

ERP and QMS Integration

For Enhanced Collaboration, Efficiency and Visibility

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About us:

- **Established:** 1992
- **Employees:** 125+
- **Locations:** USA (5), Ireland, UK, India, Thailand, Sweden and Denmark
- **Customers:** 1200+ Companies
 - 750+ full implementations
 - 400+ life science customers
 - 150+ reached exit strategy
- **Products**
 - QAD Adaptive ERP
 - ETQ and QAD Quality Management Systems
 - NetSuite ERP
 - ERP Integration Adaptors & Extensions
 - FDA Validation Toolkits/Protocols
- **Services**
 - Implementations
 - Integrations
 - Upgrades
 - SIGSERV – Managed Services
 - SIGSERV Support Services
 - Staff Augmentation



ETQ INTRODUCTION

To win in today's business environment, quality professionals need critical capabilities

- Start with best practices, comply with standards, and optimize core quality processes
- Enhance practices to create competitive differentiation
- Rapidly adapt quality processes in response to business changes



ETQ INTRODUCTION

ETQ is dedicated to creating competitive advantage through quality

MARKET-LEADING PRODUCT

ETQ is the world's most flexible, scalable and easy to use **cloud-native QMS software** with a broad app portfolio



CROSS-INDUSTRY EXPERTISE

30 years of deep expertise from dozens of industries and over 850,000 global users at varying levels of complexity

SUPERIOR CUSTOMER EXPERIENCE

A customer experience that provides all the support and resources you need for success

MANY OF THE WORLD'S TOP BRANDS CHOOSE ETQ

Reliance assures quality outcomes across multiple industries

DISCRETE MANUFACTURING



FOOD & BEVERAGE



CONSUMER GOODS



ELECTRONICS & TECHNOLOGY



SERVICES



MEDICAL DEVICES



PHARMACEUTICAL/ BIOTECH



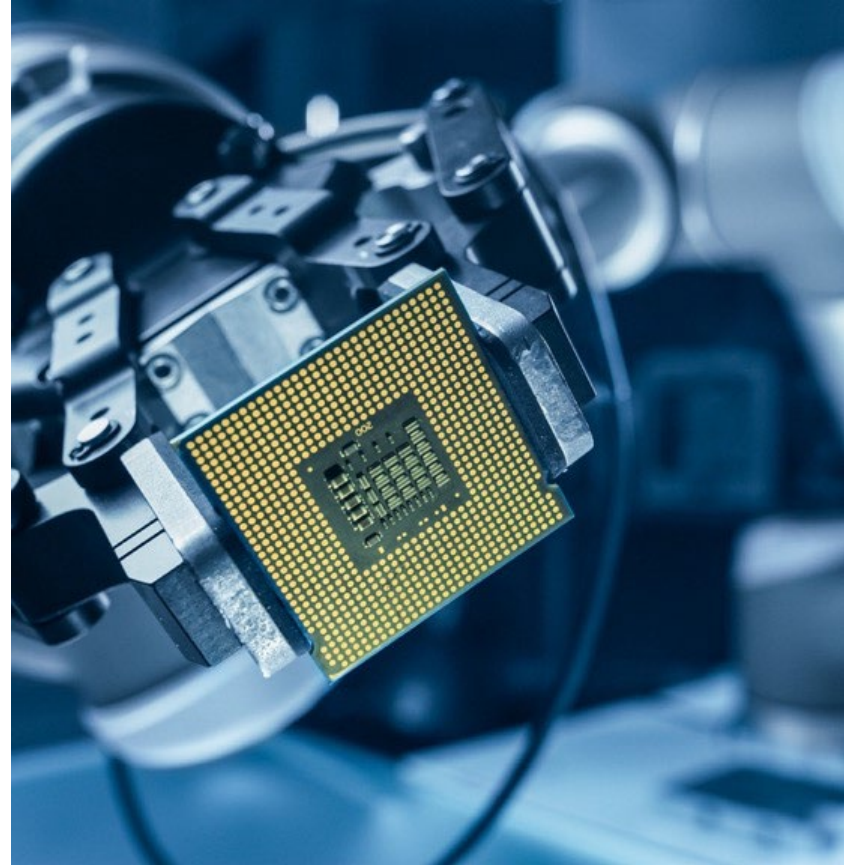
PROCESS MANUFACTURING



ETQ RELIANCE

We Believe

that competitive advantage grows when companies take a **differentiated** and **agile** approach to quality management.



ETQ RELIANCE

ETQ Reliance is built for this purpose

ETQ Reliance is the quality management system that has the **application breadth** to address broad business requirements combined with the **limitless flexibility** that quality professionals need – all in the cloud.



