WHITEPAPER

The hidden cost of bad data

How much is bad data costing your firm?



Gartner estimates that poor data quality costs organisations \$12.9 million every year on average.1 A 2017 **MIT Sloan Management Review study** put the price of bad data for most companies at 15% to 25% of revenue², while a 2022 InterSystems/Vitreous World survey found 86% of business leaders at financial services firms are not confident their data can be used for decision-making.3 And with 97 zettabytes (97 trillion gigabytes) of data expected to be created, captured, copied and consumed globally in 2022, rising to 181 zettabytes by 2025, the problem is only growing.4

"These costs come as people accommodate bad data by correcting errors, seeking confirmation in other sources, and dealing with the inevitable mistakes that follow," said the MIT Sloan study.

Poor data quality costs organisations \$12.9 million every year on average

In reality, the hidden costs of poor data mean the situation is much worse.

- How to Improve Your Data Quality, Gartner, 14 July 2021, https://www.gartner.com/smarterwithgartner/how-to-improve-your-data-quality
- 2. Seizing Opportunity in Data Quality, MIT Sloan Management Review, 27 November 2017, https://sloanreview.mit.edu/article/seizing-opportunity-in-data-quality/
- The Top Data and Technology Challenges in Financial Services, InterSystems and Vitreous World, 16 May 2022, https://www.intersystems.com/resources/the-top-data-and-technology-challenges-in-financial-services/
- Data Never Sleeps 10.0, Domo, 21 September 2022, https://www.domo.com/data-never-sleeps#

Data-driven world

Data, well applied, has become financial institutions' most valuable asset. But its value wholly depends on the quality.

Data quality, Gartner noted, is fundamental to firms' ability to achieve their business objectives and build a competitive advantage. The need for trusted data has traditionally centred on compliance and governance requirements, and reducing operational risks and costs. "Increasingly, data quality also becomes a necessity when amplifying analytics for better insights and for making trusted, data-driven decisions," Gartner added. It helps provide better understanding of customers and stronger customer relationships, driving improved client servicing and retention.

Helped by data and technology-fuelled changes, wealth managers are able to meet their regulatory obligations, boost relationship manager productivity and lift compressed margins, observed McKinsey. The opposite is also true. Bad data – be it inaccurate, incomplete, inconsistent, outdated or poorly defined – brings significant direct, and indirect, costs. There are the errors and downstream mistakes that result, plus the expense (in time, headcount, systems, regulatory fines and client compensation) of rectifying those problems.



Direct cost to the bottom line

A straw poll of wealth managers conducted by DCI found costs charged to the P&L due to bad data (for client compensation, regulatory fines, etc.) range from 54bps to 111bps of turnover, with an average of 80bps.

- Magic Quadrant for Data Quality Solutions, Gartner, 29 September 2021, https://www.gartner.com/doc/ reprints?id=1-27L65HH8&ct=211004&st=sb&mkt_tok=MzQ3LUIBVC02NzcAAAGHTHpfhKOA_enwBH4sU2-G6ieAZSkannh0dp7twXQFFeelwBc8E-T_UyUbz3ZfjRtoQ5s_gZsWNM4nuertP4px0Sqn0IBVLjYvmwO2_Vgxn7uJRION
- Analytics transformation in wealth management, McKinsey & Company, January 2022, https://www.mckinsey.com/industries/financial-services/our-insights/analytics-transformation-in-wealth-management



And there are a hierarchy of costs associated with poor data. Getting data quality right the first time is cheaper than having poor quality data that needs fixing further down the track, observes the UK Government Data Quality Hub.⁷

In a 2015 paper on the ROI of quality data, Dun & Bradstreet calculated that preventing data issues would cost \$1 per record.8 Identifying and resolving poor data took \$10 per record, while correcting a data error after an event cost \$100. The exact numbers may have changed in the interim. The principle holds just as true.

Correcting a data error costs 100 times more than preventing a data issue.

