

Making IG Real: Six Stories from the Front Lines of Information Governance Success

A Case Study with Active Navigation

Over a typical business cycle, a large organization produces staggering volumes of data. This will include essential records, valuable business intelligence, and knowledge uniquely relevant to the business. But frequently 50 percent or more of the content is utterly useless – it is dead weight, consuming storage capacity and obscuring the genuinely valuable content, burying the essential digital needles in terabytes of useless haystack.

Active Navigation, a software company that develops software to automate important parts of the information governance function, has seen this pattern again and again. The company and its technology have helped public and private sector organizations across a wide range of industries and government functions, often in global governance initiatives, to control their information sprawl.

About 90 percent of the mind-numbing data accumulation the company sees is in the form of unstructured data – text, images, video, and other content in documents and other types of files that do not lend themselves to organization in rows and columns and have no coherent metadata.

Active Navigation refers to the typical organization’s unstructured data as a “digital landfill.” This evocative phrase captures not only the chaotic nature of the content but also the equally chaotic way that it accumulates.

Active Navigation calls this detritus ROT™ – an acronym for “Redundant, Obsolete or Trivial.” File shares tend to fill up with material that exists in numerous drafts, most of which have no value once the final version is published. Other redundancies come from threaded discussions in email, in which multiple copies of earlier messages in the thread are repeated. Obsolete content is simply outdated. And organizations also tend to accumulate large volumes of personal information irrelevant to the business – shopping lists, music and video files, personal photos, jokes, and the like.

Unstructured data consumes storage capacity at an exponential growth rate. The cost burden of that storage is enormous – but many organizations accept the cost of continually adding storage capacity, as the rate of growth has overwhelmed their resources for actually confronting the problem of governance. More worrying is that most don’t even know what much of this content is.

Active Navigation has built its business on a foundation of technology designed to:



- Reduce the volume of information to be maintained, by discovering and eliminating ROT;
- Impose structure and metadata on the high-value content that is retained;
- Identify and flag sensitive data – e.g., personally identifiable information (PII) or highly confidential content; and
- Prepare for and reduce the costs of migration of the content to a records management system, archive, or other repository, such as Microsoft SharePoint®. The company also has developed services to help large organizations consolidate content from multiple repositories into one common infrastructure.

The company has packaged its software and expertise into a set of software and services that takes clients beyond records management and into the realm of higher value information governance.

Automation is becoming an essential tool in overcoming the inertia that has kept many organizations from confronting the enormous governance challenge of a Big Data world. But Active Navigation and its partners have found that their expert guidance and advocacy have been equally important assets in enabling clients to tackle governance. These experts have helped client stakeholders to scope the problem so that they can approach it in manageable stages or increments. And they have helped clients to build internal support by identifying the pragmatic benefits of making the investment in governance, as well as the strategic risks of avoiding it.

The Royal Navy and U.S. Central Command (CENTCOM): Lessons in Tying IG Success to Recurring Business Cycles

Organizations often see their businesses as continuous – ongoing enterprises that produce value and generate revenue in an uninterrupted flow of activity. They may see risk in an activity such as analyzing and cleaning out file servers or migrating data to the records management system, which may appear to have the potential to interrupt the flow of business activity and revenue generation. But most companies have at least brief pauses in their business cycles; many have regular, scheduled shutdowns once or twice a year. Active Navigation has shown clients how to take advantage of those recurring pauses, structuring governance cycles around them.

One institution whose operations have clear intervals is the military. Missions have beginnings and ends. In peace and wartime, military strategists constantly analyze and evaluate records of operations, to gauge the soundness of strategy, plan future operations, and archive essential data.

Active Navigation has assisted the **Royal Navy** in creating a ship-borne information governance process. As part of the maintenance cycle for every ship, they include an



information system clean-out, scrub, and reorganization, so that when that ship completes its tour of duty, it can be incorporated into the larger naval IT infrastructure.

The British government has outsourced all its military records onto a centrally managed service called the Defense Information Infrastructure. Any Royal Navy ship that goes to sea is migrated onto the new service. A ship's tour at sea lasts three to six months; when it returns to port, one of the maintenance chores is to remove the information and deposit it into a staging environment. The content is cleansed with Active Navigation to remove ROT and audited in accordance with information assurance rules (e.g., stripping out trivial and personal data). It is then matched against a common classification scheme that is part of the wider infrastructure and re-uploaded to the ship before it goes back out to sea. That cycle is repeated on each tour and takes about two days.

Active Navigation works principally with the collaboration systems onboard, which the command organization uses to manage operational orders, maintenance instructions, general orders, and so on. Operations run in shifts and rotations, and there are issues whenever information is handed off across rotations. It is very important that single source of truth is understood and controlled.

