



Assessing Critical Data In The Financial Services Industry



DIACSUS
ADVISORY & CONSULTING

Executive Summary

The leading financial services firms are competing to deliver greater returns and efficiencies, faster service, innovative new products, and instant access to customers globally. Critical data is at the center of these initiatives.

In the summer of 2023, Kingland Systems (“Kingland”) and DIACSUS (led by seasoned industry executive, **Tom Dunlap**) partnered to survey the world’s top asset managers, custodians, broker-dealers, & data suppliers to understand what their priority challenges are with critical data. The study uncovered common sets of business and data challenges. Notably, legacy systems and operational processes responsible for producing and managing critical data are showing their limitations. Throughout the financial services industry, critical data is being identified as an essential and compulsory need for strategic progress.



Throughout the survey, executives expressed initiatives to explore the end-to-end activities necessary to more quickly improve the usefulness of critical data for business functions, including an emerging approach called “data refinement”.

This whitepaper reveals the results of this study and provides compelling insight from executives across 14 Tier 1 financial services firms. Highlight themes include:

- Leaders overseeing risk, operations, and various business lines are largely focused on defining “the what” or rather “the business challenges and critical data needs.”
- Data and technology leaders are focused on addressing the “how” or rather “defining the approaches, technologies, and operational capabilities needed to address critical data challenges.”
- In total, leaders of business, data, and technology identified 6 data challenges that must be addressed across 3 top business challenges and 3 emerging business challenges

(Exhibit 1).

