



AI-Powered Technical Transfer

Seamlessly and frictionlessly transfer manufacturing data and processes between facilities

Pharmaceutical and biotech companies are often required to transfer manufacturing technology, processes, and data between sites. This could be moving a new product line from development to production, scaling to another facility for operational reasons, out-sourcing production to a third-party Contract Development and Manufacturing Organization (CDMO), or as the result of a sale, merger, or acquisition.

Unfortunately, tech transfer is not as simple as copying and pasting datasets from one data center to another. Drug manufacturers need to seamlessly aggregate and contextualize data, model their equipment and processes, and transfer the valuable insights they've gained to another site. The problem is that plants likely use different structures, knowledge, and even languages—making a straight transfer all but impossible.

A successful tech transfer from one facility to another is entirely dependent on process experts being able to identify the variables that impact accuracy, understand the process aspects that result in optimal yield with no deviations, and have control on the data that informs these critical decisions. This is an incredibly complex undertaking that often requires the latest data storage, advanced analytics, and AI/ML technology to ingest massive amounts of data to normalize, correlate, and contextualize product lines. Unfortunately, these are complex, expensive technologies that sap resources and add to the costs and time of completing a successful transfer.

Solution:

- AI-Powered Tech Transfer

Features:

- GxP-compliant
- Data insights powered by AI/ML
- Cloud platform

Benefits:

- Seamlessly transfer manufacturing data and processes between facilities
- Preserve valuable insights you've gained into your manufacturing processes
- Accelerate time to market through faster and successful tech transfer

AI-Powered Technical Transfer by Aizon

Powered by artificial intelligence (AI) and machine learning (ML), Aizon's GxP-compliant platform allows pharmaceutical and biotech companies to aggregate the data from each step of the manufacturing process, model the equipment to create digital twins, and run scenarios to come up with the ideal variables to ensure product consistency and optimize yield. Because these digital twins live in the cloud, data can be accessed from any site in the world—effectively supporting a successful and frictionless technology transfer at the touch of a button.

