MARKET NEWS, DATA AND INSIGHT ALL DAY, EVERY DAY

WEDNESDAY 16 OCTOBER 2013

ISSUE 3,963

insuranceday

www.insuranceday.com

in association with ACORD

TECHNOLOGY FOCUS

Know what you are about

Funny how the delighted owners on Antiques Roadshow never admit to wanting to sell their items of value – they just want to know so they can insure them properly.

But seriously, insurance relies totally on customers and carriers understanding as much as possible about the issue at hand so they can arrive at the correct terms for an agreement. The better defined and complete they can get the "aboutness", the better the deal will be for all parties.

Craig S Mullins uses the Antiques Roadshow moment as an entry point to the topic of metadata. It is an obscure, sciencey-sounding word that is more than a little offputting. But whether they realise it or not, organisations rely on the accuracy, currency and intelligibility of their metadata for all their activities.

Metadata is the key to exploiting data. As such, it is a major repository of business intelligence. The good news is you do not need to wait for the experts to roll into town before you can appraise the value of your data. Handbooks of industry metadata exist in the form of industry standards from ACORD – the keys to data value every insurance organisation relies on.

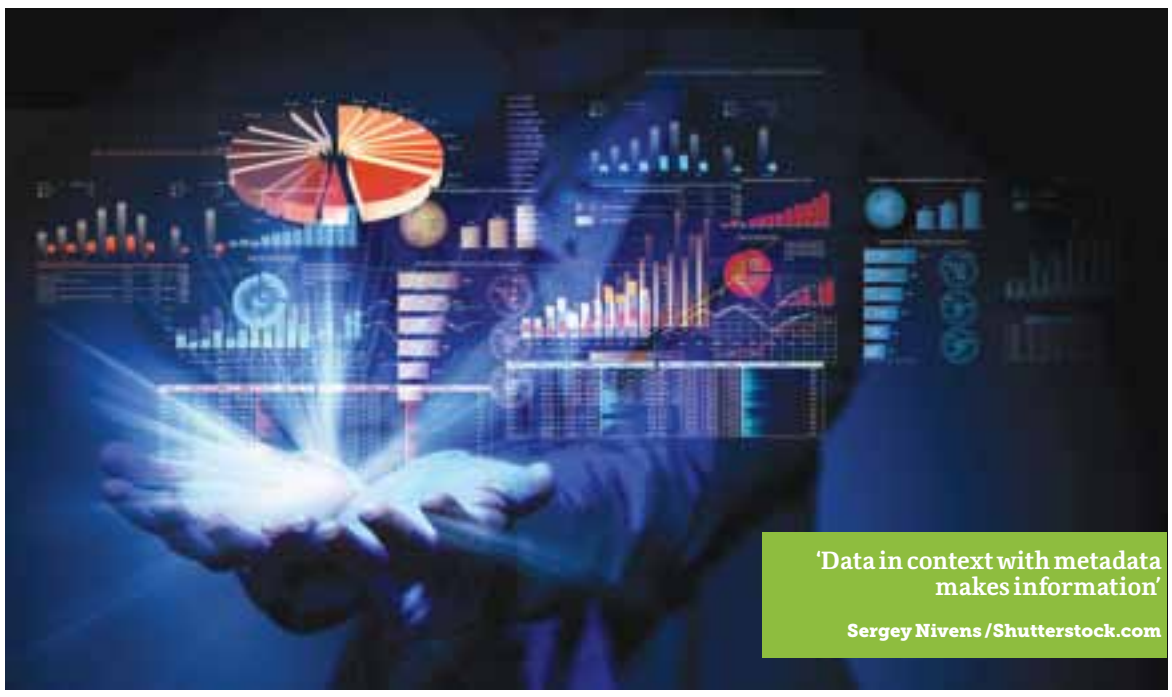
Gregory Maciag is president and chief executive of ACORD. He can be reached by email at gmaciag@acord.org.