Critical Data Meets Business Challenges

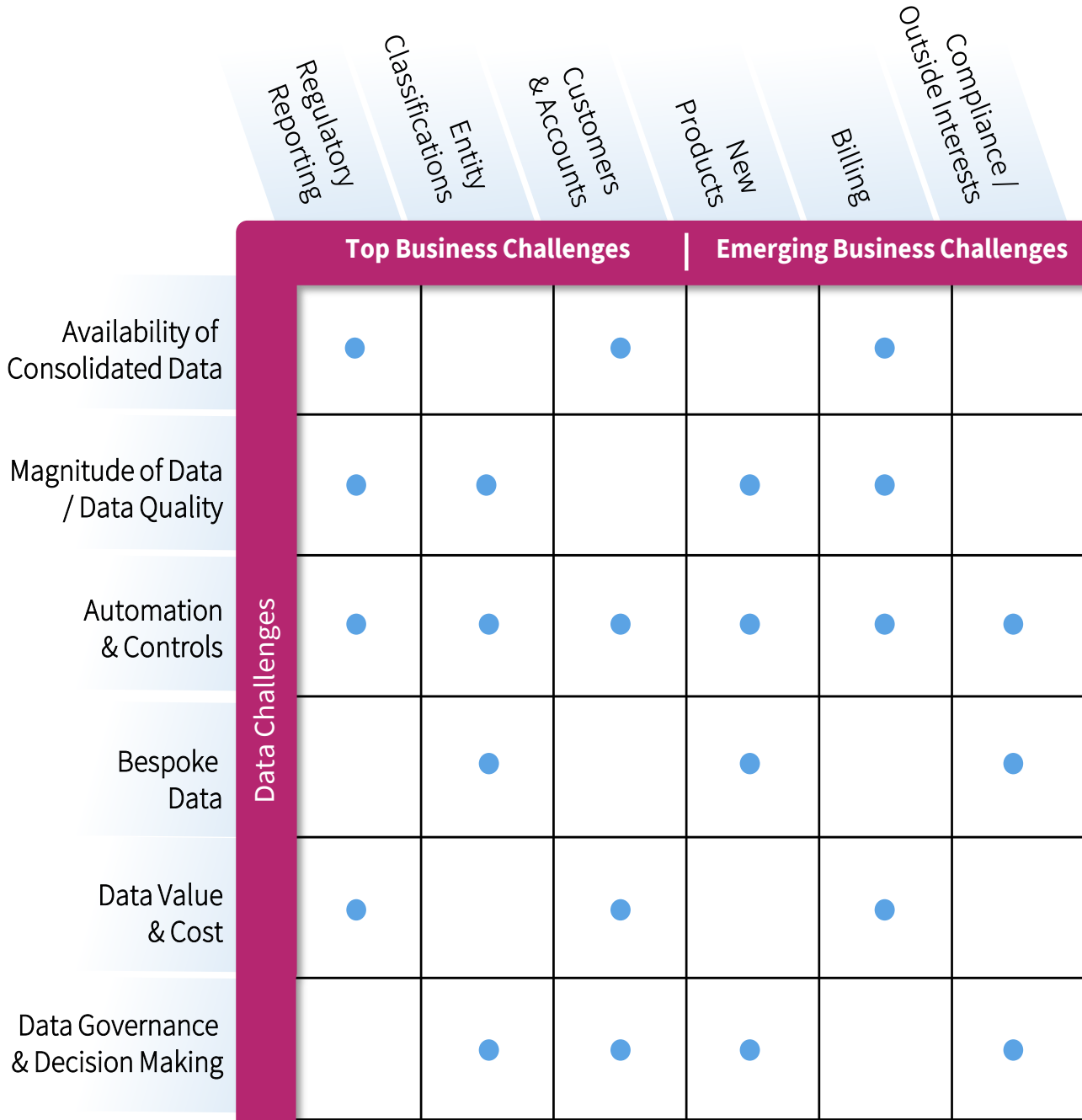



Exhibit 1 | Source: Capital Markets Executive Survey, May - July 2023, Kingland/DIACSUS analysis

Who Participated In The Study?

Kingland & DIACSUS conducted in-depth interviews with 20 executive leaders across 14 tier 1 global financial services firms to uncover the capital markets most painful **critical data** challenges. From data suppliers to consuming banks, asset managers to broker-dealers, we interviewed leaders across business, data, technology, operations, risk, compliance, legal, and internal audit functions to ensure we captured a holistic cross-section of the industry.

What Did We Learn From The Study?

Three Top Business Challenges



“ Each new rule requires us to continually uplift the reference data we have, which is no small feat. The rules evolve and therefore the data is never static. And while we have good controls to detect missing data, it’s way harder for us to identify when data values change erratically and why. This causes real pain for us.

-Strategic Programs Executive, Global Investment Bank”

Three Top Business Challenges

1. Regulatory Reporting

When it comes to critical data, one of the driving business challenges continues to be regulatory reporting. With an influx of new regulations coming out of the Americas, European, and APAC jurisdictions, updates to existing regulations, and increased regulatory oversight, leading financial services firms know that “the data” is key to mitigate risks of inaccurate or under-reporting of regulatory reporting requirements. Many increases in funding for data programs and transformation initiatives are being driven from this regulatory need. Additionally, there has been a dramatic rise in the number of severity of fines being imposed by regulators due to non-conformance.

Related Data Challenges

Availability of Consolidated Data

Making available the necessary, high-quality data to downstream regulatory reporting processes, such as trade position, shareholder, entity-level beneficial ownership, and other types of non-financial reporting, is challenging due to navigating multiple reference data systems to identify the authoritative source value.

Magnitude of Data / Data Quality

Finding data errors before regulators do to proactively self-report is critical. Firms face challenges identifying data problems earlier due to multiple hops across systems that the data may take before consumed into the reporting processes. Inorganic growth increases the magnitude of data and adds a further level of complexity due to duplicative systems, processes, and complex integration activities.

Automation & Controls

Regulatory initiatives are often times reactive and time sensitive, which has reduced automation and controls across many firms. More investments in automation & controls are needed to keep up with the data growth that comes along with business growth. Otherwise, firms know that data problems will emerge with increasing costs to tactically manage and remediate data.

