

A crisis is a terrible thing to waste

The sheer volume of data owned by banks and businesses can make its management unpalatable. But the consequences of ignoring it are increasingly grim. IBS spoke to Enterprise Data Management Council MD, Michael Atkin.



It can waste huge amounts of money, alienate customers and staff, damage brand reputation, make the implementation of new strategies difficult or impossible, and even have the regulators come a-knocking. In short, data mismanagement is bad news for your business. The longer you leave it unchecked, the worse the outcome will be. So says Michael Atkin, managing director of the Enterprise Data Management (EDM) Council.

But this is not self-serving doom-mongering to keep an unelected industry watchdog in the highlife; Atkin presides over a non-profit and neutral 'business forum', which was formed in 2005 by a dozen CIOs and COOs 'from top tier financial institutions' who have all expressed concern of the state of data management.

The Council is now directed by representatives from more than 55 banks and businesses. Each has clearly had something of an epiphany, realising that data is 'the lifeblood of their operations' but somehow its management was 'not well-understood and hard to articulate'.

The Council has certainly attracted some high-level industry support since its inception. Amongst the list of arguably self-interested but no doubt well-meaning vendors (such as GoldenSource, Sungard, Thomson Reuters, IBM and S&P) that sit on its board of directors, there are also representatives of some major financial players.

The directorial list, for example, boasts Babson Capital, Bank of America, Barclays, BNY Mellon, Citigroup, Credit Suisse, Deutsche Bank, Federal Reserve of NY, HSBC, JP Morgan Chase, M&G Investments, Nordea Bank, Northern Trust, Royal Bank of Canada, and State Street.

Each one, says Atkin, ascribes to the belief that all that is wrong about data management today represents 'the curse of the short view and functional myopia'. The EDM Council, via its members, wants to fix this.

In essence, the Council is trying to ensure that data management is 'no longer the neglected step-child of IT'. Accordingly, its members all have a voice, the Council acting as 'the facilitator of dialogue across the industry'.

Part of the problem in this space, notes Atkin, is that too many organisations still run with a silo mentality: multiple divisions independently source data that, quite often, could and should be shared. But integration of existing data repositories among business groups (and there are clear difficulties where M&A activity has thrown some parties together) is essential for a streamlined infrastructure. In the trading world, for example, 'golden copy' repositories may be necessary to link counterparty, reference data and front office securities pricing to downstream functions.

The rather shallow and all too common

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tactical approach to data management creates a fragile data culture, with users competing for resources. As data tends to be largely invisible, often with no composite view, too many firms are still in the basic 'clean and consolidate mode' of data management, says Atkin. They refuse, for whatever reason, to take a step over what is possibly seen as the precipice of integration.

Indeed, the view that data management is a 'necessary evil', rather than of strategic value, is prevalent where balance sheets, global profitability, capital optimisation, regulatory satisfaction and financial reporting are still top dog. In this environment, data management has long been a task lumbered with the mantra of 'do it fast and do it cheap'.

But merely being reactive to business data requirements is much the same as 'brushfire management', Atkin explains. Too much energy is spent on funding, ROI justification and managing social complexity when it should be invested in 'transparency and earning back the trust of business from promises that didn't deliver'.

A May 2010 survey of global financial institutions' attitudes to data management, carried out on behalf of Thomson Reuters, showed that firms struggled to automate integration of data and only 52 per cent were able to use counterparty, securities pricing and reference data that is consistent with the front office.

Despite this admission, many participants couldn't get a data management project off the ground; 64 per cent cited internal business domain ownership and governance issues as the primary obstacle to integration efforts. Inconsistencies in the needs of different business groups came a close second (63 per cent). Aside from corporate cultures and personalities, half of the

respondents claimed a lack of resources had hampered their projects and 34 per cent reported that it had been difficult to find staff with the appropriate skills.

A smaller percentage (15 per cent) said they had not been able to find a suitable technology platform to stretch across their repositories and facilitate integration.

The problem is that data management is all rather ad hoc because there is no 'route map', says Atkin. 'We're discovering what works and what doesn't as we go.' Downstream data integration, for example, is a big challenge: with the looming threat of tackling hundreds of systems and data transformation in legacy environments, most companies are looking at long IT development cycles, especially if there is a prevailing DIY-style approach to the subject, as often there is with loose data management projects.

As a result, when it comes to devoting resources to it, most firms tend to hover around the status quo, hoping all will be okay: the data function is often last in line for resources, notes Atkin. It's easy to see why, at a superficial level: if data is largely invisible, and its management doesn't provide an obvious competitive advantage, why allocate anything to it?

