

# Off Course—On Target

Where unexpected paths lead to great discoveries.

—Wayne Hodgins



## Wayne's Wine Epiphany

September 12, 2007

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**Wayne Hodgins, strategic futurist and “corporate evangelist” at Autodesk, brings his keen foresight and thought-provoking perspectives to his podcast series *Off Course – On Target*.**

**In this podcast, Wayne shares how he became an enthusiastic promoter of metadata. Even as the need for managing vast amounts of data is increasing, why do we continue to use models that were not designed to handle it? The principle of metadata can help us develop**

**solutions that enhance our ability to learn, improve our productivity, and increase our performance.**

### WAYNE HODGINS:

Hello, and welcome to *Off Course - On Target*, where unexpected paths lead to great discoveries. I'm Wayne Hodgins, and today I'd like to tell you a story about how I came to have such an affinity (and what some might call a certain degree of myopia) for metadata—metadata being the proper and perhaps somewhat pretentious term for the attributes or characteristics to describe anything, anyone, anyplace, anytime...pretty much everything.

My mother tried to teach me to never use a \$25.00 word for a \$0.25 idea, though I think metadata's actually quite priceless. It really is pretty simple. Your first name, your phone number, your address—these are all examples of metadata for you, as are the color of a car, the author of a book...you get the idea. Yet as simple as this sounds, I've come to believe that metadata is one of the most fundamental principles upon which we need to build most solutions for improving learning, performance, and just living in general.

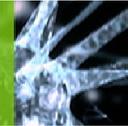
Metadata is equally a foundational element of most of the other models I've developed, such as things like learning objects and other content object models. And I believe that metadata's also critical for the overall approach we need to take for resolving the paradox of choice we are recently facing—and aren't we lucky to be doing so—in this emerging age of abundance. But my fascination with metadata began, as they say, long, long ago in a land far, far away and in a very different context.

As was the case with the origin of my development of the conceptual model for learning objects, this involved one of those wonderful “aha”! moments or epiphanies, which I understand to be a sudden, intuitive realization or leap of understanding through an ordinary circumstance. Let me explain, and bear with the unusual start because, like all great epiphanies, this one comes from a very unlikely set of circumstances.

Back in one of my former lifetimes, I was a high school teacher and a counselor, and I had the great fortune to be selected for a teaching position in Europe as part of the Canadian Armed Forces school system. Now, I'm Canadian by nationality, and back in the late '70s and early '80s, there were still a significant number of Canadian and British and U.S. military bases throughout Europe and most other parts of the world. And the personnel were often stationed there for

# Off Course – On Target

## Living in a World of Exponential Change



several years, and so they were accompanied by their families, and hence there was a need to have a school system for all of us rather monolingual folks in these foreign countries that we were now living. And I was fortunate enough to be chosen to teach at a high school on the Canadian base in Baden-Baden, which is located down in the southwest corner of Germany.

Now one of the many benefits of this posting was that, because we were living outside the country for several years—my wife and I were there for almost five years—we were able to bring back all of our possessions as personal effects, which meant that there's no taxes or import duty when we returned back to Canada. Well, if you check out on a map, you'll see that we were living smack in the middle of some of the best wine regions in the world: Alsace, Burgundy, and not far from Bordeaux either.

Well, when in Rome, right? So we drove right into that wine culture surrounding us, and we learned as much as we could by visiting vineyards and cellars, and of course you just had to bring home some of the great wine that you were discovering. And aided by a strong Canadian dollar at the time and the prospect of no tax, we soon started filling up our storage area—which was fortunately all concrete, so nice and dark and cool—with more and more and more cases of fine wine.

Well, you just couldn't stack the cases, and we needed to have a full inventory of what we had, both to enable us to find a good bottle for dinner when we wanted it and also for the customs folks when we did finally return to Canada. So I did the obvious thing: I built wine racks, and I started to fill up the racks with bottles. It seemed logical to divide the racks up into categories, right? One for red, one for white, one rack for a different region—Germany, Burgundy, Alsace, etc.—and different types of wines and grapes, so that's what I did.