Data Value & Cost

Firms are consistently driving to optimize the spend on the data required for both financial and non-financial regulatory reporting. Operational costs, technology costs, data vendor costs, reconciliations, and issue triage all contribute to a data value and cost imbalance.

Executive Quotes

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Getting reference data right goes a long way with the regulators. The regulators are way more sophisticated than they used to be, using AI and ML to identify data anomalies. You must be on the top of your game.

-Strategic Programs Executive, Global Investment Bank

Senior regulators get frustrated when firms commit to a level of transparency yet provide something less. Above all else, regulators care that firms get the data right and follow the rules.

- Operations Executive, Global Bank

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Three Top Business Challenges

2. Entity Classifications

Classifications have emerged as one of the critical data issues impacting businesses in so many ways. To operate in today's environment, firms must classify the clients, counterparties, partners, and other types based on their industry. They must classify products, investments, and even costs based upon a growing set of ESG/sustainability requirements. All of these classifications may vary based upon a business line, geography, a revenue perspective, a cost perspective, or even a risk perspective. The result? Every firm faces a consistent challenge: understanding legacy business spanning years while paving the path for new business in a regulated and evolving financial services industry.

Related Data Challenges

Bespoke Data

Company-specific data, industry classifications, and ESG data is often sourced from the actual companies themselves, e.g., through annual reports, official notices on websites, and other means. Data tends to be very stale and difficult to make current and anything 'private' causes data capture and ongoing maintenance issues.

Magnitude of Data / Quality

The scale of different classification taxonomies applied across millions and millions of clients and products makes the magnitude of classifications huge. Data quality can be challenging due to business level relationships, geographic differences, and regulatory interpretations - all which must be managed across a large universe of critical data.

Data Governance & Decision Making

Risks with bad data include companies needing to be or wrongly on exclusion lists, incorrect holdings scope, invalid or incomplete hierarchies, misapplied corporate actions events, etc. A simple change of classification can have wide-spread impact across the organization

Automation & Controls

New regulations in the EU and US are requiring firms to assert the quality of ESG data in a way that historically was not needed, e.g., regulators want firms to identify the source for accountability reasons. Additionally, M&A and business changes can dramatically impact revenue and risk assessment. This requires investments in automation & controls to perform data insights and analysis.

Executive Quotes

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ESG is difficult because you must report on many thousands of metrics for these new regulations. The data is often stale, and there is a lack of standard identifiers requiring a fair bit of mapping work.

- Data Executive, Global Bank

Data attributes may have multiple interpretations with entity classifications, also impacting our reporting. Very painful for us.

- Data Executive, Global Bank

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Three Top Business Challenges

3. Customers & Accounts

In regards to critical data, customers and accounts are at the epicenter of the business. Executives are prioritizing regulations, like know your customer and T+1, and focused on account management across various products and services. All of which, ultimately link back to customers and accounts.

Related Data Challenges

Automation & Controls

The accounts space is under-developed and under-invested, impacting readiness-to-transact and adding costs to support and maintain the data. Client onboarding and KYC have driven some automation, but the speed of use of customer and account data, and the expansion of data attributes within these critical data domains point to a need for more automation and control.

Data Value & Cost

The reference data changes in scope as the client subscribes to more and more business products, resulting in challenges maintaining even more data attributes about the client to be useful in multiple key contexts like beneficial ownership, investment suitability, & most other personally identifiable information (PII). The nature of how clients interact with the firm can cause account processes to never fully be processed straight through (STP), resulting in data management issues and higher servicing costs.

Data Governance & Decision Making

By its very nature, client and account data typically has more governance and decision making around it, particularly at set up. However, as this data is used in the years to come, for many different purposes and expanded with more related data points, that governance and decision making must continue to exist...and oftentimes it does not.

Availability of Consolidated Data

For firms that have grown inorganically, the customer and account data from both legacy and strategic reference data systems are often used as sources by downstream systems, sometimes exclusively and sometimes in combination. The problem is that the authoritative source conflicts with legacy sourced reference data and impacts what is reported about clients from a consistency view.

