Amundi **Technology**

ALTO Offering





ALTO by Amundi Technology

European heritage, global reach

60+ Clients incl. Global

Tier 1 Banks and Leading European Asset Managers

€4tn

Assets Managed on ALTO Platforms

250+

Trade Execution Counterparties

5,000+ALTO Investment Platform users

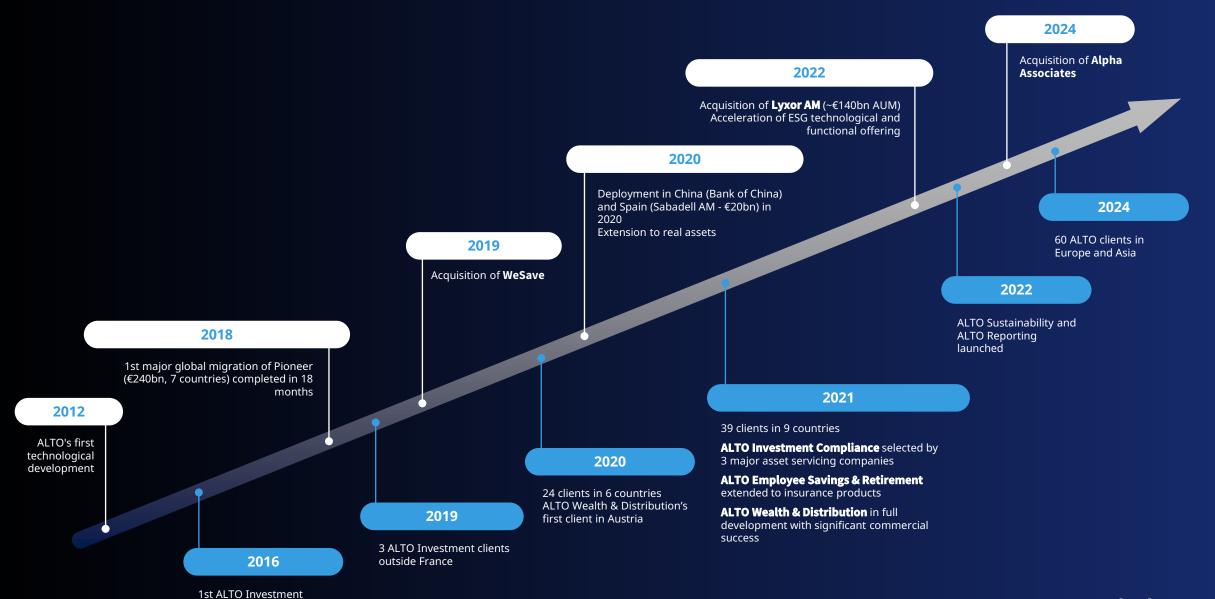
60,000+ALTO Wealth & Distribution Platform users

Technology supporting the **Largest** Dealing desk in Europe



Developed for over a decade to provide cutting-edge capabilities

client in France



ALTO's modular offering provides scale across the Investment and Wealth Management Industry

ALTO's modular offering:



ALTO Investment

A solution with rich functional coverage across the Investment Management value chain



ALTO Wealth & Distribution

A scalable end-to-end solution with comprehensive capabilities to suit retail banking and wealth management firms



ALTO Sustainability

An analysis and reporting solution providing unique ESG datasets to empower sustainable and responsible investing



ALTO Asset Servicing

A solution supporting the business of Asset Servicers covering Investment Compliance Oversight, Portfolio Analysis and Reporting



ALTO Employee Savings & Retirement

A scalable front-to-back employee savings and retirement platform for banking and insurance groups

Trusted by clients globally:



ASSET MANAGEMENT







ALTO delivers through a suite of market leading features and benefits





End-to-end

capabilities across investment and wealth management



Flexible solution

across all asset classes, highly configurable for client needs



A hosted platform with cloud interoperability

guaranteeing infrastructure scalability and market connectivity



Fast & cost effective

implementation approach



Single platform

with one data language



External data sourcing & quality control

included as part of the service



Secured, trusted & compliant with regulations

to best-in-class industry standards



Open API benefits

including workflow automation, cloud security and monitoring

ALTO Investment



ALTO Investment provides a suite of capabilities to cover your full functional requirements

A solution that combines software and managed services to support all asset classes and investment strategies, including real assets.

