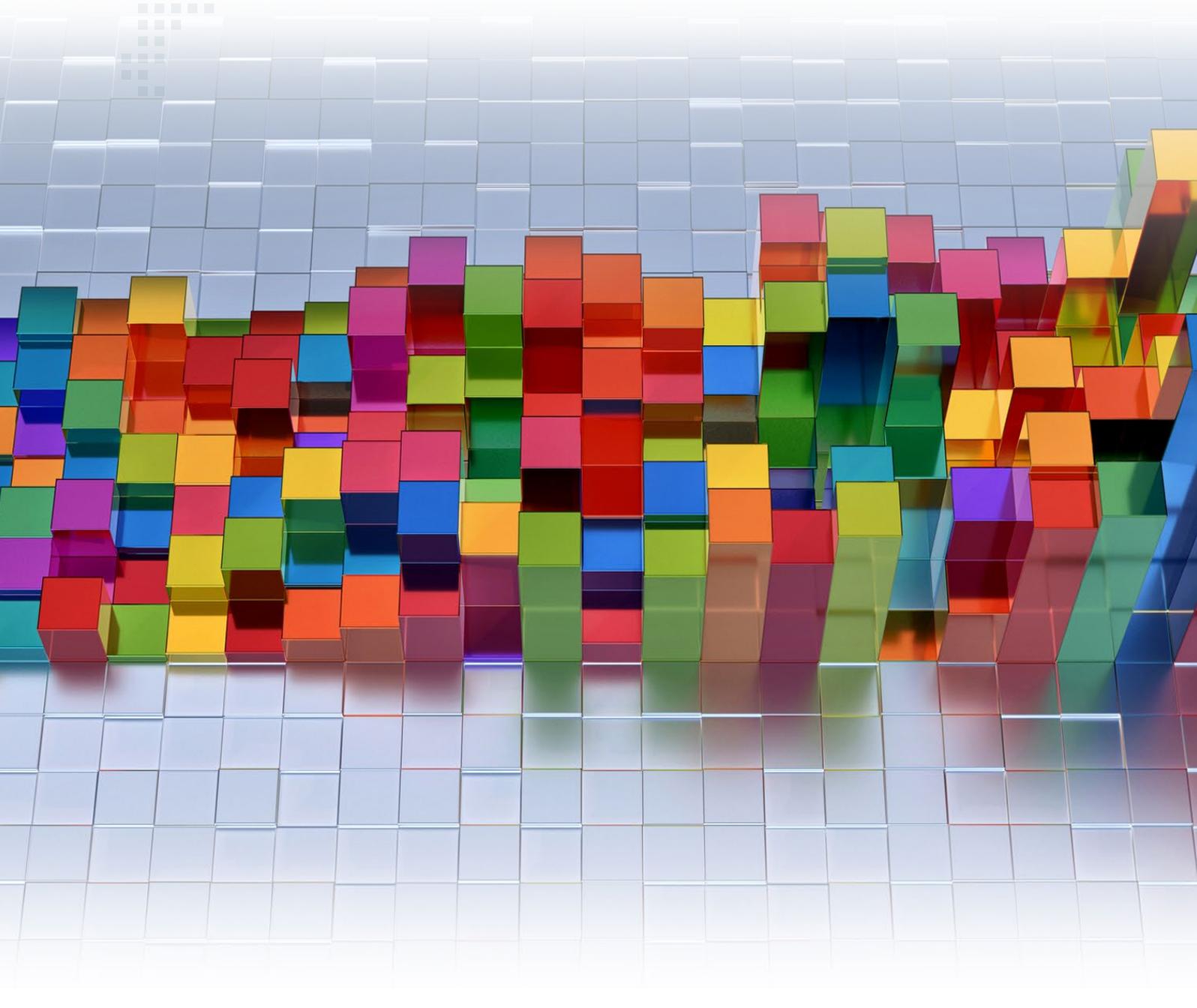




DIGITAL TRANSFORMATION: GETTING DATA WRONG IS RISK #1

ASSET MANAGEMENT



EXECUTIVE SUMMARY

As a follow up to our recent report 'Asset & Wealth Management – Core themes and challenges for 2022', we thought it would be helpful to create this document that sets out a practitioner's perspective on managing a data workstream in asset management and here is why...

Our previous report looked at the core themes and strategies for global asset and wealth managers in 2022. The priorities which were set out by the leadership teams of some of the leading asset managers are:

1. Digital transformation
2. Improving client experience
3. Sustainable investing
4. Alternative investments (Real Assets).

