Information Management Consulting for Large Enterprises

Founded in 1994, Earley & Associates is an information management (IM) consulting company specializing in Content Management and Search Strategy; Taxonomy, Metadata and Data/Information Architecture; Indexing, Auto-tagging and Migration; Content Modeling and Publishing; SharePoint Solution Design and Development; Master Data Management; and Data Quality and Harmonization.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine

Seth Earley - *CEO*

CEOCFO: *Mr. Earley, your website indicates that organizing information is in your DNA; would you tell us about Earley & Associates and what that concept means for your clients?*
Mr. Earley: We help enterprises make their information more findable, more usable and more valuable. The way we do that is by helping them organize across large repositories of information, with many different types of content, including structured data and unstructured information. I like to say that our work takes place where computer science meets library science. We have people with Master's degrees and PhDs in library science. Organizations are struggling with things like Big Data and analytics. They have a lot of information from many different sources and at an increasingly rapid rate. We help them make sense of all of that. We work with large enterprises - Fortune 1000 companies and global initiatives. One project is for an industrial firm that has 500,000 products. We are going all the way upstream to their engineering department to help them organize the information and capture the characteristics of their products. That information then flows through all of their downstream systems and out to their website so that their customers can find exactly what they need even though the company offers 500,000 products with thousands of highly technical attributes. That is one end of the spectrum. Another type of project is working with a Medicare Administrative contractor to improve access to content used to process Medicare claims. Another example, is working with a business insurance company to help their staff underwrite policies more quickly by getting to the right information at the right time.

CEOCFO: *Is there a common tipping point when a company realizes that they are just not adequately handling what they have?*
Mr. Earley: Most companies are not doing a good job with their unstructured information. They usually do a better job with structured data—for example transactional data such as sales data and financial data. However, what typically happens to push them over the edge is that a crisis occurs because people cannot find information. They end up losing information and then recreating it, and end up wasting time. They do a great deal of searching yet still cannot find things. They also complain about the situation, but they do not get any action until something critical happens. For example, one company had its search systems go down for two weeks, and since all of their systems were based on search, they could not find any information. That is when they decided that they needed a fix. Problems typically surface during a crisis such as a data breach or a major problem with customer service. One manufacturer had a product recall because the ingredients were not labeled correctly, which was an FDA regulation issue. These things happen with all organizations, but now with Big Data and a great deal of money being spent on business intelligence and analytics, companies are throwing money at these issues, but they are not looking at the underlying architecture of their content and their information.

CEOCFO: *Would you give us an example of what Earley might pick up that others would not?*
Mr. Earley: The analogy that I like to give people is that when you build a house, you typically hire an architect. You do not just start digging holes and pouring concrete. You get an architect to design it based on the needs of the occupants. In our virtual world it should be the same process. We have to design our information house, and just as if you were moving into a new house, you do not just take all of the junk in the attic and move it to the new attic and then say you will clean it later. You will never clean it if you do it that way. As you are moving it over, you start throwing things away and putting in place ways of maintaining your things. You have to label all of the stuff that is in your house, put it in boxes and take it to the new house. With that comes a great deal of discipline around cleaning up and throwing away the trash, around getting rid of the information that you do not need, around curating the content and then establishing governances and processes

for managing it. What we do that is a little different is that we take a holistic look from end to end. We go very deeply and broadly to build what is called a domain model, which identifies all of the systems in your organization. Then we apply that model to individual systems and applications, knocking them off one by one over a period of time. We provide the vision of your long term goal, along with short term wins that will get you there. You can look at foundation projects that must be there; they are the cost of doing business and allow the organization to build additional capabilities. There are incremental projects that will get you value around a process or problem, and there are transformational projects that will really change the way the business works. We find that applying our expertise in library science, plus many of these approaches that we have developed over the last twenty years, along with the governance and the change management, is very unique. Most organizations would just try to apply technology or they look at a part of the problem We provide a very unique perspective across processes, applications, business units, business imperatives and sometimes conflicting requirements.