Executive Quotes

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The big pain point for me is with AML / KYC checks working with Compliance. These are onerous and manual in nature. They also cause long delays to set up accounts, impacting the client experience for being ready to transact.

- Operations Executive, Global Bank

The data is not static; the scope and lifecycle can be broad. The reference data can change as the client subscribes to more business products. It balloons and evolves, so the reference data must continually be maintained transacting with multiple bank divisions.

- Data Executive, Global Bank

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What Did We Learn From The Study?

Three Emerging Business Challenges

“ Minimum Viable Product (MVP) is really just the result of under investment. Short deadlines often cause short term success however, they usually just lead to underlying problems that fest and show back up in 5-7 years.

- Product Executive, Global Bank ”

Three Emerging Business Challenges

1. New Products

Customers want new products to simplify their financial experience, improve their returns, and mitigate their risk. Financial institutions want to deliver new products to improve their competitive position and build customer loyalty. The data required to launch these products, manage risk related to these products, and enable business leaders to make decisions about these products represents a significant, emerging challenge, particularly for banks and asset managers.

Related Data Challenges

Automation & Controls

There is a growing need for improvements with workflow management and analytics on new product approvals. Most firms are using SharePoint or a use-case management tool that is neither scalable nor sustainable, and building out initial data sets or enriching and remediating legacy data sets in spreadsheets.

Magnitude of Data / Data Quality

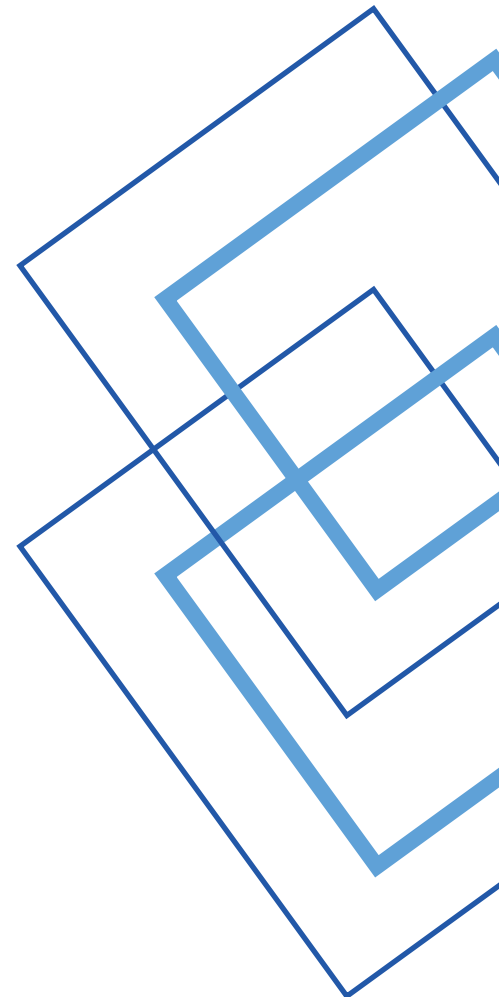
Getting data quality at source is key for any and all downstream processes to have a consistent application of the data. Otherwise, there is a risk that making changes to downstream systems will conflict with the source. Data quality issues must get fixed at source and need to reconcile against transaction level inputs, where there are often numerous exceptions to be managed.

Data Governance & Decision Making

The new product evaluation and approval process involves many different stakeholders and a significant amount of critical data to make sound decisions. Governing the data and the decision making process is complicated by new market considerations like ESG and new regulatory rules.

Bespoke Data

Many new products require collection of new types of data that have never been collected by the institution. This data can be difficult to source, maintain and has a higher probability of going stale or being inconsistent, all of which can create trust issues with consumers, the firm's customers, and even regulators.



