What You ~~See~~ Understand is What You Get – business process modeling for everyone
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This Article is the first in a mini-series on Business Process Management (BPM), a widely adopted methodology to manage and improve processes across organizations*. This piece looks at 'process design', also known as 'process modeling' which is where you capture the intent you have in mind for your business processes. The process models will specify, step by step, how they should be executed by people and machines. Modeling is therefore a pretty fundamental BPM activity.

So, if you want to design your processes, keep them constantly up-to-date and make sure they can be used on different IT systems, what options do you have? Ask any BPM expert and I'd bet my pet Shih Tzu on it they'd propose a standard Business Process Model Notation (BPMN) editor. And to a certain extent, they'd be right. Because, as a standard, there's wide support for executing BPMN models in complex enterprise infrastructure stacks. They can also be relatively easily exchanged between tools (although certain technical artifacts aren't compatible between vendors).

However, there is one big problem with BPMN: it's a technical language in the same way that UML is. Yet, whilst UML is targeted at technical people (software architects), BPMN is meant to be used by business analysts. There's a pretty important difference there. Business analysts are good at all kinds of things in manufacturing, healthcare, transportation, finance – you name it, but they're rarely comfortable with drawing logical architectures and using gateways and signals.

There's an interesting and useful parallel to draw here with using software to edit and design. You've probably seen and used a whole bunch of software tools from anything like basic text editing to photo enhancement, to programming and software design. These tools vary widely in complexity, quality, ease of use and how good they are at generating the output you expect from them.

And we all love tools that work right away or at least with hardly any practice. Tools that are intuitive, never fail, generate perfectly those beautiful PDF reports you need every month or compile that piece of code into a perfectly bug free app.

Let's pause for a second on the aspect of "hardly any practice". The amount of practice you need is, just like anything else, pretty much related to how well you know the field that the tool's been designed for.

Expert programmers can intuitively find their way around even a fully featured Integrated Development Environment (like <link>Eclipse</link>) because the

elements of the user interface and their behavior quite simply match their expectations. Some purists would even argue that, if you're a master of your trade, your tool should be minimalist (<link>Emacs </link> users, you know who you are). But, for the mere mortals among us, fully featured graphical editors are the best help we can get, and not just when it comes to programming but in any other domain; think Word, Photoshop and even Minecraft! These editors are considered to be WYSIWYG (What You See Is What You Get) where the user clearly expects the output to perfectly match their input, whether it's typed or drawn.

So how does it work in the world of BPM?

What's the equivalent of WYSIWYG for process models? And what would our business analysts be able to do if they had a WYSIWYG editor for their domain of expertise? An editor that, just like for the technical experts, wouldn't need hours of practice, would be easy to use and would automatically take care of the technical details required to execute and monitor their processes.

Imagine the financial services expert using graphical elements that are intuitive to them, to represent invoices, payments, transfers or loans. Or a healthcare specialist with patient admissions, bed allocations, surgical procedures or medication. What if these 'graphical studios' could be adapted to individual needs and domains of understanding of the people who design all these kinds of processes? Once designed they would simply need to be executed by the BPM system in place. To make that possible you might need to generate some BPMN just as PDF needs to be generated from a Word document to more easily share or print it. But that's fine because the generated BPMN would not need to be seen and edited by them. It would be either immediately executed or go through some minor enhancements by technical staff before execution. Automatic transformation technologies would ensure that further changes to the original process are always kept in sync with the generated BPMN.

We're working on it

We've always been big fans in the Xerox Research labs of developing graphical tools and environments to make work easier. In fact, the first WYSIWYG tool was created at Xerox (https://en.wikipedia.org/wiki/Xerox_Star).

Today we're exploring technology that can automatically generate modern process design studios for multiple business domains and which interface with BPM environments. The generation happens on-the-fly with little bespoke coding **and** it accommodates the fact the domains constantly evolve and change. Unless, as a business person, you'd rather fire up a BPM process equivalent of Emacs you might want to take a closer look.

The next Article in this series will be on process monitoring. I'll explore how monitoring execution platforms can help you better understand business processes and enhance the models explained here.

For more information, read the paper we presented at BPM 2016 'Business Matter Experts do Matter: A Model-Driven Approach for Domain Specific Process Design and Monitoring' or the 'Generating Domain-Specific Process Studios' paper that was recently published at EDOC 2016.

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