

TRACK & TRACE BEYOND COMPLIANCE

Kvinta is a **brand-new SaaS solution** from renowned **industry experts**.

It addresses the traceability and serialization needs of businesses throughout the supply chain.

As a highly customizable Track & Trace (T&T) solution, Kvinta helps companies comply with T&T regulations and fight product falsification and illegal trade. It is designed to connect all involved entities, such as manufacturers, distributors, wholesalers, direct sales (DSD), and retailers, to enable efficient digitalization, transparency, and end-to-end traceability throughout the supply chain.

Kvinta utilizes the latest technologies and the experience of top experts to meet the business requirements of tomorrow.

SUPPLY CHAIN COMPLEXITY

Most of the technologies used in the supply chain today were built decades ago. Not only do they lack end-to-end data visibility, flexibility, and real-time response capabilities, but they also have high integration and operational costs. Initially, serialization and T&T solutions were mostly driven by legal requirements. Later, businesses revealed the brand protection opportunities and data analytic features.

Supply chain complexity has significantly increased with rising consumer expectations, market volatility, digital disruptors, omnichannel engagement, and advanced legal requirements for T&T.

These realities have dramatically increased the need for the Kvinta T&T solution.

ULTIMATE SOLUTION BY KVINTA

To respond to new demands stressing the supply chain and address the growing demand for traceability and product authentication, the Kvinta solution is based on the following fundamentals:



ULTIMATE PERFORMANCE & SCALABILITY

Kvinta cloud and its mobile stack are implemented in a non-blocking reactive style, meaning it provides the best latency and throughput guarantees. Our data pipelines are designed to ingest millions of messages per hour. Kvinta cloud can scale up and down following the demand.



UNPRECEDENTED OWNERSHIP

Kvinta uses a strict single-tenant architecture. The solution uses open-source and standard "best of breed" technologies to ensure transparent and smooth transfer of ownership, allowing clients the option to self-host their Kvinta cloud.



ADVANCED ANALYTICS AND OBSERVABILITY

Kvinta uses machine learning and AI for problem detection and resolution, anomaly detection, and smart alarm triggering. The solution is capable of performing lean product recall process management and efficiency assessments of supply chain partners.



TOP RELIABILITY

Each data service in Kvinta cloud has a redundancy factor of at least three. Each bit of customer data is replicated among three availability zones. Kvinta runs a rich set of integration tests before any update, and we help our customers to include their test scenarios for both functional and performance regressions.



FULLY INTEGRATED MOBILE SOLUTION

Kvinta provides a fully featured mobile solution that switches seamlessly between online and offline operation for environments with poor connectivity. Our device management system enables targeted and reliable release management for the mobile app.



24/7 AVAILABILITY

The solution is supported 24/7 with no exceptions. The inherent redundancy built into the stateless service design of Kvinta cloud, which is distributed and synchronised across multiple geographic regions, means that even in the case of a large-scale event affecting underlying global internet infrastructure, our clients will still be able to reach Kvinta cloud.



DATA CONTROL

Having a validation engine in place makes consistency possible, together with the visibility of the monitoring portal. Additional machine learning allows for additional validations from events that a business might not have identified as critical.



VERSATILE INTEGRATION

Kvinta acts as a central integration platform and is able to connect with internal and external software solutions. Kvinta integrates out-of-the-box solutions with major cloud databases (both SQL and NoSQL), user management, and access control systems (LDAP, POSIX, SAML).



COST-EFFICIENT PRICING MODEL

Kvinta offers a highly competitive pricing model that is several times more affordable than most prominent solutions currently on the market due to its flexible architecture.



HIGH-END SECURITY

All customer data is encrypted in flight and at rest. Additional blockchain workflows enable an even higher level of security.

In short: Kvinta as a product is a scalable, cloud-based, platform-independent solution with advanced analytic features that supports GS1 standards but is not limited to them. The solution's design is based on more than 15 years of serialization and Track & Trace experience, a deep understanding of supply chain practices, and unmatched expertise in addressing regulatory needs.

FLEXIBILITY AND PERFORMANCE FOR DIFFERENT BUSINESS TYPES

Kvinta is designed to support all companies requiring T&T and is a great match for not only those industries that are highly impacted by T&T legislation but also many non-regulated industries, which can also benefit from it.