With so much more data – and sources of data – available now than just a few years ago, the problem is getting worse, even with the assistance of new technology. In fact, squatting alongside the 'rubbish in, rubbish out' truism is the notion that casual automation of rubbish makes matters exponentially worse.

At a functional level, the list of data failure possibilities is almost endless. Wrong prices give wrong valuations that could lead to erroneous trades (as was the recently suggested cause of panic on the NYSE).

Incorrect security, counterparty or delivery instructions will result in a failed trade. Errors in corporate action information can equate to big losses.

There is a need to ensure control of data to facilitate business-driven activities such as profitability analysis or simply being able to understand what people want and why. 'I call it operational efficiency,' says Atkin. 'Carrying on with redundant processes, manual activities, trade failures and workarounds is a pretty big unnecessary expense.'

And then there is the issue of trust. If a bank cannot get basic information such as an address correct, clients will question whether the institution's ability to manage its financial functions is up to scratch. Persistently offend and they could walk. Internally, mistrust can grow if the data from one department that is used by another is frequently incorrect. In either case, damaged reputations take a long time to fix.

The reasons for engaging with a proper data management programme have changed in recent times though. 'When we started in 2005, the drivers were operational efficiency and cost. Today, they are more about risk and compliance,' notes Atkin. 'You've got to be able to understand all of the factors and entities involved in all the transactions and business processes in order to understand where your risk is.'

Of course, regulator-enforced diligence has been part and parcel of banking for some time. Driven by the continued threat of global terrorism and the colossal financial scandals that surrounded the likes of Worldcom and Enron and the collapse of Barings, improvement of client and counterparty data became essential. It was made concrete in processes such as know your customer (KYC), anti-money laundering

(AML), Sarbanes-Oxley (SOX) and Basel II.

Now, with the furore around AIG, Lehman Brothers, Bear Stearns, the general unsettled economic environment and mounting political (and public) anger at how some banks managed to confuse themselves into oblivion, new and far-reaching regulatory and compliance demands have arrived.

'This is the big one,' states Atkin. 'It is far more serious and has far wider implications for our industry. The regulators made a promise to the citizens of the world for transparency and for oversight to ensure that systemic risk was being controlled.' This promise has forced the lid off global networks and interactions between institutions, entities, instruments and obligations and laid bare the inefficiencies.

In the UK, for example, the FSA has mandated that by a deadline of December 2010, all deposit-takers must be able to provide a single view of all customers within seven days. This is so that customers can be guaranteed all of their money back in the event of the (hitherto unlikely) bank's failure. And now, with the Conservative and Liberal Democrat coalition having published its programme for government in late May, it was interesting to note the proposed set-up of an independent commission to look at separating the retail and investment parts of banks. Whatever the commercial or political ramifications of carrying this out, the practical task of cleaving the two apart, from a data management perspective, would be a pretty severe test given the extent to which both sides have intertwined over the years.

Providing the sort of information that the new FSA mandate demands is likely to involve a costly and time-consuming overhaul of a bank's IT infrastructure: data quality and the principles of data management are now very much a concern of the regu-

lators, whether the banks like it or not.

Atkin states that the new risk and compliance focus has 'forced people to pay attention to an area that was not previously well understood'. He adds that 'the dance of priorities just mirrors what's going on in the industry' and that the key benefits of data management 'are always going to be the same'.

Some institutions are at least aware of why they need to act now: an overwhelming majority of the Thomson Reuters survey participants (87 per cent) cited risk management as the primary focus of their data quality management initiatives because – and this proves Atkin's point that ROI is mistakenly the focus – that is where they are likely to see initial benefits. Just 44 per cent of respondents said that they are focusing on the data needs to meet compliance requirements.

In the light of their recent flurry of activity, the relevant authorities have seemingly acknowledged that a global structure is needed if that effective regulatory oversight is to be secured. Being under pressure to prevent a crisis of this magnitude from happening again means that new rulings will come thick and fast and banks should be prepared, says Atkin. At least the pressure on the banks to comply will ensure that those diligent employees who have been banging unheeded on the internal door of data management reform should now be heard loud and clear. The bottom line, says Atkin, is that the fix for all of these regulatory, compliance and business-related drivers is data-dependent.

The EDM Council's quest for a coherent data model in an over-complex world of data is designed to create an environment where financial institutions can trust and have confidence in data that is 'fit for purpose', explains Atkin. 'It's a factor of input into everything we do: business processes,

customer service, management reporting, and regulatory oversight'. Data simply must be 'easy to integrate into systems, share internally and communicate throughout the supply chain'.