Portfolio Management

Portfolio construction & optimisation
Portfolio Analysis
Order management
Cash management
Trade Execution

Risk & Compliance

Monitoring of market and liquidity risks

Embedded investment guidelines

Pre- and post-trade controls

Investment Operations

Trade & funds processing
Collateral servicing
Capital activity
Corporate actions & income
Reconciliations
NAV Control

Reference Data Services

Reference data integration and quality controls



Data Management

Financial instruments
Portfolio & products
Index & benchmark
Ratings | ESG
Private & Real assets
Data quality controls

Reporting

Factsheet production
Dissemination
Data visualisation
Open API

Accounting & Performance

Live position keeping IBOR
Periodic valuation ABOR
Performance measurement
Contribution and attribution



The ALTO Investment Platform offers a variety of benefits



All-in-one solution

from order placement to position keeping in real time



100% Cloud-based

solution with an open architecture, continuously updated and improved



Singular platform

with one data language



Secured, trusted & compliant with regulations

to best-in-class industry standards



Global reach with local support



Fast & cost effective

implementation approach



Proprietary tool integrated

with external data providers



ALTO Wealth & Distribution



The ALTO Wealth & Distribution Platform offers self-service and reporting capabilities to support the entire investment management cycle

The ALTO Wealth & Distribution platform offers wealth management and middle office services. Its modular design means it can be adapted to suit each client's needs.

Wealth Management

Model/Target Creation
Portfolio Optimization
Advisory Proposals
Portfolio Rebalancing
Client constraint / preference management
Compliance pre & post-trade
Trade Execution
Client Level Allocations

Digital Monitoring & Reporting

Wealth Reporting generation and dissemination Client Life-cycle Management Commercial dashboard

Middle Office & Data Management

Trade Lifecycle Management
Positions and transactions integration
Performance and risk
Cash management
Order processing

Client Self-care & Robo-Advisor

360° view for clients and advisors External account aggregation Client digital onboarding KYC and risk profiling Robo-advisory integrated

Autonomous Reference Data

Automated Reference data integration and quality controls

Additional Service



The ALTO Wealth & Distribution Platform offers a variety of benefits



All-in-one solution

for activities needed by wealth managers to family offices



Dual user journeys

for client-facing and internal users



Fully flexible

return and performance calculations



Secured, trusted & compliant with regulations

to best-in-class industry standards



Leading automation technology



Fast & cost effective

implementation approach



Identify & secure clients

through segmentation and target allocation features



ALTO Sustainability



ALTO Sustainability provides a suite of capabilities to cover your full functional requirements

Simplify ESG data management for sustainable, responsible investing

ESG performance

ESG scoring
Bespoke ESG indicators
Raw ESG metrics

Regulatory Standards

SFDR EU taxonomy Raw regulatory metrics

Climate Reporting

Temperature analysis & trajectory of portfolio Stress testing Net zero framework Raw climate metrics

Managed Data Service

Access to data provider selection pool Integration of Provider Data

Daily operational data onboarding

Data Validation

Managed Service

Biodiversity Reporting

Raw biodiversity metrics

Impact Measurement

Account for the positive & negative effects of investments
Raw impact metrics

Issuer Stewardship

Engagement Voting



The ALTO Sustainability Platform offers a variety of benefits



Full ESG Alignment

on portfolio management and simulation



Supported by ESG data cleaning expertise



Bespoke methodologies

For sustainability with build and manage capabilities



Fast & cost effective

implementation approach



Accurate and reliable

reporting in line with your ESG strategies



Proprietary tool

integrations with established ESG data providers

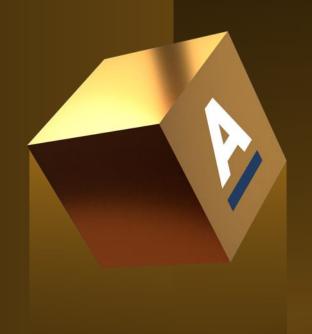


Secured, trusted & compliant with regulations

to best-in-class industry standards



ALTO Asset Servicing



The ALTO Asset Servicing platform powers asset control and alignment with evolving regulations and guidelines

The ALTO Asset Servicing platform empowers Asset Servicers to integrate and aggregate their data in order to control the assets alignment with the investment guidelines and the regulation.