Executive Quotes

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Everyone hates our new product process except those that run it; a risk-adverse process that slows everything down. Need a way to optimize the workflow & decision-making process for new products to be simpler and more agile.

- Product Executive, Global Bank

There are issues with systems talking to one another and the end-to-end processes holistically working together; these issues result in tactical workflows and exceptions, and in turn errors we see in our products.

- Technology Executive, Global Capital Markets

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Three Emerging Business Challenges

2. Billing

Another highlighted business challenge that points back to data is billing. As the business grows through acquisition or organically, product lines expand, taxes change, and customer relationships expand, the data required to accurately bill and account for business is challenged. Billing issues do not age well, and without proper proactive and preventative focus on data, unresolved issues can lead to quarters or years of under or over billed activity.

Related Data Challenges

Availability of Consolidated Data

Major hurdles stand in the way of the 'right' data getting from various systems into the final-end process flows for regulatory reporting and billing, in particular. Delays and inaccuracies should not be the norm while determining which upstream systems have the correct data. All roads lead to getting client data right: onboarding, transfers, reporting, etc.

Automation & Controls

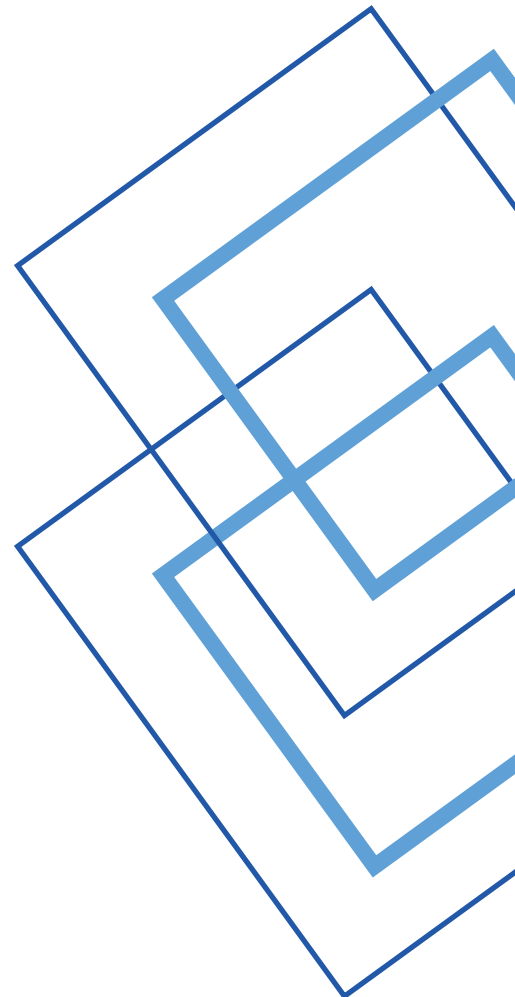
Preventive controls are commonly used, but there is larger consideration for periodic automated analysis of billing and the data supporting billing to identify issues that may have emerged in billing processes from changes and updates to data.

Magnitude of Data / Data Quality

Data quality at source is paramount, especially for reference data on accounts, entities, and products across systems. Many billing systems rely on the reference data to drive calculations and billing details, and the greater the set of reference data, the higher the risk of error.

Data Value & Cost

Firms recognize that there is a difference in 'lower-value to high-volume of data' and 'higher-value to low-volume of data'. Some data is much more valuable and more challenging to maintain, and is where money should be spent yet more difficult to manage.



Executive Quotes

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There is a lot of exception-based, manual work taking place to manage the data. It is non-valued added. And there is duplicative data work that is simply frustrating and painful.

- Operations Executive, Global Bank

Tech needs to harmonize the data centrally and make decisions on which frameworks should survive or be augmented.

- Data Executive, Global Bank

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Three Emerging Business Challenges

3. Compliance / Outside Interests

Employees are engaged in a variety of activities, particularly in the financial industry. As businesses expand their product sets and take on more clients, the opportunity for conflicts and compliance issues grows exponentially. The data required to understand employee activity married correctly and timely with relevant data about the business has emerged as a key challenge in building a resilient compliance program.