Ownership, management, and maintenance of enterprise data wasn't necessarily a priority in the past when scaling the business, it has now become a potential barrier. To align the business strategy to the target operating model data must be harnessed for alpha generation and insight while generating data and applying analytics to create business value, and hyper personalising the client experience. The integration of principals governing sustainable investing and ESG ratings, benchmarks and new and alternative data sources are adding additional layers of complexity for the data management teams.

Data is essential for growing and running the business, for regulatory compliance and reporting, finance, fund valuation, and monitoring operational and enterprise risk etc. but global asset managers face significant obstacles to achieving their data transformation strategies. This is because, in most cases, data is aggregated across disparate and fragmented infrastructure into siloes to meet the needs of individual business functions and stakeholders.

The fact remains that most asset managers access and process hundreds of different data sources across multiple systems, which were not designed for interconnectivity. An asset manager with multiple strategies across equities, fixed income, multi-strategy, and private markets will have very different data needs defined by the individual business areas.

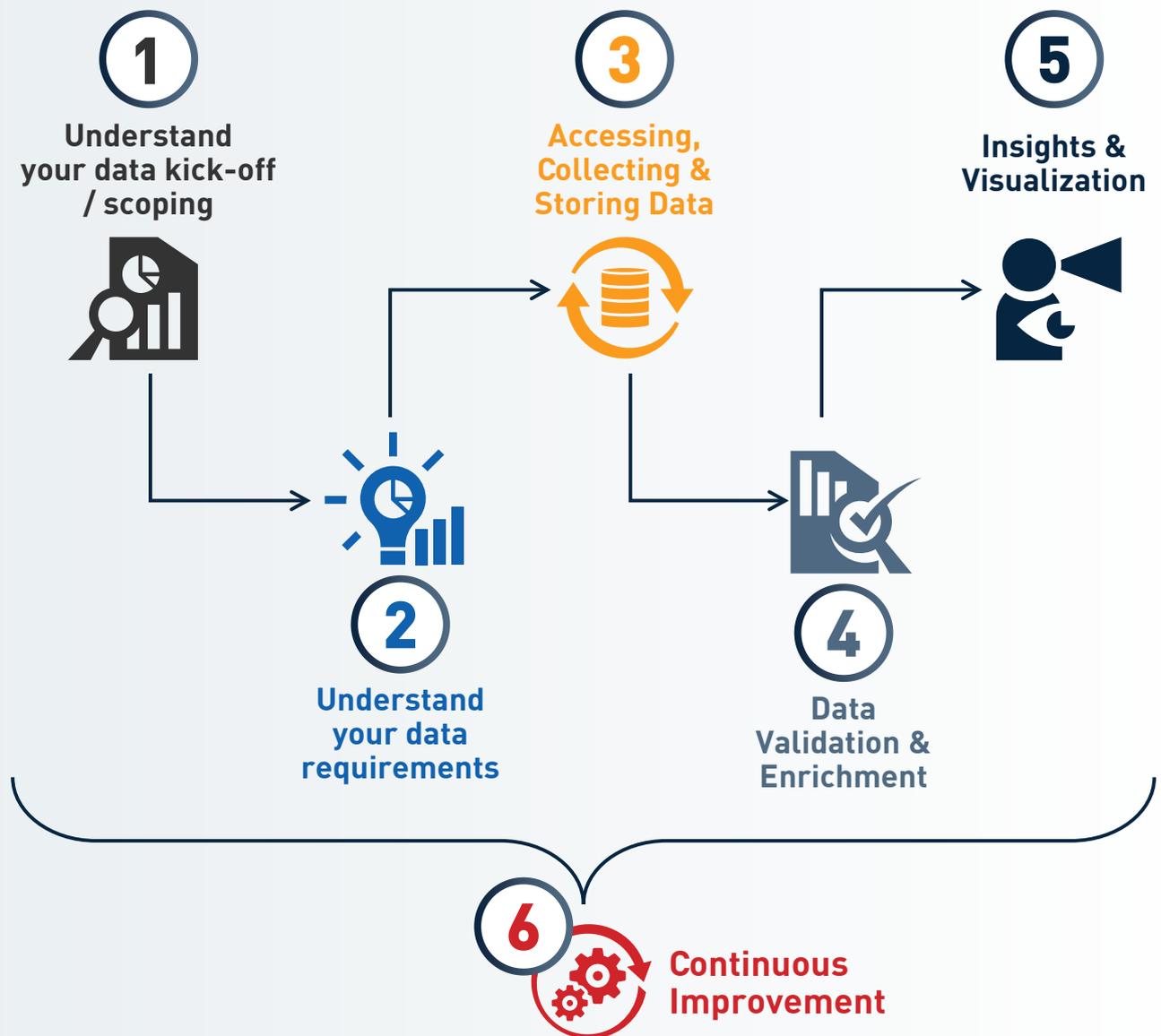
A firm-wide universal book of records is desirable for a digital transformation strategy to be successful. However, this can be expensive and difficult to achieve in the real world because of legacy infrastructure and siloed data and of course, cost. We think that it is more about accepting that a firm wide UBR might not deliver immediate value (because of the difficulties that have been highlighted) so prioritisation, process and data governance are critical factors in achieving successful outcomes.

