Frameworx: TM Forum's Big Moment?

By Tim Young

When it comes to standards specific to the telecom OSS/BSS space, a conversation is rarely complete without some mention of the TM Forum (TMF).

However, beyond its catalyst projects and training sessions, the TMF has, until recently, been somewhat reluctant to step forward and become a true Standards Development Organization (SDO). Now, however, well over two decades after the Forum's founding, it has begun to make serious inroads into establishing and promoting its own set of standards.

Unlike many other telecom SDOs, the TMF is uniquely focused on the integration and interoperability within the OSS/BSS architecture. It was founded in 1988 by BT and AT&T and has become a significant organization for facilitating interaction between the ISV community and some of the largest communications service providers (CSPs). Its flagship event, Management World, while small compared to major mainstream telecom events, is certainly one of the most focused on the realities of communications IT. However, the continued emergence of new technologies, such as cloud-computing, has put the TMF in a position that to capitalize on how these trends impact CSPs within the OSS/BSS framework. This is an opportunity that is not lost on the TMF.

The organization now sports some 800 members now, almost 30% of which are CSP companies. "I'd say that of the top 100 [largest] service providers, about 60-70 are members." Martin Creaner, President of TM Forum, told Pipeline. However, beyond its catalyst projects and training sessions, the TM Forum has always been somewhat reluctant to step forward and become a true standards body. Now, however, it is attempting to push further into that direction.

The TMF's standards are collectively known as Frameworx, though the paint is still a bit wet on the rebranding, as more than a few vendors, service providers, and even distracted Forum staffers still occasionally refer to Frameworx by its old name, NGOSS.

For those of you unfamiliar with Frameworx/NGOSS, a quick overview: Frameworx is composed of four underlying components, each aimed at standardizing information models, interfaces, and lexicon.

The first is the Business Process Framework, otherwise known as the eTOM. This framework is meant to aid in the creation of a comprehensive, multi-layered view of all of the business processes necessary for a carrier's operation. The framework provides both guidelines and process flows, and aligns with standards from ITIL and other external bodies.

The Information Framework, or SID, meanwhile, is intended to provide a common information model. It's used to develop databases and provide a glossary of terms for business processes. The framework is intended to reduce integration costs and to reduce project management time and cost by minimizing the number of necessary changes to underlying architecture during the launch of a new product or service offering.

The Application Framework, also known as the TAM, attempts to group the information and processes defined by the eTOM and the SID into recognizable applications. This provides CSPs with a coordinated systems map showing, in a clear and practical way, how business processes are implemented across applications.

Finally, the Integration Framework defines SOA-based interfaces, therefore allowing automation of business processes.

These frameworks have been in the works for some time so they are not, taken in isolation, anything particularly new. However, when you're attempting to speed time-to-market and lower the time and cost of integration, widespread adoption is all but required. After all, a common language is only valuable if it is widely adopted. Otherwise, it's just a bunch of gibberish.

So, how widely adopted is Frameworx? "We've been trying to address that question ourselves over the past few months by doing a survey of major service providers in terms of their adoption of TM Forum standards," said Creaner. "We're not fully done with it, but we do have about 130 responses in from 100 different service providers, so it's a fairly significant sample size of the largest service providers in the world."

The results the TMF has gathered so far suggest that 90% of service provider respondents are using Frameworx. "There is a small percentage that is not using Frameworx, but the vast majority is using it in some manner or form." said Creaner.

Now, there are a few qualifiers to that rather optimistic figure. First of all, this is a rough percentage of an incomplete survey of a relatively small and non-random sample. Second of all, this doesn't speak the depth of the use of the standards by the companies or the compliance of their suppliers. Each company may be using the Business Process Framework (or, as the old guard knows it, eTOM) or the Information Framework (SID) or the Applications Framework (TAM) in isolation, but we can't assume that they are using the wider set of standards in a meaningful way.

But Creaner argues that the survey reveals other data that paints a much rosier picture. "I was pleasantly surprised to see about 2/3 of [companies surveyed] are using Frameworx and are mandating it in their procurement activities." Yet again, Creaner asserts that the percentage mandating solutions across
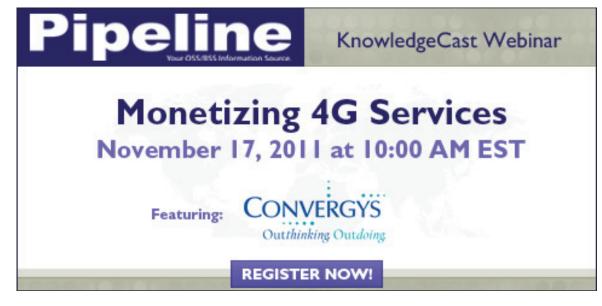
Though it seems, in many ways, like a repackaging and rebranding of Forum stand-bys, leaders insist that Frameworx is more than the sum of its parts.

the board is much smaller; this large percentage is mandating Frameworx in specific procurement projects.

