- A key initiative was the adoption of a **process-based management approach**. This strategy shifts the focus from isolated functions to a cohesive system where operations are organized around achieving objectives. The approach involves identifying, documenting, and continuously improving processes, with a focus on clearly defining each process, assigning responsibilities, and setting performance metrics. The goal is to enhance efficiency and quality across the organization by fostering a holistic view and encouraging interdepartmental collaboration, to facilitate the identification of areas for improvement and the rapid and effective implementation of changes.
- Another key measure implemented was the expansion of digital tools for operational management beyond the Administration department, which uses an ERP system for invoicing and accounting. Unlike this department, other areas relied on manual processes involving physical documents, basic digital files such as Excel and Word, and communication through shared folders and emails. These outdated methods posed several operational challenges, including limited accessibility and collaboration, risk of document loss or damage, difficulties in information retrieval, lack of system integration and synchronization, reduced security and control, and less efficient and error-prone processes.
- Additionally, Balfegó's general management prioritized obtaining ISO 9000 and ISO 14000 certifications. According "These to Floi Melich, ICT certifications Head of at Balfegó, validation, provide external enhancing the company's by demonstrating compliance with stringent quality and environmental management standards. They also bolster corporate reputation and market competitiveness."



- The ISO 9000 certification validates that a company adheres to a Quality Management System (QMS) established by the International Organization for Standardization (ISO). This certification ensures that the company meets internationally recognized standards for the quality of products and services, focusing on consistently satisfying customer needs and expectations. It also involves documenting operational and quality management processes, which enhances traceability and supports continuous improvement.
- The ISO 14000 certification confirms that a company has established an Environmental Management System (EMS) in line with ISO standards. This certification demonstrates that the company adheres to globally recognized practices for managing environmental impacts, ensuring compliance with legal requirements and environmental commitments. It involves documenting policies, procedures, and controls to reduce environmental impact and promote sustainability.

#### "Industrial processing

encompasses traceability and food safety. Upon arrival at the plant, the tuna is prepared according to customer specifications, such as whether to deliver with or without the head,

## ensuring optimal delivery times—

typically within 48
hours. This process also
includes slaughter
management, in which
different parts of the
tuna are allocated to
customers based on
their preferences."

#### **ELOI MELICH BONANCIA**

ICT Manager

#### ISO 9000 Standard

#### ISO 14000 Standard

#### Description

A framework for establishing an organization's Quality Management System (QMS).

A framework for companies to establish, implement, maintain and improve an Environmental Management System (EMS).





"One of the most significant benefits is the remarkable

### reduction in time spent on tasks that

previously took several hours, sometimes exceeding five hours per day. Additionally, we now have **real-time reports** on our

processes, which has greatly improved decision-making."

#### **JUAN SERRANO**

General Manager

#### ISO 9000 Standard

#### ISO 14000 Standard

#### **Objectives**

- **1.** Ensure the quality of products and services.
- 2. Improve customer satisfaction.
- 3. Standardize processes and procedures.
- 4. Facilitate continuous improvement.
- **1.** Minimize the negative environmental impact of business activities.
- **2.** Comply with environmental laws and regulations.
- **3.** Continuously improve environmental performance.
- **4.** Boost efficiency in resource management.

#### Contents

Fundamental concepts and principles of quality management and guidelines for their implementation.

Includes standards on environmental auditing, environmental labeling, environmental performance, life cycle analysis and environmental communication.

#### Standards included

Includes ISO 9001 (QMS requirements), ISO 9000 (fundamental concepts, principles, and vocabulary), and ISO 9004 (guidance for sustained organizational success). This includes ISO 14001 (Environmental Management System requirements), ISO 14004 (general guidelines on principles, systems, and support techniques), and other standards that address specific environmental aspects.

#### Certification

Certification is obtained through external audits performed by accredited bodies.

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#### Additional information

Applicable to any type of organization, regardless of size or sector.

Encourages the adoption of sustainable practices and corporate environmental responsibility.



"The uniqueness of the BPMS technology implementation at Balfegó is that we have used AuraQuantic not only for the company's administrative processes but also for those related to tuna processing. This has significantly improved agility in generating and communicating catch data during the fishing season. It's remarkable to see how much work has been reduced for the vessel skippers in preparing this documentation."

**JUAN SERRANO** 

General Manager

To obtain these two certifications, a company must undergo periodic external audits by accredited bodies, in which processes and procedures are reviewed to ensure compliance with the ISO standards:

- To achieve the **ISO 9000**, companies must have a **quality manual** and **documented procedures** describing how certain activities within the QMS are performed document and record control, human resource management, production and service management, legal compliance assessment, etc. In addition, they must have documentation linked to **quality records**, **quality policy**, **product or service planning**, **and internal and external communication** related to quality.
- For compliance with ISO 14000, the company must maintain a manual outlining its environmental policies and objectives. Additionally, it is required to have documented procedures for key activities within the Environmental Management System (EMS), including environmental impact assessment, operational control, emergency management, and performance monitoring. This documentation is further reinforced by records, company policies, the management of internal and external communications, and environmental planning.