Rule Edition

Design and code regulatory and statutory rules

Define indicators to monitor

Portfolio Analysis

Designing visual representation of portfolios breakdown and ratios
Providing a visual and real-time testing solution for rules

Autonomous Reference Data

Automated multiple data sources integration and quality controls

Compliance

Managing investment rules, guidelines catalogue and dynamic rule assignment Monitoring and controlling breaches
Breach management workflow

Reporting

Direct data access

Portfolio storage and computation results and preparing bespoke reports

Overview and access to past data and answer to audit requirements

Internal reporting for Asset Servicers & external reporting for their clients

Report scheduling



ALTO Employee Savings and Retirement



ALTO Employee Savings and Retirement provides a suite of capabilities to cover your full functional requirements

A platform that combines ESR solutions with Amundi ESR Industry Expertise

Front Office

Subscription / Redemption on multi-products and tax wrappers Arbitrages and Transfers Client Onboarding

Automated workflow

Documents publishing (statements, reporting) Data flow with financial institutions partners and banks

Back Office

Collective and Individual
Operations Management
Order booking with automated
workflow
Operational risk control on stock
market order

Regulatory and Fiscal Reporting

Adapted to the local regulation Fee Management



The ALTO ESR platform offers a variety of benefits to meet the needs of account holders and their clients



End-to-End coverage

Across the entire operational value chain of employee savings and retirement



A flexible Solution

For all types of accounts and configurable according to customer needs



Cloud Platform

Hosted in Amundi Technology infrastructure and guaranteeing infrastructure scalability and connectivity with partners



Fast and Efficient

In implementation and use





Data Segregation

Complete segregation of data



Secure, reliable and regulated

According to the highest industry standards

Innovation Lab

Overview



Experience cutting-edge capabilities and gain valuable insights as our Innovation Lab explores emerging technologies to deliver innovative solutions

Innovation Streams



Business Innovations





Product Innovations

Tech Innovations

Investment Product Innovations

Fed by

market trends, industry experience, fintech ecosystems and client ideas

Prototype quickly

test and scale up with ALTO

Validate

with clients and business sponsors



ALTO Studio

Extract greater value from data to optimise investments through our advanced data science platform. Enabling data-driven decision-making via:

- Data visualisation platforms reporting on large data sets
- Using A.I. to track reproducibility, sharing models and performance
- Knowledge management via secure large language models
- Low-code options and easy handling of data

Behavioral Analysis Tool

Optimise investment decisions and avoid the destruction of alpha through a module of quantitative and qualitative behavioural analysis that:

- Identifies cognitive biases through various analyses and detection of behaviour patterns
- Proposes debiasing tools to combats various biases (sectoral, geographic, disposition effect, overreaction)
- Provides analysis of manager performance and competencies
- · Automatically provides nudges to next best action

Amundi Technology is leading in AI innovation

Amundi Technology are delivering AI solutions to help clients achieve their goals with greater accuracy, speed and compliance

Amundi's Al Core Modules



Autonomous Agent

Executing automated actions including independent data searching, collection, learning and decision making

Internal Q&A Capability

Complex Q&A handling and content aggregation from confidential internal information

Document Analysis

Conduct analysis across multiple document types to summarise, extract and translate information

Secure Al

Replica of ChatGPT in a secure environment with access to internal information

AI Solutions

Document Compliance

- AI-led processes to control and update content across a legal and marketing documents
- Focused on applying local and global regulatory compliance

RFP Management

- AI-Chatbot enabled sourcing across internal document libraries in relation to RFP topics
- Generative AI to autofill RFP responses

Document Translation

- Natural language processing for translation across a range of document types
- Translation to 15 languages with growing coverage

Future product releases include...