Right now, with the effects of the crisis still stinging, the concept of data management has heightened visibility, but it is 'not yet seen as a foundational building block of operational processes'. It remains 'a low-level concern', states Atkin. 'But as the world gets more complex, global and interconnected and as oversight becomes more of a requirement, the urgency has increased.'

Although 'market turmoil and sick balance sheets can push firms to take shortcuts, we must resist the allure', says Atkin. The collective power of the financial institutions to insist on data standards and to exercise market influence over the chain of supply is 'significant'. Indeed, he adds, 'there is no choice, in my opinion, for all industries to get control over their data because we've experienced the worst nightmare that was the breakdown of systemic inter-relationships'.

But whilst the regulatory authorities may be closing in on bad practice, no mandate yet exists to change how financial institutions operate in this space. This is where the EDM Council has taken the lead. With its heavyweight membership, it has, in Atkin's words, forced the 'genie out of the bottle'. 'What we've seen over the last five years is the shift from data management sitting as a forgotten component of technology to it now sitting as a recognised component of operations.'

All the EDM Council has to do now is work some magic and encourage all in the industry 'to be bold and make data management a priority'. With so much at stake, as Atkin says, 'it would be a shame to waste a good crisis. Let's not blow it!' 

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Disruptive element

The EDM Council's goal is to put data management centre stage. Here's how it plans to do it, with a little help from some friends.

There are a number of areas where the EDM Council must now focus its efforts and push forward with its advocacy and participation in the standards process, its independent research and the monitoring of industry best practices.

With a series of projects that combine as 'components of an overall activity', EDM Council managing director, Michael Atkin, feels 'the right categories of activity' are being challenged right now. But he acknowledges that there will always be elements that will be 'added and changed as the industry matures and evolves'. All we are doing, he says, 'is documenting what's going on in the industry and translating it back in terms of an agenda to help move it forward'.

In the field of standards – 'recognised as the foundation for automation' – Atkin believes that the 'unique and precise identification of stuff is the foundation of data management'. 'The stuff we care about are instruments, legal entities, data attributes and classification schemes,' he states. 'These areas make up the totality of the factors of input into all business processes. The ability to manage it has to start with the ability to identify those things precisely.'

With many existing, but unconnected, entity identifier solutions out there, the EDM Council seems best placed to sit 'in the midst of standards activity'. Being fully aware that the application of standards is an essentially 'disruptive' process, Atkin argues that the 'most reasonable pathway to resolution' of the problem of competing identifiers is to leverage the ISO standards process. 'And of all the existing entity identifiers, the BIC is the only ISO standard [ISO 9362]; everything else is a proprietary identifier and the difficulty increases in trying to convert a proprietary identifier into a standard.'

Just as well then that the pain of change is, he claims, offset by the 'significant value' of using a standardised identifier. To this end, the Council has been engaged in detailed conversations with financial institutions, service vendors, Swift and ISO on the appropriate pathway forward for entity ID. It has now achieved a 'conceptual agreement' between Swift and ISO on the creation of a single business entity identifier. Atkin believes that a mandate from regulators on its use should be considered as 'a prerequisite for broad adoption'.

The future of the BIC as an entity identification standard is now dependent on Swift because it is the registration authority for ISO 9362. It will need to verify that the BIC is indeed 'operationally, functionally and commercially viable'. 'We are close to solving the problem,' claims Atkin. 'The industry is collectively focused on the requirement. The ISO process is fully on track,

and the Swift proposal appears to be sound.' Now is the time, he says, for all interested parties to 'run the recommendation through its operational paces'.

In another standards-related project, the goal of the EDM Council's Semantics Repository is to agree on the terms and definitions of all reference data attributes stored in the master files of financial institutions and passed among supply chain partners. Achievement, claims Atkin, will reduce the cost of doing business, and promote confidence in data among business users.

The initial development phase of the Semantics Repository is nearing completion. Development and subject-matter expert review teams are, for example, putting their finishing touches on 'a substantive draft' of OTC derivatives. The core review process for traded securities reference terms is now sufficiently complete to support initial industry migration. This should result in the project being elevated from draft- to beta-status, at least for these terms.

The Repository currently contains over 5000 terms and definitions, in both spreadsheet and diagram formats. It includes a range of common instrument categories, equities, bonds, structured finance, money markets, entitlement rights instruments, options, futures, collective investment vehicles, indices and other types of market parameters, OTC derivatives, dated terms (market data) and terms related to the issuance process.