CEOCFO: *When you are speaking with prospective clients, do they appreciate the longevity of Earley? Do they understand the value of the experience or is it more of what can you do for me now?*
Mr. Earley: Depending on where you are in the organization, people do appreciate our experience. Some people are newer to this process. If they are a little bit younger and more technology-focused, they may think that it is a little easier than it is. When you take it into the C-suite and you get the grey hair who notices that you have grey hair too, and have doing this for twenty years, and that you can tell them what is going on in the marketplace, they appreciate that perspective. When you explain that this process is about the business and the culture more than it is about the technology, people appreciate that. That said, we still get called into projects for which people have a very limited budget and they are comparing us to the single shingle down the street or the new guy that just left Microsoft who is going to provide them give them with the technical proposal, do the installation and turn on their system. Therefore, people need to understand that it will lead them to chaos, a lack of return, and additional costs. So if you get to the senior level, yes, the message resonates.

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CEOCFO: *Are people put off by the enormity of the project?*
Mr. Earley: Many times they are. They may think that it is too overwhelming and too difficult. If you look at it in its entirety you may realize that you have to organize terabytes of information, so it can be overwhelming. However, there are ways to begin this process. We are actually running a conference coming up in May 13th and 14th in which we will be bringing together a number of our customers who figured this out ways of attacking this problem. These individuals are senior executives who have had successes, and they are going to be talking about what they did. One of them is the director of knowledge management Philips Healthcare, who brought us in to develop an enterprise taxonomy, which is a system for classifying. She commented that developing a taxonomy helps people get together and start focusing on agreed-upon terminology to get them to speak the same language. It is a starting point, and there are many similar starting points that are not overwhelming. Then you start tackling problem after problem and project after project. You can break these things up into roadmaps that might have 20 or 30 projects spanning three or four years, but that is OK. That approach provides you a very methodical, clear process for getting there. Humankind takes on many big projects, building bridges and cities, for example. We can tackle information problems too. We just have to have the right approach and methodologies, breaking down the problems into manageable components.

CEOCFO: *Do you foresee a time or the possibility when a company will come to you in the beginning when they are starting out and ask you to put things in place early on?*
Mr. Earley: There are many opportunities to start fresh, but there is never a true green field, because there is always a legacy, unless you are a brand new business. We were just talking to a 100-year old company that told us that they have a real opportunity to start over. They have a new deployment; they are upgrading to a new technology and have many new capabilities. They said that they wanted to architect it right this time, because the last time they did not. Then we have to ask what the highest value content and what department is going to get the biggest bang for the buck when they can do these things. One organization that we did this with was Applied Materials, which is the company that builds all of the equipment to build the semiconductor fabrication plants. The reason we have our wonderful mobile devices is because they are really smart people. They have 33,000 installations of incredibly complex products, in addition to services, to go with an organization of 3,000 field service reps. They have to go through 17 different systems to get information, and much of that information was out of date, or they could not find the right information. We built an application that applied consistent classification structures organizing principles, and taxonomies to all the information, and the company is saving$50 million per year on just that one application. This is because they are reducing the amount of time that these people are spending looking for information. If you multiply 3,000 field service reps times 8 hours per week times $100 an hour, the result is more than $50 million. In addition, the new system has reduced downtime for fabrication plants. There is a huge multiplier effect because every time the fabrication plant is down for one day it costs

millions of dollars. Therefore, the value of making that information available, findable, and accessible in context was just enormous. They tried doing that project three times in the prior five years and failed each time, because they did not start with the underlying information architecture. This is actually now an IDC case study that is coming out as an exemplar and it has won numerous awards. Therefore, doing this right has an enormous payoff.

CEOCFO: *What has changed for you since the start of the company and what have you learned that is allowing you to provide a better service today?*
Mr. Earley: The experience gained over multiple projects and programs allows us to quickly identify what will and what will not work. We can cut to the chase and avoid a great deal of wasted effort when it comes to improving the customer experience on a web site or improving the efficiency of a call center or improving the quality of field service for example.