-Dun & Bradstreet



The implicit costs that stem from the operating frictions associated with working with, finding and fixing bad data often dwarf the direct costs though, and can be further-reaching. Poor quality data breeds customer distrust, exacerbates regulatory and reputational risk, worsens decisionmaking, hinders innovation and undermines critical business initiatives, including moves to automate, digitalise and adopt Al solutions.

It can lead to organisations being unable to assess their own effectiveness and determine whether money and resources are used in the best way possible, notes the Government Data Quality Hub. In combination, they have a huge impact on a firm's competitive standing and operational efficiency.



According to the Gartner AI in Organizations Survey, data quality is one of the top four barriers preventing organisations from successfully moving AI applications beyond prototypes.

—Magic Quadrant for Data Quality Solutions, Gartner

Bad data is everywhere

Bad data can be found anywhere and everywhere. Common problems include:

- Gaps in data, which can be anything from a missing client National Insurance number to a fee structure being set up wrong.
- Data duplication across systems, with data siloed among teams, business lines and/or geographies.
- Inconsistencies, such as a policy, investment or security with the wrong attribute put against it.
- Bad sequences, for example a data point missing in a dividend processing sequence or policy contribution.
- Logical failures, such as a British national with a UK address who is not classed as being resident for UK tax.
- Variant errors, where the variant in a number or sequence is too large or small.
- Procedural checks, where the processes a firm must follow (e.g. close-down workflow if a client dies) are not followed correctly.
- Regulatory checks that are not properly carried out to ensure firms comply with relevant regulatory obligations.
 - 7. Hidden costs of poor data quality, UK Government Data Quality Hub, 5 August 2021, https://www.gov.uk/government/news/hidden-costs-of-poor-data-quality
 - 8. The Big Payback on Quality Data, Dun & Bradstreet, https://www.dnb.co.uk/content/dam/english/business-trends/the_big_payback_on_quality_data.pdf



Gartner advocates establishing a clear linkage between business processes, key performance indicators (KPIs) and data assets. Its advice: "Make a list of the existing data quality issues the organization is facing and how they are impacting revenue and other business KPIs."

Yet many organisations suffer from a "Rumsfeldstyle" opacity about their data issues. There are the "known knowns," where wealth managers see and understand there is a data problem; the "known unknowns," where they know problems exist but not where or what they are; and the "unknown unknowns," where firms aren't even aware something is awry.

Organisations' lack of metrics and methods to monitor data integrity, and measure the financial cost of poor quality/value of good quality data leave them further in the dark.

Problems will only then become apparent down the line. Often they show up in client reporting, at which stage it is too late because the client has already seen the error. A one-time mistake, while embarrassing, may be explained away. More than that and it can have a serious relationship impact.

Issues may also arise in regulatory reporting, bringing the potential for censure and fines, with knock-on reputational damage and the prospect of further regulatory investigation. Data deficiencies often emerge in management information too. Since firms base a lot of decisions on their management information, bad data can have major consequences.

Causes of poor data

It's no surprise that the biggest cause of bad data is human error. Where you have any form of manual input – whether it is during the client onboarding process, entering transactions or market trades, setting up new policies, reconciling with counterparties, or generating reports – mistakes are inevitable. And the more manual the processes, the higher the error rate.

Inexperienced staff and poor training are a related issue. New employees may simply lack an understanding of what data goes where. They are often unaware of what the appropriate values should look like and have inadequate knowledge to spot errors. Turnover in the industry exacerbates the problem.

The way systems are configured can make inputting data cumbersome and non-intuitive.

Implementing proper procedures that guide staff through overly-complex input processes can alleviate the risks. But inadequate, informal or outdated procedures for routine tasks are not unusual. Key steps may be missing, with insufficient rigour and control around data input and checking processes.

Data feeds may also contain errors. Given the rate and volume of these data flows, any inaccuracies will be hard to spot, and may take considerable effort to track back and remediate.