INDUSTRIES UNDER T&T LEGISLATION

Kvinta's advanced connectors to the regulator's infrastructure help companies to meet both existing and upcoming T&T regulations, making it easy for businesses that are already regulated to improve their level of compliance and for companies that are new to industry legislation to achieve compliance quickly.

Our solution not only supports the achievement of short-term compliance goals but also considers the long-term strategy beyond compliance. This means utilizing different internal business benefits, from advanced analytics to brand protection and building a marketing ecosystem for customers.

NON-REGULATED INDUSTRIES

Kvinta is a great choice for customers seeking authentication or verification solutions to protect their brand from falsification and illegal trade, as well as to boost customer engagement and loyalty. Moreover, Kvinta is an excellent option for companies expecting to benefit from the increased data use efficiency and data visibility in the supply chain to improve the quality of core analytics and advanced predictive analytics practices.

THE SIZE DOESN'T MATTER

Large companies:
Kvinta provides a tailored service with extensive integration possibilities and full-time support to adapt to internal processes.

Mid-sized companies:
Kvinta provides a smart, easy-to-deploy fixed core solution with custom settings and future scaling.

Small companies:
Kvinta offers an out-of-the-box, affordable fixed core solution with standard settings to choose from.

Global track and trace solutions market share, by end use, 2019



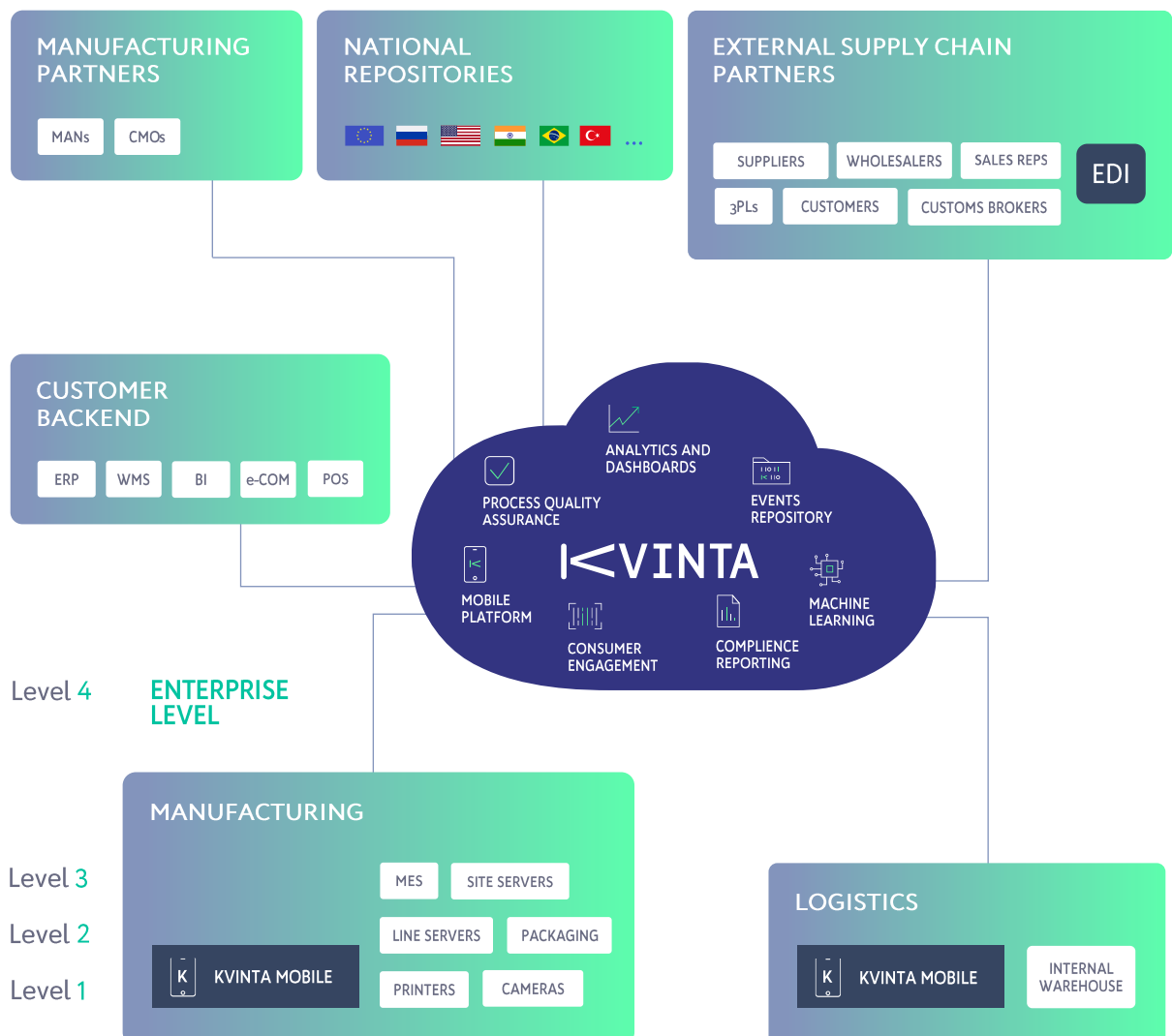
Source: www.grandviewresearch.com

THE BEST-OF-THE-BREED TECH BEHIND KVINTA