The Council is now aiming for industry adoption and rolling out to production environments. 'We are confident enough in its structure to expect that financial institutions will be able to start using it as a common source of terms and definitions,' says Atkin. Adoption time is being measured 'in months'.

Mindful that the creation of an industry-wide level playing field may require a lot of support from participants, the EDM Council has also entered into a partnership with the Software Engineering Institute (SEI) of US-based Carnegie Mellon University to develop a data management maturity model (DMM).

The aim of the tie-up is to 'capture best practice and define the scope of activities'. This will help data management evangelists to explain the concept 'to people with other activities on their mind such as senior management', says Atkin. It will, he adds, 'set out an operational route map and give people a way of benchmarking themselves against their peers and against their strategies'.

The DMM aims to combine the knowledge of financial industry practitioners – such as the EDM Council members – with the proven methodology of the SEI's Capability Maturity Model Integration (CMMI, main project sponsors of which included the US

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Office of the Secretary of Defense and the National Defense Industrial Association). Success will deliver ‘rigour and discipline’ to the objective.

As part of the project, which is ongoing, the Council has also entered into a co-operative relationship with the Data Management Association (DAMA) so that results align both the DMM and DAMA understanding of data management.

So far, the EDM Council has produced a ‘comprehensive outline of the components of data management’. This has five core categories, 15 business process areas, 50 component segments, and more than 200 issue areas. It has also sought validation of the proposed structure with subject-matter experts drawn from right across the industry. According to the Council’s non profit-making remit, Atkin has started to document the entire process so that it can be ‘put on the web and given away’. ‘Ultimately, we all need to be good at data management because we’re all connected together and we all use the same data.’ He hopes that the final component will result in independent evaluation and certification of capability, along the lines of the existing CMMI.

Another significant strand of the EDM Council’s Grand Plan is its reference data registry for instruments and entities. ‘The economy is a complex system and, like any complex system, will contain many surprises,’ says Atkin. Reference data, as a fundamental building block for business processing, is almost duty-bound to confound in its current form of management. ‘The problem, as we all know, is that the chain of supply associated with it is extremely fragmented,’ he notes. Core factual data – representing millions of deals done daily – is frequently amended during negotiation, independently sourced and corrected by hundreds of vendors and transformed many times to fit the constraints of IT systems. ‘The content itself is named, re-named, catalogued and linked without the benefit of standard tags and unique identifiers. It ends up being managed in thousands of independent operational silos, globally.’ Quite often, data is inconsistent and not easily comparable and so users are forced into a never-ending cycle of data scrubbing, reconciliation and cross-referencing. Whilst individual firms might be able to manage this process, the

oversight of fast, complex, global and interconnected markets is not possible. Regulators, Atkin explains, are therefore unlikely to have all the data they need ‘when the next crisis takes place’.

One of the emerging conclusions of the authorities is that automation is needed to manage systemic risk – and that data precision and comparability are prerequisites to achieve automation.

‘The reference data registry is actually a simple and straightforward idea,’ says Atkin. ‘All it seeks to do is to ensure that there is an underlying common data infrastructure for both the financial industry and global market authorities.’ It is, he claims, structured ‘wisely’. ‘It relies on the global standards process [using concepts such as ISIN] to implement tags and identifiers, uses national law to compel issuers to mark up and maintain financial contracts, doesn’t upset the commercial apple cart, and is structured to facilitate ad hoc data collection by market authorities.’

The EDM Council’s intention is to deploy the registry as a hub for connecting multiple warehouses of standardised, complete and reliable reference data across the industry. It would thus act as a shared data infrastructure for regulators to organise their own data collection and analytical requirements, and as an industry source of basic, factual data. On the latter purpose, Atkin notes that ‘those that are driving the concept of the registry understand that the outsourcing of a basic factual product, that doesn’t offer much competitive advantage in itself, provides economies of scale, improves quality and ensures a level playing field’.

Despite the promise of a better structure offered by the registry, the challenge for implementation will be in ‘overcoming inertia’, he notes. ‘But we can thank global financial meltdown and the requirement of systemic oversight for pushing this obvious idea closer to becoming an operational reality’.

The EDM Council has already briefed US and European regulators and a number of industry organisations. ‘The concept of trusted, basic reference data – captured at source – is finally becoming viewed as a necessary condition for transparency and systemic risk oversight,’ says Atkin. 

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