Given the substantial volume of documentation and the need for process standardization to secure and maintain certifications, Balfegó's management team sought a BPM suite with advanced document management features.

- This technology allows for a centralized orchestration of all process-related documents, streamlining their creation, review, approval, and distribution.
- It ensures adherence to ISO standards for documentation and procedures, with robust version management and change control to guarantee that only approved and current versions are in use, complete with a modification log which is crucial for audits.





- Enhanced security controls manage access, modifications, and approvals, safeguarding the confidentiality and integrity of information.
- Additionally, the suite's reporting capabilities and audit functions provide comprehensive traceability of document management activities, that are essential for demonstrating compliance during inspections.

Balfegó's management team is committed to enhancing the company's **adaptability to** growing regulatory pressures in the fishing industry.

Since its beginnings, the Balfegó family has prioritized the conservation of bluefin tuna, especially in the early 2000s, when the species faced significant risks due to overfishing. In response, the International Commission for the Conservation of Atlantic Tunas (ICCAT), of which the EU has been a member since 1997, implemented Recommendation 2006 (05), establishing a multi-annual Recovery Plan for Bluefin

Tuna in the Eastern Atlantic and Mediterranean.

This plan, now enforced through stringent ICCAT regulations, includes over 30 international rules designed to ensure sustainable management, prevent the species from becoming endangered, and maintain its population at levels that allow for maximum sustainable catch. At the EU and national level, additional provisions have been enacted to implement and adjust both the initial recommendation and its modifications. In this context, Balfegó's management team sought an automated compliance solution. This technology is used to streamline and enhance the company's ability to quickly adapt to regulatory changes by automating updates to workflows, forms, and documents. It also provides comprehensive traceability, and detailed records of compliance-related activities, along with automatic reporting to simplify internal and external audits.

"The food traceability process is the one we value most among all our implementations, as we are global pioneers in its application.

AuraQuantic enables us to trace the tuna from its capture to its arrival at the customer's table, ensuring maximum transparency and quality at every stage."

**ELOI MELICH BONANCIA** 



## 03 Problem

To carry out the strategic changes mentioned above - process management, operational digitalization, obtaining and maintaining ISO certifications and regulatory compliance - Balfegó sought a software platform to integrate diverse and complementary technologies.

The selection of AuraQuantic was based on Serrano's prior experience of the solution, and the successful results obtained in other organizations. Melich highlights that "From the outset, it was evident that AuraQuantic was the ideal choice, leaving no room for doubt despite the presence of other alternatives in the market."

The platform implementation was rigorously planned and executed. In addition, coordination meetings were held between Balfegó teams and AuraQuantic experts to define the objectives and establish the project phases.

Staff training was a top priority during the implementation phase. Balfegó employees were introduced to the platform's functionalities and trained on its use for daily tasks through courses offered by the AuraQuantic Training School. This training was crucial in maximizing the return on investment and ensuring a seamless transition to the new digital processes.

Finally, the implementation of the platform was completed without delays or setbacks, making it possible to achieve the strategic objectives set by the company.



"No-code technology offers the **flexibility** to implement our processes easily. The Quality and Innovation departments **can** design complex workflows without needing a technical background, while the IT team manages the implementation,

significantly reducing development times."

**ELOI MELICH BONANCIA** 





## **04 Solution**

The implementation of AuraQuantic has been pivotal to Balfegó's digital transformation. Currently, every department in the company uses this platform, which has significantly automated numerous processes, including:

## Catch Management

During the fishing season, this process automatically generates and sends documentation from the vessels, including catch data and other relevant information. This ensures precise control of fishing quotas and facilitates the sharing of data with scientific organizations such as the Spanish National Research Council (CSIC), the Spanish Institute of Oceanography (IEO), and the Institute of Agri-Food Research and Technology (IRTA) for the study and conservation of bluefin tuna. AuraQuantic's technology guarantees full traceability and compliance with environmental standards (ISO 14000) by efficiently managing and auditing the entire information flow, from the tuna catch to its final consumption. Additionally, fresh tuna loins and belly cuts feature a QR code on the packaging, allowing customers to access the complete traceability of the product.

## Farm maintenance and feeding:

This process manages tuna feeding and objectively measures the fat content in each fish. AuraQuantic supports adherence to ISO 9000 quality standards by maintaining detailed, auditable records of feed management and product quality. This rigorous control has allowed Balfegó to gain recognition and establish itself as a trusted brand in Japan's highly competitive bluefin tuna market.

## Hatchery Control and Maintenance:

AuraQuantic streamlines the management of aquaculture facilities by overseeing inspections, preventive maintenance, and incident handling for all components. It ensures compliance with environmental and quality standards while enabling efficient task management for component replacements, with automated user notifications.



"With the implementation of AuraQuantic, we have achieved a remarkable reduction in the time spent on administrative tasks that previously consumed a lot of resources. Automation has allowed us to optimize these

**ELOI MELICH BONANCIA** 

ICT Manager

processes

significantly."