“Make simple things simple and complex things possible.”

Alan Kay

Kvinta cloud serves as a Level 4 T&T solution, offering a central repository for serial numbers and events and out-of-the-box compliance reporting for different markets and legislations. Kvinta is fully integrated with internal manufacturing, logistical, backend, and sales solutions, as well as external supply chain partners and service providers.



KVINTA'S IT HIGHLIGHTS:

Fully featured **T&T repository**—stores the product hierarchies and event history data from external (i.e., manufacturing, 3PL) and internal parties (mobile transactions).

Fully featured integrated **mobile solution** built with React Native for use in factories, factory warehouses, market warehouses, distribution centers, or even 3PLs. The solution is adjustable and extensible to fulfill any customer needs.

Support for Global Standards, like GS1 (keywords: EPCIS, GS1-128, GS1 Data Matrix).

Cloud platform independence, allowing it to adapt to country-specific regulations regarding data storage and operations.

Rich reporting capabilities to fulfill the compliance needs of T&T-regulated industries (EU TPD, MOTP, MDLP, and others) and **AI tech** to stimulate advanced problem detection and resolution.

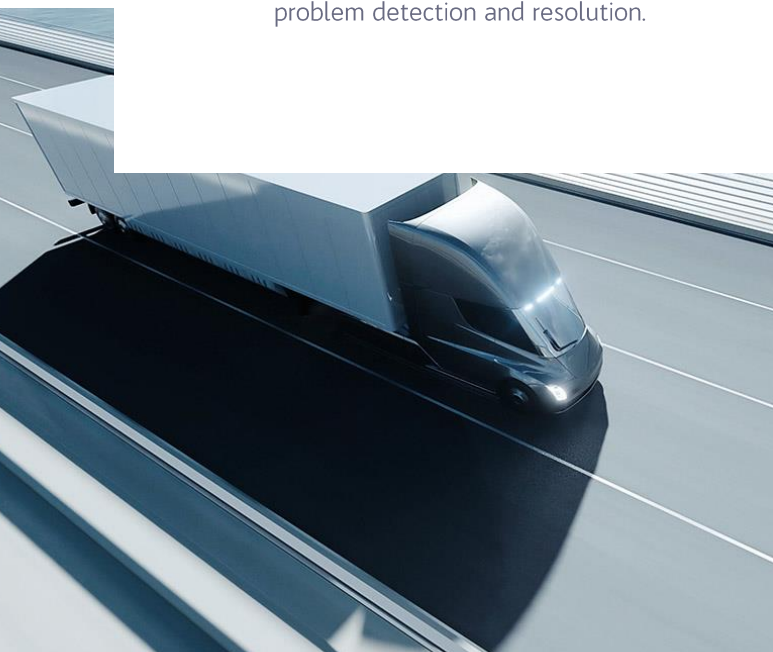
Extensive analytics capability, which allows for periodic or real-time data extraction reflecting compliance-level volatility.

Ultimate system performance. Kvinta autoscales cloud resources following the demand. We use managed Kafka clusters for messaging, managed NoSQL databases, like DynamoDB on AWS and Cosmos DB on Azure, and managed Kubernetes clusters for processing.