Related Data Challenges

Data Governance & Decision Making

Reference data is linked at the accounts and entities levels, for example, on beneficial ownership checks. The data must be accurate and reliable to support governance and decision making of compliance checks.

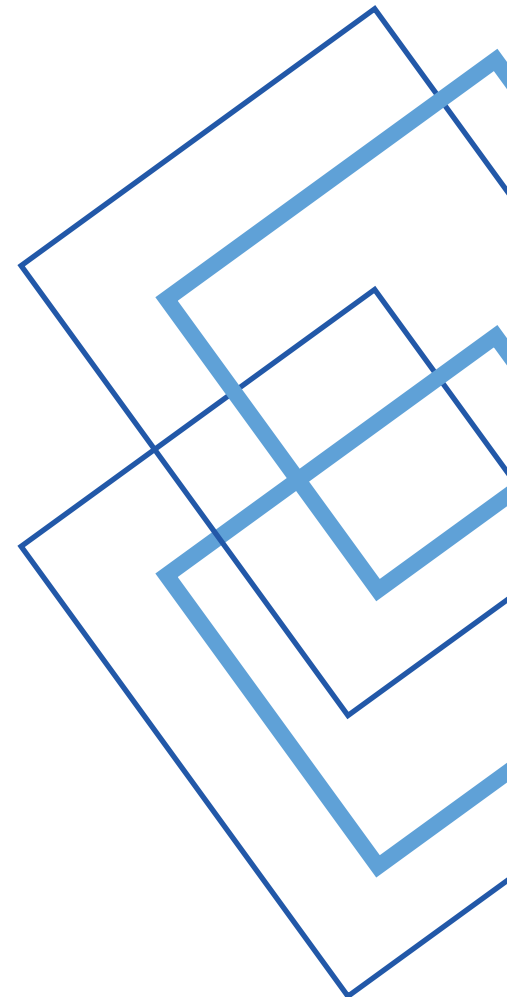
Bespoke Data

Pain points are with duplicate data, invalid hierarchies, and wrong discretion applied on classifications, including at the entity level. Also, there are challenges with private entity data sourcing and validation checks, including corporate actions events.

Data often comes from unstructured sources, which must be digitized via AI, ML and NLP technologies, then validated and applied into workflows and processes.

Automation & Controls

Exceptions are manually performed, typically take a long time, and involve Compliance, the employee, and the manager. Business, product, and operations leaders are putting forth business requirements on 'what' needs to take place systemically; they are holding their Tech colleagues responsible for delivering the 'how'. This is especially true across larger firms.



Executive Quotes

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My people are fatigued and burned-out from all of the manual exception checks and balances that must be performed daily. I want to simplify the non-value added work. I am willing to be an investor on a different approach.

- Operations Executive, Global Bank

The review and approval process in the workflow is long, which is often due to manual tasks required of the employee and compliance to perform due diligence checks. There is significant desire to automate the compliance workflow for better speed on decision making.

- Risk Executive, Global Investment Bank

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On The Horizon, A New Paradigm?

While financial services executives understand the business and data challenges, they are also tasked with establishing strategies to position their firms for the future. While each firm will have a different strategy, the study did uncover a series of consistent demand drivers that these business, data, and technology leaders are weighing.

The following eight demand drivers are top of mind for the industry. They impact every project, every program, and are the source of a significant amount of frustration, cost, and risk to these institutions.