Now another interesting part of the way the Canadian system worked was that you started with a two-year teaching contract, and then you could ask for one-year extensions at a time, and if your home school board agreed and if the administration of your current school wanted you to stay, you could get another year, up to a total of five maximum years. However, you didn't find out if you get your extension until the current year was almost over, so you had to live as if every year was your last because, as far as you knew—right up until the end—it was.

Well, somewhere about the second year of being there, visiting lots of vineyards and bringing home more and more wine, the inevitable happened: We had more bottles of a certain type of wine than we'd planned. We liked one more than we thought we would, and there was no more spaces in the wine rack for that particular section, so this meant either starting a whole new section or moving bottles from one section to another to give you more space for the new bottles.

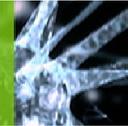
Now this is all happening in about 1981 or so. Started in 1980. We were there through late 1984, and though the PC was yet to emerge in North America—that was about 1984—we happened to be receiving in the school a bunch of Commodore computers – the early PETs and CPM models, for those of you that might remember. And I'd been having great fun learning and trying out some serious play with them, being the curious guy I was and a little bit mechanically minded and other what.

Well, as part of this, I'd been dutifully using the computers to keep track of all the wine that we could have, and so I now started to create what we call spreadsheets. A little history for you... VisiCalc, amongst the first of these programs, wasn't even produced until 1980, and Microsoft Excel didn't come out—on the Mac, I might add—first, until 1984. So I was, in any case, physically applying some use for these new things called personal computers—not even by that name at the time—to keep track of the wine. Can you see where this is headed?

After a few more repeats of this running out of space in the wine cellar, and as I was dutifully moving bottles from one set of racks to another for yet one more time, it suddenly hit me:

# Off Course – On Target

## Living in a World of Exponential Change



"Wayne, you idiot. What does it matter where a given bottle is stored? Does it matter if a '72 Alsatian Riesling has a 1976 Aloxe-Corton sitting next to it? I don't think so. In fact, it doesn't matter at all. All that matters is that I know what I have, where it's located, and I can find any bottle that I'm looking for. Let the spreadsheet manage the inventory and the location—not me—and the bottles and exactly where they are.

So I quickly labeled each wine rack as a matrix of rows and columns so that each space for every bottle had a unique identifier—let's say, A156—and I'd know just where that slot was amongst all the racks, and my spreadsheet would tell me what bottle was in each unique slot and what all its accompanied characteristics were: what region did it come from, what year was it bottled, what date did we buy it, how much did it cost, what type of wine and grapes, and notes about our trip to tasting it and why we purchased it. And then when we drank it, we'd add some notes about how did we like it, what food did we eat it with, etc.

And though I was not to learn the proper term for many years, this was all metadata. Couldn't be any simpler, and it couldn't be any more powerful. Imagine my glee, as I was now able to simply start filling up the racks almost kind of willy-nilly. It didn't matter where they went; I just simply put every new bottle into whatever slot was available, and I just kept building more and more racks. If we'd drink one out of the middle of the rack, I'd buy a new one and we'd just put it in there. It didn't matter what it was replacing, because now there was so much great wine and so little time.

As time went on, I was struck more and more by just how pervasive and profound this switch in approach and thinking was having on me. There were no more categories for me, and no more thinking in fixed ways about things. I still needed all the same information I'd been gathering previously—all the attributes and characteristics, all the metadata—but now it didn't matter how we arranged these. I didn't have to live by fixed categories and a box for everything, and everything in its perfect place. Sounds simple, and it is, but as with most profound ideas, this simple change was what I've come to understand as the magic of metadata.

Now fast-forward almost 20 years to today, and let's look at some current examples of how to apply this idea because, unfortunately, I find that in general we're all still mired in the past thinking of old categories and these fixed approaches. Perhaps it's from our early upbringing, where we were told "a place for everything, and everything in its place." "Put your socks in your sock drawer, Wayne." But for whatever reason, we still have the habit of creating these fixed containers or boxes that we want to put everything in.

