

Information Governance at Work

An IGI Case Study Series

PANDORA MEDIA

HOW PANDORA TUNED IN TO
INFORMATION GOVERNANCE CONTROL OF
ITS MOST SENSITIVE AND VALUABLE
INFORMATION ASSETS



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About the Information Governance Initiative

The [Information Governance Initiative \(IGI\)](#) is a cross-disciplinary consortium and think tank dedicated to advancing the adoption of Information Governance practices and technologies through research, publishing, advocacy, and peer-to-peer networking. The IGI publishes research, benchmarking surveys, and guidance for practitioners that is freely available on its website. Join the [IGI Community](#), a place for practitioners from all facets of IG to come together and learn from each other. The IGI was founded by recognized leaders in the field of Information Governance, and is supported by leading providers of Information Governance products and services.

About This Publication

This publication was written by the Information Governance Initiative as part of our ongoing series exploring issues, strategies, and techniques related to information governance.

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Who Needs to Tune in to IG?

Every information governance (IG) professional has likely encountered the perception that IG is only for big, old, regulated, and litigated organizations. Given IG's heritage in risk mitigation, this perception is not surprising. It also reflects the reality that organizations with this profile tend to have the most mature IG programs.

However, this perception and reality are quickly changing. All organizations need to be doing IG at some level, even those that are not “regulated” in a traditional sense.

Pandora Media's investment and success in IG couldn't make this clearer. In this new IGI case study, we are going to look at why Pandora's GRC (governance, risk, and compliance) team adopted IG, how they got started, and what they have accomplished so far.

What *have* they accomplished?

With the help of the file analysis and governance experts at IGI Supporter Active Navigation, the Pandora GRC team discovered that at least 60 percent of its unstructured data had no value and there was no business or legal reason to continue to spend precious resources on protecting and storing it. So they took control, realizing significant security, privacy, cost, and productivity benefits along the way.

A Young Company Grows Up

Headquartered in Oakland, CA, Savage Beast Technologies was founded in 2000 with its sights set on becoming a pioneer of streaming media, enabling consumers to find and listen to the music they love. Pandora grew out of that company, officially launching on the web in August 2005. Today Pandora is 2,200 employees strong with over 81 million active listeners around the world – including 4.48 million Pandora Plus subscribers – each of whom tunes in for an average of 22 hours every month. To date, users have created more than 11 billion Pandora stations. In recent years, Pandora acquired Next Big Sound, Ticketfly and assets from Rdio. In Q4 2016, the company's revenues grew to \$392.6 million – a 17% year-over-year increase.

Doug Meier joined the fast-growing media and tech company in 2012, as Director of Governance, Risk & Compliance, shortly after the company's successful IPO (initial public offering). Meier stepped into a new role that was created as part of the company recognizing the need to meet important regulatory compliance requirements for enterprise IT and to build and formalize an information security program across the entire business, not just within IT. An important part of the role was to discover, understand, and take control of risk associated with the company's significant and growing unstructured data burden.

During his early days at the company, Meier knew that some would perceive this mandate as counterproductive to the company's desire run lean, move fast, innovate and to grow, grow, grow. It is common – especially in companies building an IG culture from scratch –



to view GRC programs as “business prevention” instead of information governance and business enablement.

A leader in streaming and on-demand music, Pandora generates and manages a significant amount of *structured* data: business intelligence, data analytics, music databases, structured event and system logs fed into the SIEM, customer data, vendor information, and more. The creation, use, and management of this data has high and constant visibility with engineering teams at the company. Less visible is the significant amount of unstructured information at the heart of the way the company functions, communicates, and collaborates every day – with much of this information sitting in lightly governed network file shares and desktop hard drives, as well as in the cloud.

Pandora’s GRC team wanted to bring the same level of IG rigor and management to Pandora’s unstructured data (including scanning for and detecting sensitive personally identifiable information and financial data) that was present in their structured information environments. Adopting the framework and principles of IG and putting Active Navigation’s software and expertise to work would enable Pandora to maximize the quality and usefulness of information that truly had value to Pandora while facilitating the remediation of information that had none. The Pandora GRC team knew that this would also help to protect Pandora from risks to its brand and customer relationships caused by data breaches and litigation.

A Familiar Refrain: KEF

As Pandora’s GRC team started down the IG path, the Pandora GRC team quickly realized that the company’s culture, in the absence of formal guidance, policies, and tools that enabled anything different, was essentially to Keep Everything Forever, or “KEF” – a refrain that Meier and his team found themselves repeating during data discovery exercises and meetings with key unstructured data constituents across the organization.

“We clearly needed to do something different,” Meier explains. “We needed to keep our data for the time it needed to be kept—and no longer.”

When an organization’s data retention policy is to keep everything forever, the risk does not remain static – it continues grow, exponentially, along with e-discovery costs, regulatory compliance burden, data breach mitigation, IT operational inefficiencies, and reputational and financial liabilities.

Meier was successful in getting Pandora’s senior management on board with his ideas (unlike many organizations at the same level of IG maturity). To help regain control of Pandora’s unstructured data, he realized he needed to hire a full-time employee with deep experience in GRC best practices and a strong background conducting internal and external IT audits. The new hire was the easy part. The hard part was coming next: taking the big ideas about IG and making them real.



What It Takes to Take Control

To take control, the Pandora GRC team had to first get, “the lay of the land.” He asked each department four questions:

1. What information do you have and which of it do you need?
2. Where do you keep it?
3. How long do you need it for?
4. What are you already doing to govern it?