CEOCFO: *What is the key for you in evaluating the new technologies as well as keeping up with the regulatory and the industry related issues that will have an effect?*
Mr. Earley: There are a huge number of challenges there. First, do not get distracted by the shiny bits. It is very easy to have a problem and then have someone present a PowerPoint and a demo that seems like it could really solve your problem. However, that is rarely the case, because that problem is part of a bigger ecosystem of information. I suggest that you look at the "fitness to purpose" first. The other possibility is that you could buy a system and think that it will do everything, because it is going to be full suite of all of the technologies, but there is no such thing. Those technologies usually come from acquisitions. They are usually bolted together, but not truly integrated and can be a real nightmare to deploy. You should look at what the problem that you want to solve today, how appropriate is the technology for that problem and for the near term, but also making sure that it is done in a holistic environment and you are looking across multiple systems. Therefore, you have to contextualize the technology decisions and you have to make sure that it is appropriate for what you are trying to do in your business, not a generic business, not a bigger business, or a company that has all of the bells and whistles. With regard to regulatory compliance, that is a moving target, but you at least need to get you house in order, in terms of being able to have consistency of terminology. We are dealing with Rights Management right now for the entertainment industry, because they do not know what rights they have. The contracts are, frequently one-off negotiations that use different terminology and express things differently as people are trying to give the fewest rights or receive the greatest ones. There are liabilities and challenges if you misuse assets. Therefore, getting your internal house in order and getting agreements within your teams and your regulatory compliance groups is critical. You need to be sure that you are using the same language, that you are identifying risk, and that you are at least maintaining the documentation that you need in order to mitigate those risks. That comes back to standard organizing principles, library science document management and records management. These issues have gotten BP and Pacific Gas and Electric in enormous difficulty. They were not managing the content that they were supposed to in order to support their maintenance procedures. All of these things are closely related and they can all start with this core foundation for basic consistent language, terminology and architecture. Then you build everything on top of that framework.

CEOCFO: *What is ahead for Earley & Associates?*
Mr. Earley: Computers will be getting better at understanding what people want – what answers they need and what information people need in the context of their task or problem. We are doing that now with what we call "intelligent assistants" which are basically more sophisticated search engines that interpret human language. We are also helping organizations leverage big data by understanding the business implications of that data and improving the ability to make sense of large amounts of information. The holy grail of information management is to make near real time decisions in order to improve business outcomes. That is the capability we are helping our customers build.

CEOCFO: *When people read about Earley & Associates, what should they remember most?*
Mr. Earley: We are the company that will help them get their information house in order, no matter what process they are working on, no matter where they are in the life cycle by developing their enterprise taxonomy - which supports all projects and processes. People say that they want to wait until they solve other problems first. However, there is no perfect time. We should come in first, to help get the foundation in place. This foundation will support any number of initiatives, whether they are a $100,000 project or $100 million project. We can set up the foundation to get all of those systems working together correctly. We increase the "information metabolism" of the organization. We help information processes work more effectively and we improve the return on investment in tools and technology.

BIO: Seth Earley CEO of Earley & Associates and is Editor, Data Analytics, *IT Professional Magazine* from the IEEE. His interests include Knowledge Strategy, Data and Information Architecture, Search-based Applications and Information Findability solutions. Seth has worked with a diverse roster of Fortune 1000 companies helping them to achieve higher levels of operating performance by making information more findable, usable and valuable through integrated enterprise architectures supporting analytics, e-commerce and customer experience applications. For *IT Professional* he writes a regular column on data analytics and information access issues and trends. He is founder of the Boston Knowledge Management Forum, former adjunct professor at Northeastern University, where he taught graduate courses in Knowledge Management Infrastructure and E Business Strategy, and was Co-Chair of the Metadata Committee, NDIIPP Education and Outreach for the Academy of Motion Picture Arts and Sciences (AMPAS). He has conducted workshops for senior leadership around aligning information management strategy with measurable business outcomes and developed information governance programs for clients in healthcare, technology, manufacturing, insurance, retail, pharmaceutical and financial services industries.

Earley & Associates
P.O. Box 292
Carlisle, MA 01741
781-444-0287
www.earley.com