Metadata matters

The term 'metadata' has been popping up in the mainstream media recently as security agencies and network providers account for their usage of customer records. But what is metadata and why does it matter?

Craig S Mullins, strategist, researcher and consultant

If you have ever watched Antiques Roadshow you will know it features people bringing items to professional antique dealers to have them examined and evaluated. The participants hope to learn their items are long-lost treasures of immense value. The antique dealers always spend a lot of time talking to the owners about their items. They ask questions like "Where did you get this item?" and "What can you tell me about its history?" The item is sitting right there in front of them, yet they ask these questions any way. Why? The answer is metadata. These details provide knowledge about the authenticity and nature of the item. The dealer also carefully examines the item, looking for markings and dates that provide clues to the origin.



'Data in context with metadata makes information'

Sergey Nivens /Shutterstock.com

It is what it is

So, the item being evaluated by the Antiques Roadshow experts is the "data." The answers to the antique dealer's questions and the markings on the item are the "metadata". Value is assigned to an item only after the metadata about that item is discovered and evaluated.

The typical off-the-cuff definition for metadata is usually something like "data about the data". That might help to quickly bring about a high-level understanding of metadata but it is not a very good definition. It is self-referential and does not add much to our understanding. A friend of mine calls this a "cheeseburger definition"; that is, a cheeseburger is a burger with cheese.

Metadata characterises data. It is used to provide documentation so data can be understood and more readily consumed by your organisation. Metadata answers the who, what, when, where, why and how questions for users of the data.

Providing the context

Users of data must be able to put their data in context before the data becomes useful as information. Metadata describes data, providing information like data type, length, textual description and other characteristics of the data. For example, metadata tells the user that the customer number is a five digit numeric field, whereas the data itself might be 53781.

The basic building block of knowledge is data. Data is a fact represented as an item or event out of context and with no relation to other things. Here are a few examples of data:

- 27
- 010110
- JAN

Without additional details we know nothing about any of these three pieces of data. Consider:

- Is 27 a number in base ten, or is it in octal (which would translate to 23 in base ten)?
- If 27 is a number in base ten what does it represent? Is it an age, a monetary amount, an IQ, a shoe size, or something else entirely?
- What about 010110? Is it a binary number? Or is it a representation of a date, perhaps January 1, 1910? January 1, 2010? Or something else entirely?
- Finally, what does JAN represent? Is it a woman's name (or a man's name)? Or does it represent the first month of the year?

Metadata characterises data. It is used to provide documentation such that data can be understood and more readily consumed by your organisation. Metadata answers the who, what, when, where, why and how questions for users of the data

Or perhaps it is something else entirely?

From data to knowledge

All of these are examples of data because of the lack of context. Information, on the other hand, adds context through relationships between data and possibly other information. Data in context with metadata makes information. The relationships may represent information, yet the relationships do not actually constitute information until they are understood. Also, the relationships that represent data have a tendency to be limited in context, mostly about the past or present, with little if any implication for the future.

Webster's New Collegiate Dictionary defines knowledge as "the fact or condition of knowing something with familiarity gained through experience or association." Knowledge adds understanding and retention to information. It is the next natural progression after information. To have "knowledge" requires information in conjunction with patterns among data, information and other knowledge. So knowledge couples data with understanding and cognition.

Get wise

The final step would be to move from knowledge to wisdom. Wisdom can be thought of as knowledge applied. You may have the knowledge fatty foods are bad for you, but if you eat them anyway, you are not wise.

So, in order for data to be anything more than simply data, metadata is required. Without metadata, data has no identifiable meaning – it is merely a collection of digits, characters or bits. Metadata gives data its form and makes it usable by information professionals. ■

Craig S Mullins is a strategist, researcher and consultant with nearly three decades of experience in database systems development. This article is based on a post at datatechnologytoday.wordpress.com and he can be reached via www.mullinsconsultinginc.com