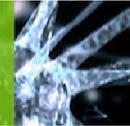
If you look at the computer desktop of today—today, 2007—and we still see the same organizational structure of files and directories. Heck, we're still even using literal things like file folders and file cabinets as the iconic representation for a storage of data and e-mails and photos and everything else, all of which would be fine if this system was working. But it's not, and it's getting worse by the minute. Are you still filing your e-mails, your photos, your spreadsheets, your documents, and everything else with carefully thought out file names and putting them away in carefully thought-out directories? And how's that working for you? Are you having increased problems finding the files you want when you need them, the e-mail you need to refer to in a phone call, the photo you want to show Grandma when she comes over to visit? Yeah. I thought maybe you might recognize some of these scenarios.

Now the good news is that there's a great set of alternatives and solutions already in place, and likely right at your fingertips. In fact, if you look at things like the latest operating systems, such as, let's say, Mac OS X and Windows Vista, or the latest software that comes with your digital camera or your photo organizer, for instance, or even newer e-mail programs that you find, they all have the ability for you to do something unthinkable: stop naming and filing everything.

It turns out that the best filing system is no filing system at all, at least none from you. No names, no directories...at least the ones that humans will create. Let the software do this. Let your photo

# Off Course – On Target

## Living in a World of Exponential Change



programs put the files wherever it wants to because, as with the wine, we really don't care where things are put, or what they're called. We care that we can find them when we need them, and it's not as radical a shift as you might think. You still need to go through much of the same mental exercise of putting some thought into the attributes and characteristics of each of these things—the metadata—but you can just list these off, make sure that they're captured, and then forget about them.

Now when you need something, you can just ask for it by listing any amount of the criteria you have in mind, and zip...the system can almost instantly present you with a relatively short list that match these criteria. And as you get better at these requests, these queries, these searches—being more specific, more demanding, if you will – you'll find that the system starts to get better and better at finding just the right things just for you. And many of these systems are getting better over time, better as you use them more, and perhaps best of all (quite contrary to what you might think is logical) they actually get better as the volume of items to choose from goes up.

More good news is that more and more metadata is being generated for us automatically. Simple things that you probably already know, such as how every photo you take with your digital camera already has a long list of automated metadata generated, including things like the time and the date, the exposure information, information about the camera you took the picture with. And on the newer cameras that include GPS chips, it also is going to have the precise location of the photo, and it'll be taking that and automatically generate it.

Advances in such things as recognition software also mean that soon you'll have photos that know that Grandma's in the picture, as is your dog Buddy and your '62 BMW and what building you're standing in front of. I'll leave all this for another time, and just circle back to where we started: my wine epiphany and discovery of what I now know by the name metadata.

The tagline we have here in *Off Course - On Target* is "Where unexpected paths lead to great discoveries," and I hope you can certainly see how this story that we've just told leads to the first part of unexpected paths.

Who would have thought that you could start with wine and end up with photos and metadata. Well, I hope you can see many other parallels here, that you can apply these, and that the latter part of our tagline is even truer for you—that it leads you to great discoveries. How can you see yourself applying the shift from categorizations to metadata in your life? Let me know as you do so and what some of your great examples are via your comments here at *Off Course - On Target* or e-mails you send to me. And I hope you'll be able to increasingly resist those age-old habits of fixed categorization, and shift more to a metadata model and mindset, by whatever name you'd like to call it. As you do, I'm convinced that you too will find this extremely freeing, and you can spend more time finding, less time searching, and no time filing and organizing.

And if this story has worked as well for you as it did for me, then I think you too will start to see the magic in metadata.

I'm Wayne Hodgins, and I want to thank you for joining me here on this episode of *Off Course - On Target*. Hope you'll be back soon, and I hope you'll be back often. Bye for now.

[closing music].

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<http://waynehodgins.typepad.com/ontarget/2007/09/waynes-wine-epi.html>