

Off the Beaten Path: Strategies for Tackling Data, Green IT & Social Media

By [Coco Brown](#), Taos President and COO

Recently, Gartner released its [Ten IT Trends that Need Your Attention Now](#). As the leader of an IT consulting company, I am well positioned to share perspective on a few of the top ten I find most interesting. I'm also going to give you some "off the beaten path" suggestions to tackling these issues. (When I refer to "you" I generally mean the CIO or equivalent leadership role in IT). The three trends I choose to look at are Data Deluge, Energy and Green IT, and Consumerization and Social Software.

Data Deluge. This subject continues to haunt us – the predictions of the rate at which corporate data will grow keeps getting shockingly bigger and bigger, the concerns around what data is subject to discovery in litigation are becoming broader, and new advancements in technology keep enabling us to create more, more, more. What do we do with all those word documents, emails, PowerPoints, voicemails in email, Livescribe recorded conversations, stored instant messages, video clips, blogs, tweets, etc. that are floating around your organization and being stored in multiple, identical or slightly different versions everywhere, taking up a lot of "space" and putting you at risk? And how do you even determine risk and value when the data is so hard to find and organize and analyze, providing very low return beyond its first intended use?

To address the concerns of "data deluge," we often turn to technology: thin provisioning, data deduplication, automated tiering, and virtual tape. But really, it's thoughtful policy and aligned management that will serve us the greatest good. The two big questions around data are those of risk and value. This is something I have talked quite a bit about with [Jeff Lucchesi](#), Executive IT Management Consultant in our [Office of the CIO \(OCIO\) practice](#).

Jeff has recently met with more lawyers around the issue of discovery related to legal actions being taken against companies in the last four years than he has in his prior 30 years in IT. His advice to CIOs has been to engage in working sessions with Legal and Risk Management. (Even if you are too small to have internal roles for these, you will usually have a firm your company works with that you can talk to). Paint the picture for them of how technology is, or could be, used in your organization to create data – IM, blogs, Twitter, recorded conversations, digital voicemail – and work with them to create a legal risk profile for each, a draft policy for corporate use and (very importantly) retention for each. The ease at which intellectual property or financial data can be leaked, accidentally or otherwise, very quickly and very broadly these days is tremendous. No one, especially fast growing flexibility-oriented companies, wants to be bogged down by the idea of bureaucracy or a legal group getting in the way of collaboration or outreach, but nonetheless, the risks warrant thoughtfulness, especially around retention policies. Your work with Legal should result in a proposal you can take to the Executive Steering Committee (and perhaps the Audit Committee as well) for refinement, alignment and ultimately for a decision. This may be a simple and quick pitch for thoughtfulness around value vs. risk, but by no means do we see the effort as easy. This is, however, where Jeff and I believe true leadership lies (as opposed to technology solutioning).

As the CIO, you can also be the facilitator to ensure intended value in data is realized, rather than data simply being junk beyond first use. Tools like SharePoint attempt to reign in the vast amounts of unstructured data in corporations. Often, the CIO is the technology implementer, but rarely is there really and truly an executive level strategy, policy and design for such a powerful tool. Instead, the approach is grass roots and then takes off like completely unmanageable wild fire. Pretty soon every department has their own site, their own set of policies, and again, data is everywhere in multiple versions and with very little true interconnectivity, reference-ability or value. It becomes junk. [Bob Quinn](#), many time CIO and part-time consultant with Taos' OCIO Practice, has run up against this challenge a number of times and finds that IT leadership is often like a "deer in headlights" when it comes to dealing with information management and reigning in data proliferation. Because there are great technologies being released every day, IT leaders tend to hope that technology will solve the problem on its own. To make matters worse, there often isn't a clear charter for IT to lead the organization, categorization and standards for data.

I believe this is a great opportunity for the CIO to show true leadership within the realm of enterprise information management. It takes leadership to organize the company's information stewards and, surprisingly, to utilize old-fashioned, cross-functional program management. These will both help lead the enterprise in establishing clear standards, taxonomies and support mechanisms to enable consistent utilization of applications such as SharePoint. As Bob has found in his own leadership roles, this alignment process requires a "back to basics" approach of change management that can be summarized by five simple steps:

1. Establish a clear need and vision for change. This is often times the hardest step and where IT leadership often needs outside expertise to get started.
2. Organize a leadership coalition that sees, but more importantly has a passion for, the need and vision for change.
3. Identify how disorganized current structures for data organization are and prioritize where better organization structures can be implemented.
4. Gain momentum by "quick wins" in defined categorization schemes, taxonomies and re-organizations of data stores for business value.
5. Establish a cross-functional governance and support process to ensure continuity.

In the end, I believe technology will continue to provide IT with advances in data management and to provide the business with advances in data creation and proliferation. The only chance of getting these two to meet at a productive place for all is thoughtful policy supported by a culture that will internalize and adopt it. Without this, it's "invest now to pay later." I encourage the CIO to focus on leadership in this domain, not simply technology.

Energy and Green IT. At this point, few would deny that "going green" is something to which we all need to pay attention. We should do our part to protect our planet as good citizens of this world and for the sake of those who follow us. However, some are pushing aside green initiatives as a luxury in today's economic climate. This is not wise; certainly not when it comes to the datacenter where "green" in the traditional sense means money – lots of it to save or to avoid spending. Everyone knows that data centers are HUGE consumers of energy, and for all of the usual reasons – underutilization of servers, inefficient use of storage, and the like. And there is no single magic bullet that will solve the data center energy crunch, however, manufacturers of equipment are starting to build more energy efficient gear (even though the demand for computing power keeps going up).