However, Creaner asserts that Frameworx certification is beginning to approach critical mass. As more providers look for Frameworx certification in their RFP process (and the Forum provides downloadable templates for providers looking to insert mandatory Frameworx compliance into RFPs), more vendor products become Frameworx certified, and more engineers become trained in the implementation of Frameworx, the whole process will begin to snowball toward ubiquity.

But as a standard, is Frameworx significant? Though it seems, in many ways, like a repackaging and rebranding of Forum stand-bys, leaders insist that Frameworx is more than the sum of its parts.

Creaner compares the standards set to a language. "Every sentence has to have one or more nouns or one or more verbs. Your information framework, these are the nouns. They are the things that everything

happens to." The customers. The network elements. The devices. All of these objects and people fit into the Information Model commonly known as the SID.

The eTOM, or the Process Framework, meanwhile, is made up of the verbs, from provisioning to assurance to billing. "What you need to do is create a library of both your nouns and your verbs that are self-consistent to each other," said Creaner, "that in some way can be used to create the infinite number of sentences that are out there."

The grueling work for the Forum comes from the constant growth and sophistication of both the nouns and the verbs in that equation. "You've got an ever-changing set of processes and an ever-expanding set of information," said Creaner, "and you've got to continually make sure those fit really tightly together."

So, based on the narrative coming from the TMF, the approach to both information and processes that they offer have real benefits to the provider. If that's the case, why weren't these standards offered in a more cohesive way from, say, 1988 to the present?

Creaner seems unsurprised when I asked, "What took so long?"

"It doesn't take long to create these standards," said Creaner. "That's the easy bit. Trying to get adoption is the hard part." Therefore, perhaps it is the changing business landscape that is driving adoption. "The reality is that people adopt standards when they are no longer willing to pay the cost of going proprietary."

Creaner and the TM Forum are unequivocal on the idea that standards reduce cost. Furthermore, they have released numerous case studies from providers who insist that experience has supported this idea of cost savings as a result of Forum-backed standards.

However, the Forum's particular take on standards is not without its skeptics.

"When we look at TM Forum, it's all high level architectures and it's all a little bit loosey-goosey," said Alan Quayle, an industry analyst and longtime observer of the Forum. This looseness, according to Quayle, stems from how the Forum makes its money and who, therefore, gets a seat at the standards-crafting table. "The paymasters are the big suppliers," said Quayle. "They're the ones with the big budgets at the conferences. They're laying down millions of dollars for their stands and their platinum or ultra-platinum or diamond-diamond-diamond sponsorships."

Quayle compares that to other industries, like

Creaner seems unsurprised when I ask, "What took so long?"

financial services, wherein standards are highly specific and set by the service providers with suppliers supporting, but not driving, the process.

"If it was a pure standards body owned and operated by the service providers, I think we'd get a lot more specificity." said Quayle.

His solution? Create just such a standards body by splitting the standards group from the conference organizing group. "All the money is made on the conference organization," said Quayle, "which might bias the focus of the standardization a little bit."

However, Creaner insists that while suppliers are a part of the process, it is service providers who are driving the effort. Whereas service providers once insisted on designing their own systems and services, "they now understand that there is no differentiation in a lot of these basic areas," said Creaner. "There's only unnecessary cost." He uses the analogy that if the telcos ran the airline industry, every carrier would have its own style of plane or its own fuel or its own proprietary type of wing. However, they are increasingly understanding that standardization does not mean a lack of differentiation.

"This could have happened 20 years ago, but the pain wasn't there," said Creaner. "And once they start mandating it in their procurement activities, the supply side rapidly shifts over and follows the money. The whole thing really starts with the service provider, their level of need and their level of pain."

Given a real and growing demand among service providers for interoperability, and the growth of technologies like service-oriented architecture (SOA) and cloud computing, the TMF is well positioned to take advantage of their recent self-appointment as a SDO. The major remaining hurdle is also the largest one: widespread adoption of the Forum's standards. The momentum for that adoption may require more than just a casual rebranding. It seems to rest, almost solely, upon the TMF's ability to both involve and energize more CSP members to create an industry-wide set of mandatory standards, and regulate compliance across the ISV community.