The Navy's imperative is to clean the data, remove the just-ended tour's classified data, preserve any high value military records, and file the content at the Military Archives in Plymouth. For each captain, the value is in being confident that they understand and have control of the sensitive data on their ship.

Active Navigation has applied some of the same principles on a much larger scale, working with the U.S. Central Command (CENTCOM). The Iraq War, known from 2003 to 2010 as Operation Iraqi Freedom, was considered the first truly electronic war. The scale of data handled in theater was significantly greater than in any previous war. CENTCOM was the unit in charge of the entire operation and the oversight and responsible agent for collecting and preserving those records created by the Headquarters units, Multi-National Forces-Iraq and United States Forces-Iraq, and its supporting units and Joint Task Forces. CENTCOM is the command responsible for the Middle East and Central Asia, where the U.S. has been actively engaged in three 21st Century conflicts, so doing things right is a core value.

The Command has been using Active Navigation software for three years. Given the nature of public sector procurement, the software was justified for purchase on the basis of cost savings for storage. That was the hard ROI argument. But CENTCOM recognized information governance from the outset as a critical element of operations, and it had additional incentives.

The U.S. Defense Department was under political pressure to manage Iraq War records more effectively than it had in previous conflicts, after media reports and a viral video focused attention on haphazard military record keeping and especially its impact on veterans' ability to receive promised military benefits. The White House had mandated that the National Archives and Records Administration (NARA), the agency in charge of



federal and military archives, do something about it. NARA worked with CENTCOM as the agency to upgrade the governance of the records from Operation Iraqi Freedom and potential future conflicts.

The operational team set up a program to not only cleanse the data from the servers, but to provide more complete metadata and annotations for information going into military archives. The team wanted to highlight especially valuable content (generally based on the rank of the original author). They accomplished this by doing statistical analysis on the content to produce value-add tags, so that when it was sent to the archives, there was genuine context for the data.

Active Navigation and its partners were responsible for training the CENTCOM records managers on its software and methodology. Given the 'classified' nature of the content, much of the training was conducted in a separate training facility where dummy data was used. Despite this unusual process, following the training the CENTCOM team was able to process dozens of terabytes of data entirely on its own using Active Navigation software.

The initial project took approximately nine months. After cleansing, CENTCOM had pared the volume down to 30% of the original content before submitting it to NARA. When they submitted to NARA, CENTCOM was congratulated for delivering the highest quality records ever submitted.

Taking Advantage of Major Business Events for IG Success

A ship's tour at sea – or an entire war – is a discrete event, with a beginning and an end that defines a specific occasion for making the investment in information governance. The same argument can be made for occasions when business are bought and sold. Part of the process for completing such transactions is to tie up operational loose ends, including properly disposing of records.

Active Navigation has worked with both public and private entities involved in acquisitions and divestitures. **The Royal Borough of Kensington and Chelsea (RBKC)**, a part of London that includes such landmarks as Kensington Palace, Harrods, and the Kings Road, has its own local government (Council), which is an Active Navigation client. The Borough has a number of local agencies that operate like business units. RBKC's Council had identified a particularly successful youth services organization that had begun to generate significant revenues. The Council wanted to set it up as an independent agency so it could sell its services to other organizations. To do so, it needed to divest it and give it its own operational structure.

The Council originally had adopted the Active Navigation software in connection with an organization-wide migration to SharePoint and had been using the tool to analyze and reduce the volume of redundant content being migrated to the new repository. The divestiture of the youth services agency provided a new rationale for the document cleanse. In addition to reducing the cost of migrating content from the Council's old



repository to the new agency's system, the Council took advantage of Active Navigation's Sensitive Data Identification tools, identifying specific kinds of intellectual property it did not want moved over from the Council to the new agency.

A global oil and gas company also presented Active Navigation with an acquisition-related business problem. This customer had acquired a number of established North Sea oil platforms, and with those assets, came the associated information systems and engineering data. The problem for the company was amalgamating all the data and moving it into the company's Engineering Hub, a central repository for all their engineering data.

Oil platforms are depreciating assets. The company has several that had gone from a profitable position at acquisition to a loss, as the platforms became older and harder to maintain. The company was managing each of these platforms as a separate P&L, and each one had its own cost base. The company was not achieving the scale economies it might have by accounting for them as a group. An objective of moving all the data into the Hub was to enable them to leverage the engineering knowledge from all the platforms so that they could ultimately turn them all into one P&L. The primary driver was to reduce the cost base and thereby bring the platforms back into the black.

Data was coming from Documentum® and SharePoint sources. The company used Active Navigation software to remove ROT, de-duplicate documents, and look for specific metadata in the documents such as part numbers and other engineering details, so that metadata could be moved with the documents to the Engineering Hub (on the Aviva® platform). Following the project close, the company was moving toward profitable operation of the platforms by consolidating the data and its engineering and maintenance resources.