YOU'RE READY FOR YOUR DIGITAL TRANSFORMATION, BUT IS YOUR DATA READY?

You've identified the priority areas and business case for digital transformation; prioritized initiatives into a roadmap, and know which technologies to use, but have you formalized your data, so it is ready for your digital transformation?

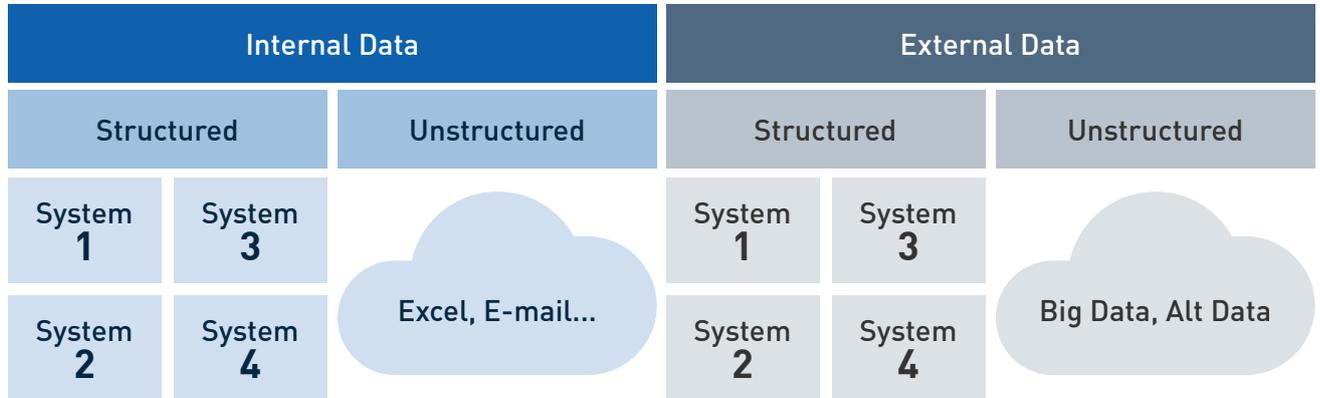
Teams are often enthusiastic about bells & whistles in terms of functional requirements and love the idea of sexy analytics and data visualization. The problem: Rigorous, disciplined work on data is hard work in the basement. We often see that data is workstream on a project left till last and therefore becomes the "problem" workstream for the project.

At psKINETIC, we believe in the maxim that *data transformation is a critical part of any successful digital transformation initiative*. In this paper we set out our approach to successfully manage the data workstream.



1. Understand your data kick-off / scoping

As a mental map (see figure below) it is useful to think about the data dimensions of Internal (you directly control) and External, as well as whether Structured or Unstructured.



As part of scoping your projects, you must assess your data readiness. At psKINETIC, this forms part of the Automation Assessment, a quantitative and qualitative assessment of benefits (business case) and complexity of implementation. The data readiness activity assesses the following dimensions:



2. Understand your data requirements

It is near pointless to run workshops etc. to identifying business and functional requirements without defining and capturing the data requirements in the same level of detail. A number of different analysis techniques can be used here such as data flow diagrams sitting alongside process flows, state diagrams, a CRUD matrix and a data dictionary. It is hard to arrive at an agreement on data definitions and sources of data, however, investing the time here gives you a sound basis for successful agile implementation.

3. Accessing, Collecting & Storing Data

Once you're clear on the data that you need, the next step is to access, collect and store the data. Typical enterprise environments are evolving towards distributed data systems: some data stored inside in-house systems, sometimes you will have to ingest data from spreadsheets and documents, connect to legacy databases and pull from your SaaS solutions via APIs. For each data source, a different technical approach may be required. Often you will also need to decide the amount of data you store (or access) in structured or unstructured format.

psKINETIC - CASE STUDY: Automating Risk Metrics Reporting

The client is a global specialist alternative assets and commodity investor & trader. Their existing risk metrics solution was increasingly more complex, with multiple data sources.

psKINETIC implemented a solution that utilized Azure Data Factory (ADF) to connect to a legacy SQL Server Database and to SFTP file stores to parse data in CSV files. The data was stored in a relational structure in an Azure SQL Database. The ADF pipeline are executed on a daily schedule with automated exception handling to ensure data is imported in the appropriate sequence, with data integrity checks.

psKINETIC - CASE STUDY: Term Sheet Data Extraction

Global financial services company (insurance and asset management) being overwhelmed by large volume and variation of documents coming in by email.

psKINETIC implemented a two-step solution that consumed attachments from the inbox, then i) using Google Cloud AI services classified the documents to identify the type (term sheet, trade confirmation, etc.) and then ii) machine learning models where trained (for each document type) to extract field values. This data was then passed via APIs to an existing workflow and task management application to automate the processing of the data.

