Decision-Critical Data Integrity and Controls

Independent assurance for data used in financial crime, payments, reporting and AI

If the data fails, the decision fails.

DQIntegrity helps regulated organisations establish whether decision-critical data remains complete, correct, timely, understood and controlled across its end-to-end journey.

THE FOUR QUESTIONS THAT MATTER

01 COMPLETE

Did the full expected population arrive?

02 CORRECT

Did meaning remain right through transformation?

03 TIMELY

Did data arrive within the required decision window?

04 EVIDENCED

Can the organisation prove the first three?

WHERE DQINTEGRITY OPERATES

FINANCIAL CRIME

Transaction monitoring, screening, KYC/CDD and remediation.

PAYMENTS

End-to-end journeys, reconciliation, exceptions and operational evidence.

REPORTING

Regulatory, risk and management decisions supported by controlled data.

PLATFORM CHANGE

Migration, integration, transformation and pre-go-live assurance.

AI AND ANALYTICS

Readiness, provenance, traceability and human oversight.

CONTROL REMEDIATION

Root causes, sustainable controls, ownership and evidence.

PRINCIPAL-LED | INDEPENDENT | CONTROL-EVIDENCE FOCUSED

No predetermined technology or generic data-quality programme.

Where data integrity breaks

A stable output does not, by itself, prove that the data journey underneath is complete or correct

DQIntegrity's working premise is that data can be lost, delayed, filtered, transformed incorrectly or misunderstood before a control or decision uses it. The assessment therefore begins with the expected population, not only the records visible at the end.

END-TO-END JOURNEY AND COMMON BREAKPOINTS

SOURCE

Customers, accounts, transactions and events

INGEST

Files or records may fail, filter or arrive late

TRANSFORM

Mappings, formats and meaning can change

CURATE

Partial data may still appear usable

DECIDE

A control acts only on what arrived

OUTCOME

Stable output may mask weakened coverage

FOUR FAILURE MODES

COMPLETENESS

Missing records, partial populations, unintended filtering, dropped interfaces and late arrivals.

CORRECTNESS

Wrong mappings, truncation, invalid values, duplication, formatting change and semantic drift.

TIMELINESS

Data reaches the process after required monitoring, reporting or operational windows.

CONTROL EVIDENCE

No governed expected population, weak thresholds, unclear ownership or proof limited to final output.

WHY GENERIC DATA QUALITY MAY NOT BE ENOUGH

Data quality

Often tests the condition of data already visible: format, validity, consistency or conformance.

Data integrity

Tests whether the expected population remained complete, correct, timely and evidenced through hand-offs and transformations.

Evidence-led analysis: dqintegrity.com/global-data-integrity-evidence.html

The DQIntegrity control architecture

A repeatable framework for proving integrity across the decision-data journey

The framework starts with the business decision and governed expected population, places controls where integrity can fail, and connects exceptions to accountable response and durable evidence.

APPROACH

01	02	03	04	05
DEFINE	**TRACE**	**TEST**	**ASSESS**	**PRIORITISE**
Population, decision and critical data	Sources, filters, transformations and use	Completeness, correctness and timeliness	Ownership, exceptions and evidence	Stabilisation and target controls

CONTROL ARCHITECTURE

01 REQUIREMENTS AND EXPECTED POPULATIONS

Define what should exist, why it matters, the decision it supports, material data and timing.

02 CONTROLS AT CRITICAL HAND-OFFS

Apply count, value, mapping, field, uniqueness, timeliness and source-to-target evidence where failure can occur.

03 EXCEPTIONS, OWNERSHIP AND ESCALATION

Set thresholds, route exceptions, assign owners and distinguish incidents from accepted variance.

04 EVIDENCE, REPORTING AND SUSTAINABILITY

Retain repeatable proof, expose residual risk and monitor whether controls remain effective.

CORE CONTROL DIMENSIONS

POPULATION · RECONCILIATION · CORRECTNESS · TIMELINESS · OWNERSHIP · EVIDENCE

Applications and commercial services

Specialist data-integrity support for high-consequence environments

DQIntegrity is applied where incomplete, incorrect or weakly governed data can undermine control effectiveness, regulatory confidence, operational decisions or automated outcomes.

WHERE THE FRAMEWORK APPLIES

TRANSACTION MONITORING

Expected transactions, accounts and attributes reaching monitoring completely and correctly.

SANCTIONS AND SCREENING

Population, exclusions, mappings and evidence supporting screening coverage.

KYC / CDD

Customer-data requirements, event inputs, workflow hand-offs and decision evidence.

PAYMENTS

Count and value controls, dropped or rejected transactions and exception ownership.

REPORTING AND REMEDIATION

Controlled populations and root-cause closure supporting risk and regulatory reporting.

AI AND ANALYTICS

Readiness, provenance, representativeness, versions, oversight and fallback.

DEFINED SERVICES

01 DATA INTEGRITY DIAGNOSTIC

Focused assessment of critical flows, risks, control gaps, ownership and priority remediation.

02 DATA CONTROLS FRAMEWORK

Practical completeness, correctness, timeliness, reconciliation, exception and evidence controls.

03 TM AND SCREENING DATA ASSURANCE

Independent challenge of whether controls receive the complete and correct data expected.

04 PAYMENTS DATA CONTROLS

Controls across payment hand-offs, count and value reconciliation, rejects and evidence.

05 AI AND ANALYTICS DATA READINESS

Assessment of whether data is understood, controlled, traceable and appropriate for automated use.

06 REMEDIATION AND DELIVERY ASSURANCE

Independent oversight where data integrity is a critical dependency in change or recovery.

From uncertainty to defensible assurance

Principal-led diagnosis, practical control design and evidence for senior stakeholders

HOW AN ENGAGEMENT BEGINS

01 SCOPE

Decision, population, concern and available evidence

02 DIAGNOSE

Trace the journey, test controls and separate symptoms from causes

03 DECIDE

Findings, risk, stabilisation and intervention options

04 SUPPORT

Design controls or provide independent remediation assurance

TYPICAL OUTPUTS

- Critical data-flow and control-point map.
- Expected-population and material-data definition.
- Completeness, correctness and timeliness assessment.
- Reconciliation, mapping and transformation findings.
- Ownership, exception and escalation assessment.
- Target control architecture and remediation roadmap.

EXPERIENCE INFORMING THE PROPOSITION

- Global transaction-monitoring data strategy and continuous-control leadership.
- Completeness, correctness, reconciliation and control-evidence design.
- Financial-crime remediation across business, data, technology and operations.
- Complete-lifecycle payments delivery and operational readiness.
- Synthetic-data and controlled AI or automation use cases.

BRAND AND DELIVERY ARCHITECTURE

NFRISK

Principal senior advisory proposition for cross-boundary mandates.

DQINTEGRITY

Related but commercially distinct specialist Data Quality & Integrity proposition.

RESOLVO ADVISORY

Planned future corporate and commercial umbrella; not presented as an incorporated operating entity.

DISCUSS A CONFIDENTIAL DATA INTEGRITY MANDATE

dqintegrity.com | nfrisk.com