A collateral benefit has been that the company can be confident that the repository is free of sensitive but unaccounted for data – a potential risk factor in all acquisitions. An acquirer really does not know what the information associated with a newly acquired asset contains. The deal imposes on the buyer a responsibility to analyze and assess any risks the newly acquired information might contain and take appropriate mitigating steps.

When IG is a Strategic Imperative

Information governance programs require project teams, training, software, and other resources. Governance can be costly and obtrusive. Sometimes, however, a strategic requirement will crop up that enables information governance to establish a foothold.

Active Navigation developed such an opportunity together with the CTO of the exploration group at a **large international mining company**. The exploration group is tasked with finding new mineral assets, and as such, this group is the company's leading edge. The team had a plan to consolidate all of its global content from 17 separate locations (and in five different languages) into a single SharePoint records repository. The team had resolved, understanding the difficult logistics of bringing all the information in from these



17 locations, to bring only clean, high-value data into their new system. They broke the project into three phases:

1. **Finding and cleaning content globally.** Active Navigation rolled out a project across all 17 locations, based on policy originated at the exploration team's headquarters and derived from discovery within headquarters' content. The pilot group cleansed the headquarters' data and then rolled the program out to the other locations.
2. **Preparing the content for migration to the client's "Enterprise Repository."** The team wanted to apply business classification and metadata schemes to the content so it could be tagged properly in SharePoint. Given the volume (15 terabytes or approximately 150 million files), they recognized the futility of doing this in anything other than an automated process. Active Navigation helped the team to build out rules that extracted attributes from the content and from their context, to define the metadata set for each document. The documents were then wrapped up with their metadata, shipped to a staging location, and then imported into SharePoint.
3. **Deployment.** Before the Enterprise Repository went into production, the team quickly discovered that the policy they had developed could potentially allow sensitive data to leak into search results. Active Navigation is now deployed into the SharePoint environment and continuously monitoring for sensitive data, which is flagged and remediated by a central team.

Driving Down Cost through IG

Active Navigation established its initial foothold with a strategic initiative for some of the company's most sophisticated users. The driver was effective information governance, designed to create a strong foundation to help the global geologists find the right version of truth, stop generating redundant data, use the right information, and ultimately improve their revenue lines by finding better mineral resources more quickly. The technology has since been adopted more broadly within the organization, where the drivers are more conventional and more cost-focused. Active Navigation has found that this is a consistent pattern in large organizations.

A further observation is that it matters what language is used to express the value and return on investment argument. As Active Navigation's CEO Peter Baumann observed, the client's executives 'got' taking 7 million documents out of circulation over saving 7 terabytes of storage.

"It's more tangible and relevant to them that they can't deal manually with 7 million documents," Baumann said. "But you might run into resistance to an argument based on the saving of storage space, because there might be other ways to go about that."



Savings on storage often is a powerful cost justification, however. A **Tier 2 U.S. based financial services company** engaged Active Navigation when it became clear that it was running out of space in its Storage Area Network (SAN). The company wanted to reduce its content load as a way to avoid buying a new SAN. It also planned a migration to SharePoint and wanted to move a clean, slimmed down data set to the new platform. Working through a partner, Active Navigation was able to identify and cleanse initial content across 20 terabytes in four weeks – far exceeding the capability of a competing e-discovery tool then in production at the company. Ultimately, the project would enable the company to avoid the purchase of new hardware.

The company therefore not only avoided an expensive and ultimately unnecessary investment, but also gained a deeper understanding of its own capacity needs. Large organizations, Active Navigation has found repeatedly, tend to have very hazy impressions of how much data they really own. Their estimates may be off by an order of magnitude. In this case, the company was evaluating an investment in a SAN to house more than 100 terabytes of data, when it turned out that there was only really a 30-terabyte requirement.

Lessons Learned

Automation of the kind that Active Navigation offers can reduce the effort and the cost of archiving, records management, the risk of stray sensitive data, and other elements of information governance. The biggest obstacle, however, can be inertia – faced with a cost-oriented return on investment argument, such as the need to control storage costs, a manager may simply decide it is easier just to go and buy another server and let the next stakeholder worry about this big, expensive, complex, stressful, and frankly potentially risky governance exercise.

Active Navigation has added significant value to the information governance discipline by enabling clients to quantify their content volumes and the proportion of it that ROT represents. This ability to reduce the process to something concrete and contained has helped large and small enterprises confront the governance challenge head on. Ultimately all organizations will need to deal with this problem and the sooner they get on with it, the better. Simply put - it is not going to go away and will only get worse!