4. Data Validation & Enrichment

With your data in a controlled data store, you can now run validation checks and integrity checks on the data in a systematic way. This provides a confidence level in the data before it is utilized to support business processes.

You may also want to enrich your data at this stage, such as:



Calculating values based on existing data fields



Algorithms and rule sets to infer new data values e.g., using a currency value to infer country of origin



Merging with external data sources based on specific criteria

psKINETIC - CASE STUDY: Master Data Validation & Workflow Integrity

The client owns a national portfolio of real-estate assets, which has a complex process to manage asset lease changes. The client sits within a global parent company with an enterprise ERP system for core CRM data. The CRM data can be used and changed by various teams however, it needs to be controlled when being processed through a separate workflow solution where the end-to-end process can take months to complete.

Due to the long running workflow process, it was not possible to lock the CRM data for changes. psKINETIC implemented a data ingestion algorithm as part of the workflow solution. This would detect if any master data was changed for processes that were in active workflow. Depending on where the data was in the workflow process, the solution would automatically update master data records or alert the user to a potential data mismatch, that would lead to a master data integrity issue between two independent business processes.

5. Data Validation & Enrichment

With your data collected, trusted (to a high confidence level) and structured, it's now in a position that it can enable the goal of your digital transformation initiative – or at least report on and measure the impact.

Data visualization tools such as PowerBI are powerful to extract insights from the data. The other benefit is of course that the more people use and rely on your data, the better it gets over time. When building reports and dashboards our experience shows the following approach should be used:

Really understanding the user needs for the data and how they use it to make decisions and drive actions.

UI / UX is a critical element. Picking the right graph type can be important, but even more so is ensuring the user can easily apply the filters and grouping they want to interrogate the data (if this is not available, users will export to Excel, manipulate the data, save it...and next time update the Excel!).

Performance and timeliness of visualizations are important to consider, especially when managing large data sets. In some cases, reports will need to be pre-staged so it's ready to go at 8am and the user has visibility of when the last refresh of data was used to create the visualization.

Report meta data is often overlooked in the process. Capturing who ran the report and how often are useful metrics to determine if the reports are serving their need or if there are adoption challenges.

As an *intentional by-product* of your data transformation, you've created a rich data source for your data science team leverage, whether this be unsupervised or supervised algorithms for predictive analysis.

6. Continuous Improvement

If you are not improving the data, its degrading. Good, relevant data deserves an audience. Work on user adoption (see above) and use feedback to improve the data or the presentation. At the same time maintain and expand the data as your digital business processes naturally evolve. Digital transformation is a journey and data transformation is a critical part of that journey.

CONCLUSION

For asset managers, data is going to power the future of their enterprise, whether it be client data, asset data, industry data or asset analysis, data is king and will continue to be so. In the new age of the customer, refining data into an asset will unlock new business models and with it, the ability to thrive in volatile market conditions. Data fluency will become the norm and one of the major success factors in a data literate world.

We are working with our clients to educate and change their business models to implement data as an asset. This allows them to have the data steering the business, with culture, clients, and people at the centre of the data driven transformation. Darwin said *“only the fittest will survive”*, we would say *“the fittest will thrive on data”*.

psKINETIC is a leading provider of intelligent automation working with global asset managers to successfully deliver their digital transformation projects. Our sector experts and engineers will scope out each project and carry out a comprehensive automation assessment the aim being to deliver working solutions to clients within 90-days for the front, middle and back offices. The principal is not to rip out or replace existing infrastructure but to connect the systems and data using best practices which we call “intelligent glue”.

Please contact us if you would like further information or to find out how we can help deliver results and business value.



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psKINETIC

We enable the success of people through intelligent automation.

With our *Intelligent Glue* we help clients automate processes, connecting and enhancing existing systems rather than replacing them. We have helped the world's leading Financial Services and Insurance companies accelerate their ability to take advantage of market opportunities. Our focus is on delivering outcomes and financial returns at pace. We leverage next-generation automation technologies, our multi-disciplinary team combines delivery, engineering, and managed services capabilities to achieve sustainable outcomes for our customers.

We base ourselves on a simple philosophy: The success of our customers and the success of our people are what matter most to us.

For more information, visit www.pskinetic.com