Eight Demand Drivers

- 01** The days of multi-year, big bang data initiatives are over. New approaches that are scalable are being prioritized.
- 02** Conformance to regulations and internal policies and standards will always drive critical data needs.
- 03** Fragmented systems and processes add significant complexity to accessing and using critical data.
- 04** As data has expanded, the data is more difficult to create and difficult to maintain, particularly across the enterprise.
- 05** Manual processes will continue to be used to collect and assess data for key business, regulatory, and risk processes.
- 06** Data suppliers can be an important way to improve coverage, yet total cost of data fees and operational fees are being evaluated to produce more optimized plans.
- 07** Businesses that have grown inorganically or have under-invested in technology in the last 10 years must be considered and managed differently in critical data processes.
- 08** Data quality (missing data, duplicates, different interpretations / accuracy) is an on-going challenge that must be considered in every technology and business process investment.

A Data Refinement Approach

While critical data was the focus of this study, leading financial services firms are also faced with other important priorities that are universal across the industry.

- Firms *want to* get to the Cloud.
- They *want to* modernize legacy systems and processes.
- They *want to* meet the needs of the business but look for ways to automate and innovate with new technologies such as generative AI.

However... these priorities all require foundationally high data quality.

Data is indeed foundational in all of these priorities; however, the legacy systems and processes that run the business today are not always well-suited for the future of the business. As we saw in the study, new regulations emerge, new products are created, customer relationships expand, and the result in almost every case is that **critical data is required**. The pace of business can not afford a multi-years long major data initiative to remediate poor quality data, or expand the data to meet the business need. Because of this need for speed, agility, and real business impact from the data, there is a new approach emerging called “**data refinement**”.

Key Capabilities of Data Refinement

The goal of data refinement is to streamline the end-to-end activities necessary to improve the usefulness of critical data for business functions. Instead of individual data warehousing, data management, and data analytics silos of activity, data refinement looks at these capabilities as an orchestrated process of “refining” data from source to its intended use by the organization. Certain data refinement needs are short term in nature – weeks or months. Other data refinement needs are strategic, requiring a new operating model, new data product, or an upgraded approach to the data needed for risks or regulatory compliance.

To deliver the speed and agility required, the **key capabilities of a data refinement approach are:**

-  **Data Aggregation**
Accessing the data required across the enterprise
-  **Data Analysis**
Analyzing the data individually or from across sources to prioritize data needs
-  **Data Enrichment**
Using tools, techniques, and people to remediate and enhance the data
-  **Operationalization**
Leveraging automation to implement end-to-end processes for ongoing data refinement activities and use by businesses

Today, data refinement planning is being explored by many executives in the study to address the strategic challenges identified. We see significant data quality and efficiency gains for the industry by using a set of **data refinement** technologies and processes adjacent to a firm’s existing systems and processes.

Kingland and DIACSUS - At The Forefront Of Data Refinement

Very few Tier 1 firms have developed or are building internal solutions to-date, where interviewees state having only realized marginal success with many more improvements still needed.



At DIACSUS, we bring deep industry expertise to help you strategically facilitate and manage through your critical data challenges. Check out diacsus.com for more details and to schedule time to speak with us.



The financial services industry needs help now to solve for its bigger data and business-related problems. Technology such as [Kingland's Data Refinery](#) platform enables firms to mitigate their most significant data challenges by:

- Leveraging, improving, and expanding critical data to achieve “regulatory grade data” required to meet regulatory standards and mitigate risk.
- Quickly migrating legacy data and processes, and building out next generation data pipelines, and data analytics and management automation to power next generation business products and services.
- Assembling new data sets, augmenting and enriching the data, and developing new data assets to be integrated into business processes and new products
- Experimenting, expanding, and improving the data to drive greater value from AI investments.



DIACSUS

Tom Dunlap
Founder, Managing Partner
Thomas.Dunlap@Diacsus.com



 **KINGLAND**

Tony Brownlee
President, Chief Revenue Officer
Tony.Brownlee@Kingland.com



 **KINGLAND**

Alex Olson
Executive Vice President
Alex.Olson@Kingland.com



 **KINGLAND**

Matt Good
Senior Vice President
Matt.Good@Kingland.com



 **KINGLAND**

Tony Somers
Industry Specialist
Tony.Somers@Kingland.com