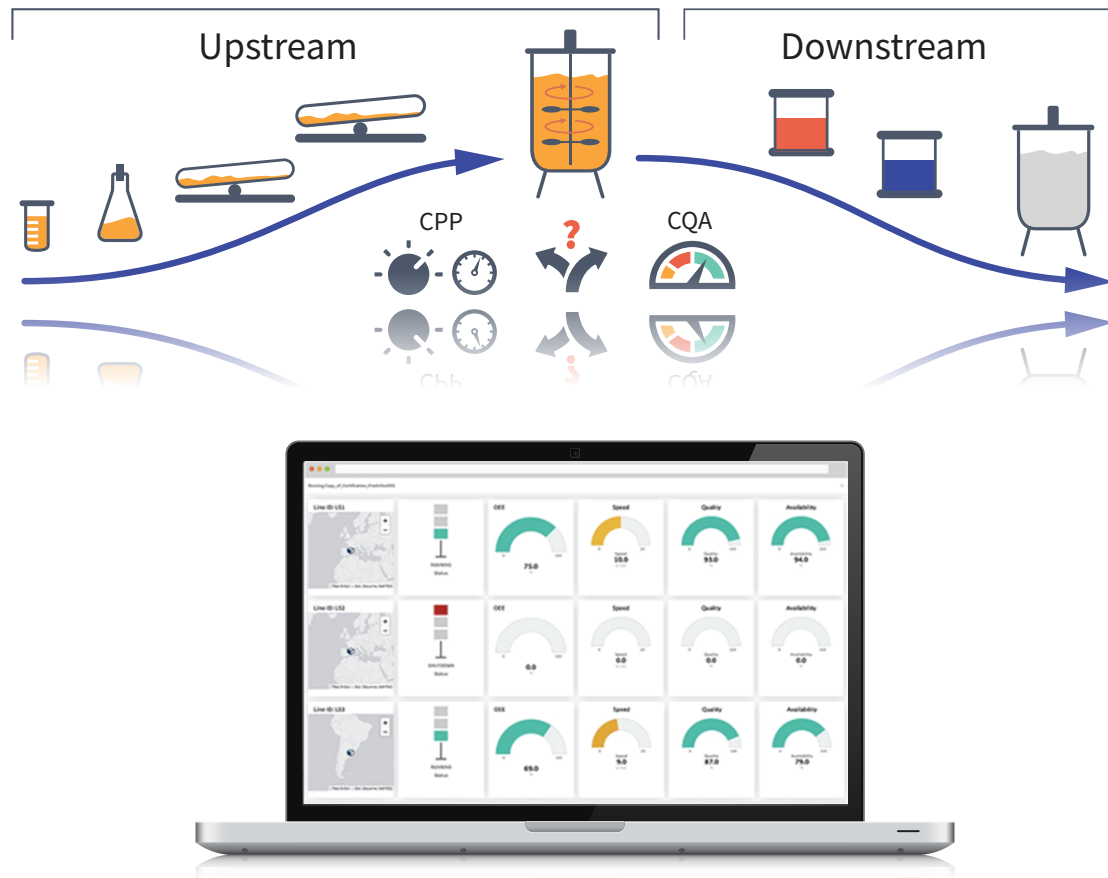


Figure 1. Technical Transfer and Optimizing Capacity Across Multiple Sites with Differences in Equipment and other Resources. The Identification of bottlenecks and relevant factors is achieved through AI/ML and other advanced analytics. Multi-site visibility and analytical comparisons enable the tech transfer across multiple sites, removing the guesswork around optimization and making performance transparent. The result is efficient optimization and immediate monitoring of process performance, enabling meaningful comparisons between site locations, and real-time predictions to support a successful technical transfer.

AI-Powered Technical Transfer Features and Benefits

GxP Compliance	<ul style="list-style-type: none"> → Ensures data integrity → Better visibility into data, models, and application lifecycles → Integrates data silos across quality control, production, supply chain, maintenance, and other business systems
Cloud Platform	<ul style="list-style-type: none"> → Eliminates the need to transfer data between on-premise infrastructure in disparate facilities → Data resiliency and data protection
Anomaly Detection	<ul style="list-style-type: none"> → Enables Quality by Design (QbD) → Strengthens process design → Analyzes the relationship between relevant factors at scale
AI/ML	<ul style="list-style-type: none"> → Transfers historical insights and process knowledge from R&D to production → Strengthens process design → Faster time to market → Generates confidence for process performance qualification (PPQ)
AI Consulting Services (ACS)	<ul style="list-style-type: none"> → Identifies opportunities to use AI/ML to improve tech transfer processes → Leverages Aizon industry and technical expertise
Innovation Lab	<ul style="list-style-type: none"> → Improves time to value → Formalizes tech transfer process for repeatability → Keeps a step ahead of the future complexities

Aizon AI Consulting Services

With more than 30 years of pharmaceutical and biotech experience, Aizon's AI Consulting Services (ACS) team, along with our Consulting and Technology Partners help solve complex or hidden problems with a proven methodology that aligns with regulatory guidelines. It is through collaborative work between process experts and data scientists in multidisciplinary teams that generate the business value for your process. With Aizon helping you put the right technology in place it becomes easy to analyze historical data to better understand relevant variables, apply improvements from insights gained from contextualized manufacturing data, and use AI to augment your decision-making process.

Operational Efficiency and Faster Time to Market

Tech transfer is a critical process in an increasingly competitive and regulated industry. Done correctly and efficiently, tech transfers can speed time to market and give drug manufacturers and CDMOs a major competitive advantage. Unfortunately, most pharmaceutical and biotech companies cannot invest in GxP compliant data storage and multi-site platform capabilities, advanced analytics,

and AI/ML technology to ingest, normalize, correlate, and contextualize massive amounts of data. Aizon can help bridge the gap by providing cost-effective AI-powered data analytics capabilities in GxP environments—allowing drug manufacturers to transfer valuable insights into their manufacturing processes across facilities while accelerating time to insights and improving real-time decision making.

Visit: sales@aizon.ai to learn more about AI-Powered Technical Transfer with Aizon.

About Aizon:

Aizon is a software provider that transforms manufacturing operations with the use of IoT, cloud, advanced analytics, artificial intelligence, and Pharma 4.0 technologies focused on optimizing pharmaceutical and biotech companies. The Aizon analytics platform seamlessly integrates unlimited sources of structured and unstructured data to deliver actionable insights across all manufacturing sites. Aizon offers an intuitive way to gain meaningful operational intelligence with data by enabling real-time visibility and predictive insights in a GxP compliant manner with end-to-end data integrity. Aizon is based in San Francisco, California and also has a European office in Barcelona, Spain.