"AuraQuantic has allowed us to integrate our platform with applications we use on a daily basis, such as

Sage 3 ERP and Microsoft 365. This integration has significantly increased our operational capabilities, and we are highly satisfied with its performance."

**ELOI MELICH BONANCIA**ICT Manager

## Industrial Processing

AuraQuantic enables real-time recording, management, and monitoring of each wild bluefin tuna's size and weight, from capture through industrial processing. This ensures full traceability and compliance with ISO 9000 standards at every stage of the process. Balfegó's implementation of this system has positioned it as an industry leader, being the first and only company with a comprehensive traceability system that spans all stages of tuna processing. This approach guarantees rigorous control that meets customer requirements, optimizes tuna harvesting based on demand, and automatically generates official documentation, including quality certificates detailing fat content and health certificates verifying histamine levels.

## Sales Data Capture in Japan:

Developed within just two weeks, this process includes several external portals and integration with the ERP system for automatic invoicing. This integration provides accurate, real-time sales data for Japan, accelerating invoicing and enhancing operational efficiency compared to the previous manual Excel records. According to Melich, "It has significantly reduced workload and improved information control, ensuring adherence to quality and efficiency standards in quality certificates detailing fat content and health certificates verifying histamine levels.

## ICT Incident Management:

This process streamlines the handling of IT-related help requests and incidents within the organization. When a user encounters a problem, they can open a support ticket initially addressed by the Level 1 Helpdesk team. This team resolves common issues and escalates more complex problems to specialized experts. This approach ensures operational continuity and adherence to ISO 9000 service standards.







"AuraQuantic has brought about a profound digital transformation at Balfegó. We've moved away from paper, eliminated manual tasks, and streamlined timeconsuming processes. As a result, all departments now operate with greater efficiency."

**ELOI MELICH BONANCIA** 

ICT Manager



## Supplier Homologation:

This process streamlines and optimizes supplier approval management for Balfegó. Leveraging AuraQuantic to automate and audit workflows ensures that all suppliers meet the necessary standards before being integrated into the ERP system.

In addition to automating the processes mentioned above, AuraQuantic has also enabled Balfegó to:

- Generate fishing heat maps from vessel GPS data.
- Record temperature measurements throughout the tuna life cycle by integrating with IoT.
- Customize interactive forms to ensure compatibility with mobile devices. In certain cases, users must use the AuraQuantic App.
- Design external portals for customers, suppliers, and partners.
- Collect data for automatic document generation.
- Integrate with ERP (Sage x3) used by Balfegó, enabling automatic invoicing.
- Integrate with RPA, IoT, and documents through automated processes.



## **05** Results

AuraQuantic has delivered highly customized solutions to tackle the strategic challenges identified following Serrano's appointment as General Manager. These solutions were implemented within timeframes beyond the reach of other BPM suites on the market.

The main results achieved by Balfegó include:

#### At a quantitative level:

- ▶ 100% Traceability: Comprehensive operation tracking across every stage of the tuna cycle, from capture and industrial processing to delivery to the end customer.
- 90% Reduction in Process Time: Significant decrease in the time required to complete organizational processes.
- ▶ 80% Reduction in Human Errors: Substantial decrease in errors associated with manual tasks

#### At a qualitative level:

- Streamlined Invoicing: Accelerates collection times and enhances cash flow.
- Enhanced Security and Traceability: Maintains a comprehensive record of task initiation and execution.
- Regulatory Compliance: Automates auditing and internal control processes to ensure adherence to regulations.
- Informed Decision-Making: Provides real-time dashboards and reports for better insights.
- **Strengthened Communication**: Improves internal and external communication through dedicated portals for customers, suppliers, and partners.
- Increased Productivity: Employees can focus on high-value activities by automating manual and repetitive tasks.



## "AuraQuantic has given us unparalleled agility and speed in

implementing automated processes.

This has reduced our dependence on technical staff with advanced programming skills,

enabling functional profiles to take care of process design, while smaller technical teams focus on implementation."

#### **ELOI MELICH BONANCIA**





- Optimized Information Management: Centralizes and updates data in real time to ensure accuracy.
- Unified Workflow: Integrates diverse processes into a single platform, enhancing coordination and eliminating information silos.
- Reduced Operating Costs: Minimizes human error, optimizes resource management, and improves efficiency.

Regarding Balfegó's future plans, Melich reaffirms the company's commitment to AuraQuantic, noting its extensive adoption across all departments. "Our goal is to keep developing new processes, enhance existing ones, and explore innovative ways to use AuraQuantic," he states. The goal is to "centralize all operations on the software platform." Currently, "the company is considering the feasibility of implementing a CRM system on AuraQuantic to eliminate the need for third-party software."



"The **BIDI code** in each piece of tuna represents the culmination of **our** 

#### traceability process.

This allows any customer to access comprehensive information about the tuna they consume, including its origin, date of slaughter, fat content, and measurements."

**ELOI MELICH BONANCIA** 



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