As you know, Taos is an IT consulting company. We're doing quite a lot of work for our clients in the data center, both at the strategic evaluation and planning level and tactical execution level. Perhaps stating the obvious, we're seeing a lot of savings in data center consolidation, increased attention on build vs. buy decisioning, and data center virtualization activities. This is going on with almost every one of our clients right now. I asked [Bruce Whetstone](#), one of our Executive IT Management Consultants in Taos' OCIO practice to share some of the not-so-obvious sources of energy efficiency he is recommending clients explore. Here are a few of Bruce's suggestions:

- Ultrasonic humidification – as an alternative to heated (steam) humidification – saves energy to produce the humidification and eliminates the requirement to cool the steam
- Precision cooling (for examples, see: <http://ats.stulz.com/>), including such possibilities as:
 - Ducted HVAC to only cool the equipment cabinets, not the whole data center environment
 - Chilled water cooled cabinets
 - Variable speed air handling fans
- Thermal storage – time-shifting using an ice making unit to take advantage of cheaper power rates at night, then using the ice made overnight to cool the data center during peak hours of the day
- Solar arrays – using the roof of the data center to install solar arrays and using the energy generated directly within the data center (low transmission loss)

Some might argue that in the truest sense, a few of the above are not "green" as they are about reducing total power demand, but don't really shift power generation to alternate sources (e.g., time-shifting of power doesn't eliminate the burning of fossil fuels to generate electricity, but does help cut peak demand). Nonetheless there is great value to be had while conserving energy resources, and reducing costs. [i/o Data Centers](#) is one provider of collocation facilities and data center solutions that we really like to work with. They already have the solutions Bruce mentions in place or well under development. We suggest that if you are in the market for a data center, you check them out. And of course we'd be happy to help with the decision process, strategy and planning, or simply the tactical implementation of moves or consolidations, etc.

Consumerization and Social Software. To me this topic is both fun and frustrating. It's been true for some time now that we have looked to the consumer market to tell us what's going to be hot in the corporate environment. Just look at the proliferation of iPhones, IM, and blogging. And now we've got our social networks poking into our corporate world, if not consciously as a corporate initiative, at least stealthily blending into the corporate self. What I mean by that is that suddenly, we are finding that it's not just old friends and friends you've made through your kid's school who are finding you on Facebook, it's now your work associates and clients too (which personally I find exciting and fun). And what

about Twitter? The jury may still be out about what value Twitter brings to the corporate user, but a revolution is in the works (I'm not speaking of Iran) that we leaders of corporations should pay attention to. I think Wired did a nice job of laying the groundwork for understanding this new internet revolution in an article in the June Issue titled [The Great Wall of Facebook: The Social Network's Plan to Dominate the Internet – and Keep Google Out](#). For some time now, we've talked about trusted social networks and their power to overtake the formulaic, algorithm-based approach to knowledge and information seeking. It's becoming much closer to possible with search capabilities in Twitter and an ever broadening base of "people like me" that I trust in my Facebook circle. If I want to know "what's going on" and "what are people thinking," it is now becoming true that if I go to Twitter, I might really find out the news before The News finds the news. And if I want to know about the best management book out there, I can ask my group of friends and probably get as good, maybe the same, or perhaps a better answer, than I would have found if I had "done my research."

What's my corporate point? It's that it's becoming true that we are delineating less and less between our personal persona and our work persona. As leaders we need to figure out what that means to us and to our responsibility as an ambassador of our business. At the same time, we have tools at our disposal for "getting the word out" (in a big way) and creating influence that we don't yet understand.

It's time I ask myself, "How do I use Twitter, blogging, Facebook and LinkedIn as the President and COO of this company to best support my business while not compromising the value they bring to me personally (and vice versa)?" I've got my Marketing team looking into this question for me and for Taos as a whole (e.g. "how do we use social networking with our consultants and the candidates we want to keep warm for future hire?"). I imagine that your company President or CEO might be doing the same thing. The question is: where do you fit in as the IT leader with governance over information security and corporate responsibility to help the Legal and Risk departments ensure proper use of technology? And how do you ensure the data being created from this technology provides proper value to the business as a whole?

I've made a full circle back to my beginning points from "Data Deluge" because these two trend areas are hugely related. Again it's value vs. risk; what is the benefit to be gained by leveraging consumer originating tools for corporate gain, but also what is the risk of misuse and therefore potential suit, embarrassment, or wasted time? Building upon what I presented earlier from Jeff, when it comes to the use of social networking tools in the work place, rather than letting them get ahead of you as others have in the past, like IM, try to get ahead of this game. Perhaps a worthwhile exercise (in advance of that meeting we mentioned you should have with Legal and Risk) would be to meet with marketing, recruiting, HR and sales to learn about how they see social networking benefiting them and whether they are exploring it for corporate use. Get on the forefront of your peers' thinking here and help them shape appropriate policies and management structures around them before it simply happens on its own. And if these groups aren't thinking about it at all, what a great opportunity for you to show technology leadership by investigating and outlining the potential for them.

Across all three of these trends, my main point is that leadership is about asking the right questions, pulling together the right teams and individuals, and setting the right direction, policy and culture to support your vision. From my vantage point, these are the things I think about. Even though we are a technology-oriented consulting company, I don't think about technology. I think about vision, policy, strategy, etc., and look to my team to help me understand the tools that can enable all of these things. As the CIO, I believe you should be doing exactly the same. Take the opportunity to be a leader amongst the leaders in your business by being the one to drive the leadership initiatives I have mentioned here.

By focusing your attention on these trends now, your business can benefit in the long-run with better policies and processes in place, contributing to a stronger, more productive business.

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