ETQ RELIANCE

ETQ Reliance uniquely combines a broad portfolio of quality applications with market-leading flexibility – all delivered in a cloud environment

42

built on

1

delivered in



Ready-to-use applications in 8 application sets

*Broad application portfolio across
the entire product lifecycle*

An agile platform

*Highly flexible platform designed for
business users backed by
the industry's most advanced analytics*

Cloud-Native SaaS

*The industry's most scalable QMS with the
security, flexibility and IT management power only
available in a leading-edge cloud solution*



*Supporting industry standards
ISO 9001: 2015 and ISO 27001
certified*



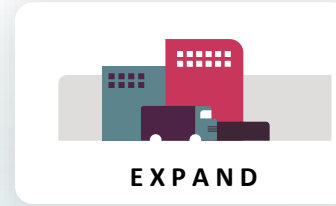
*Use out of the box or
configure with drag and drop
ease*



*Integrates with other
enterprise applications
(ERP, MES)*

ETQ Reliance addresses the full range quality management needs

Our value continues to grow as complexity and application breadth grows



SOLUTIONS

- Document Control
- Training Management
- Audits Management
- Corrective Action
- Change Management
- Suppliers & Materials
- ETQ Insights

- Nonconformance Handling
- Integrate with ERP
- Complaints Management (integrate with CRM)
- Customer Feedback (integrate with CRM)
- New Product Introduction (integrate with PLM, xFMEA)
- Risk Register
- Lab Investigation

- Supply Chain Quality
- Health and Safety
- Environmental Management
- Integrate with MES, LIMS

- Enterprise Risk Management
- Integration with IIOT
- Harmonized, global transformation

Quality Management System Value

Reduce Risk of Non-Compliance

- Save time spent on:
 - Planning and executing audits
 - Supporting external audits
- Reduce number of audit findings

Streamline Operations

- Reduce time spent on:
 - Document revisions and approval
 - Nonconforming materials instances
 - Customer complaints
 - Receiving and inspecting incoming supplier deliveries
 - Supplier corrective actions

Reduce Costs

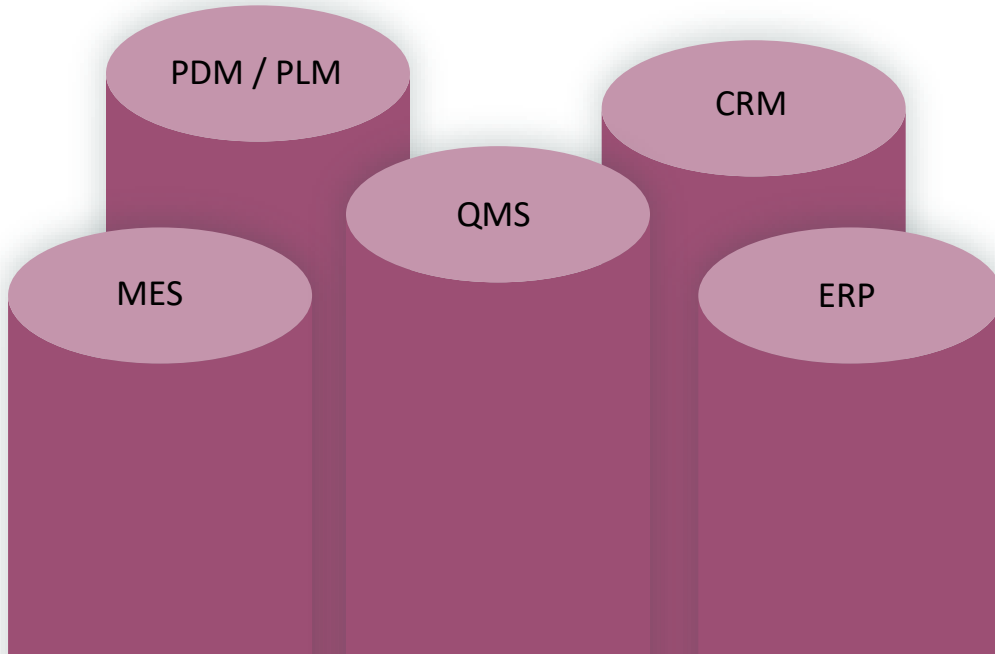
- Reduce costs from:
 - Scrapping/reworking through more efficient operations
 - Field failure costs with fewer product defects
 - IT, by consolidating systems
 - Inventory carrying costs

Grow/ Protect Revenue

- Increase customer satisfaction and brand loyalty with higher quality products
- Reduce new product development timeline and bring new products with new revenue streams to market faster

BREAKING DOWN INFORMATION SILOS

The Enterprise Software Landscape



Disconnected
systems
duplicate work
and limit
reporting

Inconsistent
processes
reduce
productivity

Ongoing
challenges are
difficult to
respond in a
timely way

INTEGRATION

Benefits of Integrating ERP and QMS

- Alignment of Data
 - Single source of truth for common data such as suppliers, customers, items
 - Enter data only once
- Data Visibility
 - Access current information without direct access to the ERP
- Support Process Handoffs
 - Initiate quality workflows from ERP transactions
 - Update ERP when materials are put on hold or are released



Step 1: Understand the Data

- Master Data
 - These common data elements are the primary means for linking systems
 - What are the common data elements for your process?
 - Customers, Suppliers, Items, etc.
- What data drives your KPIs?
 - Where and how do we capture the data points to measure the process?
 - Dates, Keywords, Text, Attachments, etc.