Inventory Specialist Aggregating internal resources to one source



Content Creator **Automated** content



Coding Assistant Improved code

generation, review

Case studies

Asset Management, Insurance and Banking examples



Client Case Study: Global European headquartered asset manager



Client context:

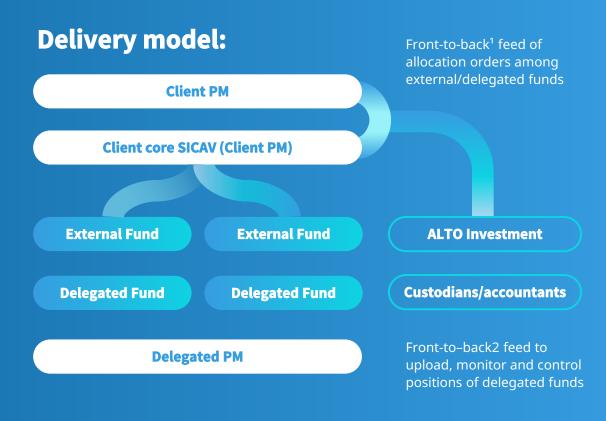
- European asset management firm, headquartered in Dublin with a diverse internally- and externally-managed fund portfolio (~€10bn assets)
- The client required a solution which provided a consolidated view of all their assets to manage both their funds of funds and enable the supervision of delegated funds for regulatory purposes

Why the client chose the ALTO Investment Platform:

- Integrated modular solution of technology and services
- Flexibility and ability to offer a complete service line, from dealing to middle office services
- Rapid deployment, forgoing long internal IT development and operational processes to handle the transition

Amundi Technology's solution for the client:

• Provision of a broad range of services, including front office and trading, risk and performance management, data management and support, middle office, compliance, information delivery and reporting



Implementation duration:

 Front-to-back and Back-to-front solutions deployed in 4 months (including complex instruments integration)

Client Case Study: French multinational Insurer



(With insurance module)

Client context:

- Leading French insurance group which manages ~€130bn assets, has over 110 funds and mandates, and more than 100 users
- The client sought support in effectively managing its broad portfolio of insurance, pension funds and asset management entities

Why the client chose the ALTO Investment Platform:

- ALTO Investment provides the ability to manage multiple asset types Front-to-back via one consistent and integrated solution of technology and services, including:
 - Equity funds
 - Fixed Income funds
 - Multi-asset funds

Amundi Technology's solution for the client:

Provision of a vast range of services: front office and trading, risk
performance management, data management and support, middle office
services, compliance, information delivery and reporting

Delivery model:



Implementation duration:

Front-to-back solution deployed in 12 months

Client Case Study: Leading Spanish private bank



(Full Offering)

Client context:

- One of the top 5 banks in Spain with wealth management, retail, corporate and investment banking operations
- The client manages ~€30bn assets, with 90% under wealth management and has over 500 users
- The client sought to improve business monitoring, ensure suitability of client risk profiles and asset allocation, and streamline banker performance. They also wanted to simplify their IT landscape and achieve a faster time-tomarket

Why the client chose the ALTO Investment Platform:

- Cost and operational synergies with a unique unified platform
- Flexible, innovative and agile solution with a highly modular offering
- Were looking for more than just software, wanted a business partner who shared the same challenges

Amundi Technology's solution for the client:

 Provision of a vast range of services: tailor-made portfolio management, data management and support, middle office services, compliance, information delivery and reporting

Delivery model:

RETAIL DPM
FULLY AUTOMATED AND INDUSTRIALZED

HIGH-END DPM
TAILOR MADE PORTFOLIO MANAGMENT

ADVISORY INVESTMENT PROPOSALS

SELF-CARE - ROBOT - ADVISORY

Implementation duration:

- 15-month project with phased intermediate delivery:
- Self-care Robo advisor in ~4-6 months and DMP in ~8-12 months
- Advisory in ~12-15 months

Client Case Study: DPM & Advisory for the Retail & Private bank



Client context:

- A leading German universal bank addressing both retail and private banking
- The client needed a solution to provide new investments and reporting for their bankers and clients at scale whilst also optimising risk & compliance monitoring. The solution had to relieve the client from long Internal IT development times to accelerate new DPM offering time to market while industrializing the processes.

