Chapter 2
The Reality of Using Standards for Electronic Business Document Formats

Tim McGrath
Document Engineering Services, Australia

ABSTRACT
This chapter presents the challenges faced when developing and using standard formats for electronic business document exchange and tries to identify the real values and costs. As a reference it takes the OASIS Universal Business Language (UBL) and demonstrates how, despite the challenges, UBL can provide a common bridging format (sometimes called a “lingua franca”) for exchanging business information between different communities.

INTRODUCTION
Electronic business document standards are truly fantastic, in the sense that we expect unrealistic or impractical things from them. We expect efficiency, quality, compatibility and possibly competitive advantage from standards. But is that what we get?

What is Meant by “Standards”
Our first challenge is to understand what we mean by a ‘standard’. There are so many claimants that the term has become obfuscated. Frequently we blur the distinction between de-facto and de-jure standards, between specifications from different standards development organizations, between open and proprietary, between versions of each standard, between different implementations of standards, etc.
In their simplest form standards are specifications (or patterns) that are considered worthy of re-using. What makes a pattern worthy is if it is generalized enough to meet common usage and adaptable enough to allow customization for specific cases. To use a tailoring example, we need a coat that mainly fits off-the-peg, but is also available in different colours and materials and can have the arm lengths adjusted.

Organizations wish to follow common patterns for various reasons:

• Common external influences, such as taxes, market forces and national and international trade laws.
• Common internal influences and goals, such as profits, efficiency and environmental impacts
• Common activities, such as hiring employees, insurance, procuring supplies and selling goods.

In fact patterns like procurement, payment, ordering and billing have become common terms for describing business processes. We all tend to have a common high-level understanding of what is involved in these processes. Similarly, these business process patterns are supported by common patterns in the business documents they require. We find document types such as purchase order, invoice, tax receipt, catalogue, etc. Again, we have a high level understanding of what we should find in these document type patterns.

If, as said earlier, standards are patterns that are considered worthy of re-using, there is some confusion when it comes to identifying the standards for business documents. This confusion was articulated by Robert J Glushko, who in an interview with CNET in 2004 stated…

“One of the issues here is what a standard is. That is one of the most abused words in the language and people like you (in the media) do not help by calling things standard that are not standards. Very few things are really standard. Standards come out of standards organizations, and there are very few of those in the world.”

Officially (according to the World Trade Organization) there are only a few recognized business document Standards (denoted with a capital ‘S’). In fact it can be argued that only the ISO (International Organization for Standardization), the IEC (International Electrotechnical Commission) and the ITU (International Telecommunications Union) publish the Standards for electronic business document exchange. Many of the things we call standards are actually multilateral initiatives developed by communities or commercial organizations, others are customizations or localizations of Standards, and some are projects developing solutions using Standards. Yet others are simply commonly used best practices. The differences are significant because their varying governance models affect their value as a 'standard' (denoted with a lowercase ‘s’). And governance is emerging as a major issue for achieving value from standards, as we shall see below.

“Nevertheless, it isn’t what we call them that really matters. What matters is the undeniable trend toward specifications that businesses can willingly choose to adopt and that are not controlled by a single firm. A firm’s flexibility to engage in a network of loosely coupled relationships is increased each time it follows a standard at any level, and standards have become central to business strategy and technology decisions.”

– Glushko & McGrath (2006), Document Engineering

What is Meant by “Business Document Formats”

With business exchanges we tend to focus on standards for the format (that is, syntax and structure) of the documents being exchanged. This is not