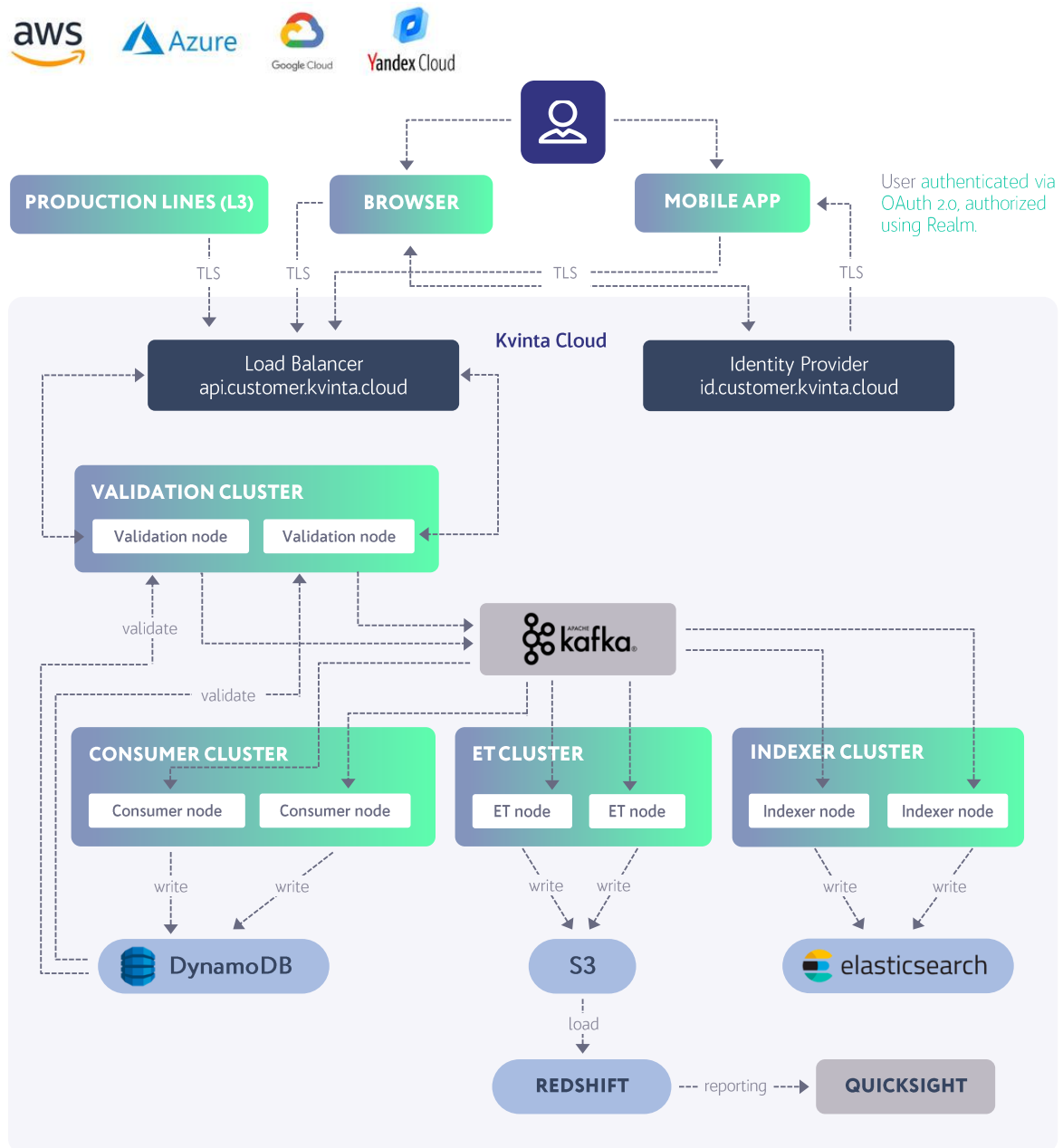
Easy integration with other parties or customer systems through the use of global standards in data exchange (i.e., EPCIS, EDI).

Voice recognition/voice control to increase value, efficiency, and user's comfort in operational environments.

Release management. Kvinta provides its customers with as many stages as their pipelines require. Kvinta automates end-to-end integration tests for both functional and performance regressions.



KVINTA CLOUD TRANSACTIONAL DATA PIPELINE ARCHITECTURE



We believe that a modern supply chain demands a new, flexible, and up-to-date serialization and T&T solution. Kvinta is here to help your business align with the market's dynamics in the digitized supply chain practice.