Step 2: Design the Integration

- Share the Master Data
 - Which system is the system of record?
 - What is the process for creating new master data? Updating it?
 - Force good data practices
- How do we aggregate data for KPIs?
 - Where/how will the analysis be performed?
- What integration technology to use?
 - Flat file transfer (not real-time)
 - Web Services (real-time)



INTEGRATION

Real World Use Cases

QAD ERP is the system of record for Supplier and Customer data

GOAL: Eliminate conflicting data

A nightly batch process creates and updates supplier and customer data in ETQ

BENEFIT: No conflicting data, improved efficiency



INTEGRATION

Real World Use Cases

Product Issues identified during manufacturing require containment

GOAL: ETQ and QAD communicate to prevent further processing or shipment.

Nonconformances processed in ETQ based on information from QAD

BENEFIT: Faster, less error prone. Lower risk of sending known bad product to customers



Inspection/NCMR Integration

The Process:

1. Material is received against a PO
2. Receiving Inspection may or may not be required
3. If Inspection is required, material needs to be put on hold, then inspected based on the sampling plan and defined criteria
4. If Inspection passes, material can be released
5. If Inspection fails, material is put on NCMR



Inspection/NCMR Integration

Can't this all be done in QAD? *Yes and no*

1. Material is received against a PO
2. Receiving Inspection may or may not be required
3. If Inspection is required, material needs to be put on hold, then inspected based on the sampling plan and defined criteria
4. If Inspection passes, material can be released
5. If Inspection fails, material is put on NCMR



Inspection/NCMR Integration

What are the data points?

- PO and Line number
- Supplier number
- Item number
- Lot/Serial number
- Qty Ordered / Qty Received
- PO date / Due date / Received date
- Domain / Site / Location

These are all generated in QAD and are known when PO line is received



INTEGRATION

Inspection/NCMR Integration

Where are the process handoffs?

Since the necessary data points originate in QAD and become available on PO receipt, we need to trigger integration on PO receipt

ETQ Inspection module has a corresponding Receiving Record, so the integration will create one of those and fill in the data

ETQ will then determine whether inspection is required based on the skip lot setup for that item



INTEGRATION

Inspection/NCMR Integration

Where are the process handoffs?

ETQ determined this lot does not need to be inspected

- **QAD needs to be updated to release the material**
- **We can trigger this on completion of the ETQ Receiving Record**

ETQ determined this lot does need inspection, and inspection passes

- **QAD needs to be updated to release the material**
- **We can trigger this on completion of inspection**



Inspection/NCMR Integration

Where are the process handoffs?

ETQ determined this lot does need inspection, and inspection failed

- **Inspector creates an NCMR in the ETQ NCMR module**
- **Material goes through NCMR workflow and disposition(s) are determined and approved**
- **Also, a SCAR may be created in the ETQ CAPA module**
- **QAD needs to be updated based on the disposition(s)**
- **We can trigger this upon approval of the disposition(s)**



Inspection/NCMR Integration

What are my metrics and KPIs?

Material / Supply Chain Quality related

- **Am I receiving material on time?**
- **What percentage of the material I receive from a supplier is defective?**
- **Did a design or process change impact product quality?**
- **Did an external event impact product quality?**

Process related

- **Are we completing inspections on time?**
- **How long are NCMR dispositions taking?**



INTEGRATION

Inspection/NCMR Integration

Where will I calculate metrics and KPIs?

Both systems have analytics capabilities, especially if you're on the more recent versions

Do we want to use QAD Action Centers for some and ETQ Insights for others? Is there a centralized BI tool we need to use?

Can I aggregate all the necessary data into one system so we can see everything, everywhere, all at once?



How Strategic Can Help

- Deep consulting and implementation expertise for QAD and ETQ
- Standardized integrations available for common integration points
- We can develop custom integrations
- We can support different integration approaches – Boomi, QXtend, Web Services, flat files, etc.

Next Steps

- Contact your Strategic Account Executive, or sales@strategic.com if you are interested in:
 - Evaluating quality system options
 - Implementing ETQ Reliance
 - Integrate your existing ETQ Reliance system
 - Assess/improve/optimize your ETQ Reliance configuration and/or existing integrations
 - Determine potential ROI of implementing ETQ

We look forward to working with you!



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www.strategic.com