“We realized there was a lot of data, a lot of classification that needed to be done, and a lot of governance to layer on top of it.”
—Doug Meier

After gathering and analyzing the responses from his discussions with the business, it was time for the Pandora GRC team to look for the capabilities they would need to put the plan into action. After assessing various internal capabilities at their disposal – and researching the market and comparing vendor options – the Pandora GRC team selected Active Navigation, a specialist file analysis company that develops software to automate a large part of the IG process.

Following a successful proof of concept that demonstrated the technical, business, and economic feasibility of his plan, the Pandora GRC team made the decision to move forward with the solution, working with both legal and IT to sign off on the program.

After sign-off, Active Navigation’s software helped the team quickly index unstructured data stored and managed in on-premises file shares. After just a two-day training session, Meier’s team was able to easily run searches with customized parameters and take advantage of rules built into the software to remediate (i.e., dispose of, migrate, classify, etc.) unstructured information. The company, for example, determined that the pool of data that had not been accessed in two years could very likely be removed with no business impact or legal downside.

Throughout the process, Pandora could always rely on Active Navigation to provide guidance and support. If the situation arose whereby the Pandora team experienced difficulty in performing a specific function of the software, Active Navigation’s remote support team was there to assist and advise.



A Chorus of Support for Remediation

“As we went through this process, we discovered that people really don’t want to keep their data forever. After they understand IG, they actually embrace it because it allows them to do a better job.”

—Doug Meier

To start remediation, the Pandora GRC team developed and IG policy based on a rules and templates refined by Active Navigation over the course of hundreds of similar engagements. Pandora only need to make minor changes to the template, and it was quickly approved as a corporate policy thereafter.

Next, the Pandora GRC team picked one area of the business to focus on, understanding that this would enable them to test and develop a repeatable process that would work across the

entire company. The team used Active Navigation’s software to take inventory of Pandora’s content, with a particular focus on sensitive data. A high priority for the team was identifying information that contained private and other sensitive information so that it could be governed by security and other rules necessary to protect it. In addition to this, the company identified information that no longer had value and thus could be deleted.

Although Meier’s program was a radical shift from the company’s (unofficial) KEF policy, Pandora’s employees quickly saw the value and jumped aboard. In fact, 18 months after the new program was put in place, 98 percent of employees had opted into the company’s two-year email deletion policy. Meier and his team also helped create an email and laptop data retention policy for terminated employees, a records retention schedule, and other relied-upon IG procedures.

Calculating the Benefits

Using Active Navigation’s tools and adapted policy, the Pandora GRC team determined that 60 percent of the content on the company’s network file shares was redundant, obsolete, or trivial. Armed with the visibility they now had into the data, and the confidence of a high-quality and defensible policy and process, they deleted it, keeping internal the data owners informed before, during, and after.

“The fire shares were like a junk drawer for many, many years, full of data that simply should not be there.” —Doug Meier

The result: The company immediately reclaimed 18 terabytes of expensive data storage and management capacity. Putting the total cost of managing a terabyte of network file share capacity at \$3,000 per year, every year, the immediate economic benefit was the recovery of tens of thousands of dollars in wasted storage capacity. Critically, this is not a one-time economic return for the company. Rather, it’s one that will be realized annually.



From a ROI (return on investment) perspective, the immediate hard dollar cost avoidance benefit easily covered the cost of the software, professional services, and internal resources required to execute the program – meaning that the program effectively paid for itself.

On top of this, of course the company realized enormous “soft” value in the obvious reduction of security, privacy, litigation, and other risk.

What’s more, from an enterprise architecture perspective, Meier’s program enabled the company to reduce the average number of storage repositories per file from six to two – an enormous reduction in information management complexity, effort, and cost.

The benefits of taking control of Pandora’s unstructured information environment, with the help of Active Navigation, didn’t stop there.

“E-discovery costs can really be reduced by economies of scale if you are classifying your data and applying retention periods accordingly,” Meier says. “Let’s say you’re hit with a lawsuit and someone’s got 10 years of email. That’s just more time the lawyers will spend looking at everything.”

Pandora also expects to see an uptick in productivity.

“People are going to be working off the same source file. There’s not going to be multiple copies.”



IG: The Song That Never Ends

“This is a full-time, ongoing project,” Meier explains. “Hiring the right person to help in our IG efforts was critical to being able to create a plan of action that can assist our needs moving forward.”

Next up, Pandora plans to use Active Navigation to clean up its Google Drive and other cloud storage repositories. Ultimately, Meier hopes he and his team are able to make the process so automated that, with the assistance of key IT partners, this IG project basically runs itself.

“The thing about information governance projects is that a lot of people say how important it is to know your data,” Meier concludes. “It’s even more important to know your data that really, truly matters.”

What Can We Learn from Pandora?

When we think of companies that need IG, we often think of 150-year-old banking institutions that have enormous vaults of data in every conceivable format. Cutting-edge tech companies aren’t usually the kinds of organizations that pop into mind. Yet as Pandora’s IG success demonstrates, the benefits of IG can be realized by almost any organization. As this ongoing partnership with Active Navigation demonstrates, they stand to benefit considerably by making IG a top priority.

The end result?

Thanks to its cleaner repositories and a lightened data load, Pandora has become a more resilient and efficient organization. Now, Pandora will be more nimble when the need for e-discovery arises, more able to defend critical business data, and better positioned to provide intrinsic IG business value behind the scenes for a media and entertainment company focused on being at the cutting edge.