Pain points from bad data

The volume of data and data processing in today's wealth management businesses is enormous. Relatively small problems can therefore have a huge impact. If a firm processes 500,000 transactions per month, even a less than 1% error rate (an impressive achievement in a manually-orientated environment) translates into a massive number of issues. Finding and resolving those in a timely manner presents a monumental challenge.





Cost and inefficiencies

As Dun & Bradstreet's 1:10:100 ratio indicates, resolution and correction are expensive measures.

Significant staff hours may need to be devoted to investigating where any errors occur and fixing them. Organisations will have to employ more people than they would otherwise need to rectify the data faults. Lack of trust in the data may also demand that the wealth manager runs duplicate systems and/or undertake excessive checking. Reliance on inefficient resolution and correction processes means firms will lack the scalability to grow profitably.

Alongside the direct cost of those employee hours is an opportunity cost from the wasted time and lost operational capacity, resources that could have been spent on more value-adding, revenue-generating activities.

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Take a common situation: a firm discovers a security set-up problem after it has issued all its tax packs to clients. The figures will have to be restated. In addition to the labour time involved, reissuing the report packs will incur printing and postage costs if done physically. Clients may need to be compensated.

Missing or incorrectly-applied investment restrictions are another example. A client may stipulate they don't want to invest in tobacco or fossil fuel companies, but because the restriction data point wasn't set up correctly they find unwanted securities in their portfolio. The client may need to be recompensed and/or have their management fees refunded. And the stock will have to be sold, leading to additional costs.

Reputational damage and lost revenue

Data errors undermine hard-won reputations. Mistakes affect clients' trust in and satisfaction with the service. Once their faith has been rocked, it is hard to regain. They may decide not to entrust any additional sums to the wealth manager, hitting future revenue possibilities. Worse, the client may withdraw their business entirely.

The strongest marketing resource wealth management firms have is client advocacy. Service niggles can quickly have the opposite effect. In an age of social media and online reviews, perceptions of lax controls and incompetence can spread fast and wide. Once a firm's reputation has been tarnished, it will struggle to retain existing clients and attract new ones.

Staff disenchantment

Employees want their work to be interesting and fulfilling. Spending their days checking data, remediating errors and mollifying irate customers is demoralising.

Disenchanted staff will be less productive. Turnover is likely to be higher, requiring further expenditure to recruit and train replacements. Inexperienced new employees in turn will make more mistakes and be less able to spot where data errors have crept in.

Compliance issues

Bad data that winds up in wealth managers' sundry reports risks provoking regulatory censure and fines. But aside from general reporting compliance, organisations have specific regulatory responsibilities for the quality of their data.

Under the Financial Conduct Authority's Principle 3 on management and control, "a firm must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems." 9

The FCA's Senior Management Arrangements, Systems and Controls (SYSC) sourcebook builds on Principle 3. In SYSC 21.1.2, it states that a Chief Risk Officer should be "accountable to the firm's governing body for oversight of firm-wide risk management" and "ensure that the data used by the firm to assess its risks are fit for purpose in terms of quality, quantity and breadth."

 PRIN 2.1 The Principles, Financial Conduct Authority, 3 January 2018, https://www.handbook.fca.org.uk/handbook/PRIN/2/1. html#D3



The Chief Risk Officer is also responsible for reporting on the firm's risk exposures to its governing body and alerting them about any business strategy or plans that exceed the firm's risk appetite and tolerance.

Timely, accurate data is essential in carrying out those risk monitoring and management functions.

The Senior Managers and Certification Regime (SM&CR) likewise seeks to "reduce harm to consumers and strengthen market integrity by making individuals more accountable for their conduct and competence." Effective governance is at the heart of the SM&CR, requiring comprehensive management information based on quality data.

Meanwhile, the EU's General Data Protection Regulation (GDPR) demands firms "take all reasonable steps to ensure the personal data you hold is not incorrect or misleading". Any that is should be amended or erased as soon as possible. Inaccurate or incomplete personal data that relates to an individual must be rectified "without undue delay, and in any event within one month."