To achieve this, the following ALTO Wealth and Distribution modules and services were selected:

- Data management
- Middle-office
- Compliance
- Information delivery & reporting
- · Support desk services
- · Middle-Office services

Amundi Technology's solution for the client:

 Provision of a vast range of services: tailor-made portfolio management, data management and support, middle office services, compliance, information delivery and reporting

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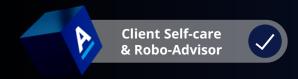
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Client Case Study: DPM & Advisory for the Retail & Private bank



Client context:

- A Private bank that operated the number 1 platform in Europe for aggregation, wealth advice and distribution services
- The client needed to develop personalised propositions at an industrial scale to promote relationship intensification, network engagement and customer satisfaction to increase sales, multi-sales rates and generate further wealth diversification
- The client needed an internal dashboard for their advisors to manage the engine and journeys that drive distribution and customer/advisor follow-ups

To achieve this, the following ALTO Wealth and Distribution modules and services were selected:

- Multi-Invest wrappers
- 360-degree customer view

- Global allocation analysis
- Proposal generation

Key figures:

1.1m customers engaged

100mAggregated/ historised portfolios

By using the ALTO Wealth & Distribution platform, the client was able to deliver the following services to their clients:

Total wealth analysis across all asset classes including real estate

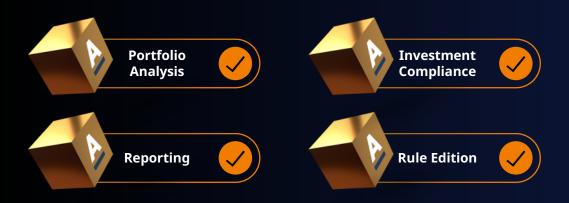
Wealth optimisation taking into account legal, tax and liability

Advisory proposal generation to push additional products and investment wrapper sales

Implementation duration:

- The solution was delivered in 12 months
- Deployment was run in agile methodology with multiple iterations and customer testing

Client Case Study: Custody and trustee services



Client context:

- A major European Custodian company
- The client needed a global compliance platform that could adapt and evolve with local regulatory constraints, with an industrialised process capable of managing large volumes with 18000 rules & constraints on 8000 portfolios

To achieve this, the following ALTO Asset Servicing modules and services were selected:

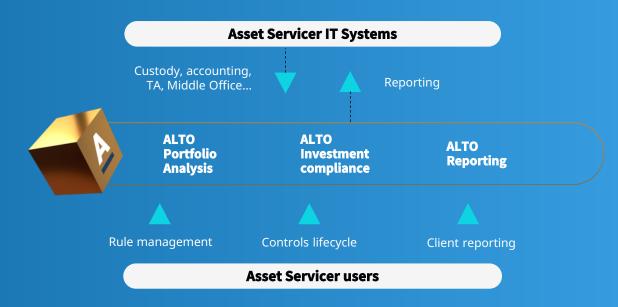
- Flexible rule coding interfaces
- Interactive breach management
- 360° oversight dashboards
- Compliance reporting factory

Key figures:

€1.5tn AuD

>150 users

By using the ALTO Asset Servicing platform, the client was able to deliver the following services to their customers:



Implementation duration:

The project was delivered with agile methodologies through incremental deliveries over 12 months

The solution was deployed on premise using Azure Cloud

THANK YOU



Amundi **Technology**

Amundi Technology, a business unit of Amundi Asset Management, French "Société par Actions Simplifiée"- SAS with capital of €1,143,615,555 - Portfolio Management Company approved by the AMF under number GP 04000036 - Registered office: 91-93, boulevard Pasteur - 75015 Paris – France - 437 574 452 RCS Paris.

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