Wealth management organisations may be aware of, and even measure, certain tangible financial consequences such as headcount needs and regulatory penalties that stem from poor data. Yet the true enterprise-wide impact of firms' data errors and omissions is rarely appreciated, let alone fully costed.

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 Senior Managers and Certification Regime, Financial Conduct Authority, first published 6 July 2015, https://www.fca.org.uk/firms/senior-managers-certification-regime

Problem fixes

As the MIT Sloan research observed, "fewer errors mean lower costs, and the key to fewer errors lies in finding and eliminating their root causes."

Sounds obvious. Most wealth management firms though struggle in practice.

"Without proper tools or technologies," noted the Gartner Data Quality Solutions Magic Quadrant report, "data quality processes can be highly manual-intensive and time-consuming." Which is where many in the wealth management industry find themselves today.

Four-eyes checks of data entry are commonplace. But that approach eats up staff time and slows processes down. As do four-eyes checks of client reporting, a typical recourse when firms are unable to trust their own data.

Often wealth managers will run spreadsheets and compare them against downloaded data and data scripts to check for discrepancies and resolve them. Larger firms may have dedicated individuals and teams responsible for data integrity. All take manual effort. Plus they introduce key person risk.

Human involvement also means errors can be missed, or corrections applied incorrectly. Many firms don't have a robust, standardised procedure for staff to follow when making amendments, nor a recheck process to ensure mistakes have been properly rectified. Data remediation also depends on staff actually completing the task, and the results being relayed to supervisors through the management reporting.



 Guide to the General Data Protection Regulation, Information Commissioner's Office, https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/principles/accuracy/



Data solution

According to the Government Data Quality Hub website, "Preventative measures and effective data quality management should be embedded into your organisation." That will take a better data quality solution than most wealth managers have at present.

Preventative measures and effective data quality management should be embedded into your organisation

—Government Data Quality Hub

Automation is vital to remove manual expense, delay and unpredictability. Typical current approaches to data management are reactive, responding to errors that may have occurred days, weeks or even years before but that are only now coming to light, with a repair price tag that can run into the hundreds of thousands or millions. An automated system creates a proactive environment, checking data as it comes in to prevent errors occurring, while ensuring any issues can be resolved quickly.

Automated data quality tools remove human variability, ensuring checks are always accurate and consistent. Problems are identified much quicker, enabling faster resolution. And an automated system is always on. It offers wealth managers a 24/7 data analyst that takes no holidays, requires no training and makes no errors. The result is significantly enhanced operational efficiency and scalability.

By flagging errors early in the process, automation also helps firms to enhance their staff knowledge and training. Users can see where and why an issue emerged and how to fix it, so the same mistakes aren't repeated.

An integrated workflow engine can then provide management with greater transparency over data quality.

Workflow reports can detail the issues being investigated, where they stand, what has been resolved and when, and what hasn't. Plus it creates an audit trail that firms can give to their regulator and to auditors to evidence what actions have been taken.

The result is a golden source of data that is truly golden. Users move from no data visibility to data clarity, and from an untrusted to a trusted data source. Wealth managers are able to act on the data with confidence, and run client, regulatory and management reports knowing the information is accurate and complete. Clients are happier. Compliance becomes easier. Reputational risk diminishes. And operational gearing and profitability improve.

Prevention is better than cure

Clearly it is far more cost effective to prevent data issues than to resolve them. Poor data impacts all areas of the wealth management business, from client servicing to investing and regulatory compliance. The costs are huge but often underappreciated and un-itemised. This ignorance is hurting firms' profitably and constraining their ability to grow.

But poor-quality data does not have to be an inevitable part of doing business. Simple tools and effective training can radically improve firms' data, shifting the onus of work from correction to resolution and prevention. The gains will be transformational for those wealth managers willing to finally get to grips with their data deficiencies.







For more information on how wealth managers can get the data quality they need, visit

www.wealth-dci.com