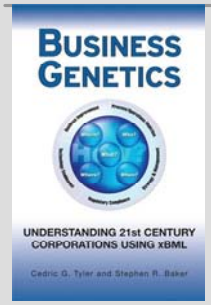

Business Genetics: Understanding 21st Century Corporations Using xBML

Cedric Tyler and Stephen Baker
John Wiley & Sons, 2007
$60.00 247 pages

Reviewed by Paul Harmon

Cedric G. Tyler is the President and Steve Baker is the CEO of Business Genetics, a company founded to sell the eXtended Business Management Language or xBML, a "business process methodology" invented by Tyler. They have recently established a software company, xBML Innovations, which offers a software tool that supports xBML.

In an Advisor published on the 27th of November of 2007, I reviewed the entire range of business process methodologies and concluded that, while Six Sigma DMAIC, ARIS and UML were the best known, the first was generally applied to narrowly defined problems and the last two were primarily used with IT related problems. Those that were primarily for process architecture and process redesign – methodologies that will come to dominate Business Process Management work -- were mostly newer and less well established. I included xBML in this latter category.

Every methodologist faces the same problem. The world of business and, for that matter, any specific business process, is very complex and complicated by numerous paths and exceptions. The methodologist can not anticipate all the problems or all the paths for any given problem. Instead, he or she must come up with a generic approach: A set of phases and steps that will help would-be process analysts and designers move toward an improved process. Too much detail and the methodology becomes overwhelming; too little detail, and it seems to suggest a solution, but, in fact does not provide enough structure to allow the new analyst/designer to actually solve the problem. Methodologists tend to offer some combination of a (1) step-by-step procedure and (2) tools or heuristics that you can use along the way to accomplish the different steps.

xBML does not offer a step-by-step methodology. There is no single place in the book in which Tyler and Baker tell the reader where to begin or what steps they might follow to either create an enterprise architecture or to redesign a business process. There is one table where they demonstrate how xBML can be used to support a "Six Sigma DMAIC Framework" and, thus, implicitly suggest what elements of xBML might be used in each of DMAIC's five phases: Define, Measure, Analyze, Improve and Control. (At one point the authors suggest their approach can be used to model a redesign project – which is to say that they don't tell you how to do it, but suggest you model it in their notation.) Beyond this, however, anyone looking for concrete advice or specific steps to follow will be disappointed. xBML is not so much a methodology as a notation and a set of techniques looking for a methodology. Given that, let's turn to the notation and the techniques.

Most people who have read about xBML have probably come away with one image: a set of concentric circles, which I've illustrated in Figure 1.

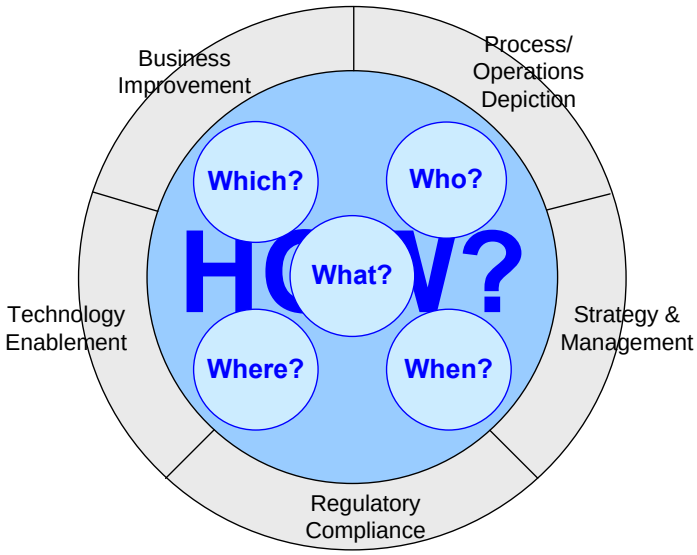

Figure 1. The BusinessGenetics overview.

At first glance, one is tempted to think that xBML is derived from Zachman's Framework, but Taylor is quick to say that the relationship is only superficial. In essence, the model is designed to suggest that xBML is organized around six models:

W1. The WHAT dimension – Processes or Activities
W2. The WHO dimension – Organizations and Roles
W3. The WHERE dimension – Geographical Locations
W4. The WHICH dimension -- Information Required for Activities
W5. The WHEN dimension – The Sequence or Timing of Work
W6. The (integrated) HOW dimension – A model that integrates elements from the other 5 models.

Obviously all of these dimensions can and are represented in conventional process flow diagrams, but xBML introduces a unique notation to describe each of the five basic models, and then combines the various elements to create a unique How (process) diagram.

WHAT models are represented as a hierarchy model of activities. (See Figure 1.) At some points the authors seem to suggest you should create a hierarchy model of all of the activities in an organization – an exercise that could easily swamp any BPM group in an endless analysis effort and result in thousands of activities. Most of the actual examples in the book suggest that they somehow scope a given problem, and then only define the activities used in the process scope. xBML defines semantic rules to assure that all activities defined are similar.

The WHO models are organization charts, represented as organization charts usually are. Some boxes represent organizational units. Some represent job titles of individuals and some represent roles. In addition a box with a corner missing is introduced to represent systems. Once again, we have rules to guide us in creating a more or less consistent organization chart.

A WHERE model is a hierarchy of boxes, like an organization chart that describes the physical locations at which work is performed. At the top of the chart, we might have widely dispersed locations in different countries (all reporting to a single corporate headquarters), while at the

bottom we find buildings or even work areas at specific sites. Once again, we have rules to guide us in the creation of the Where model.

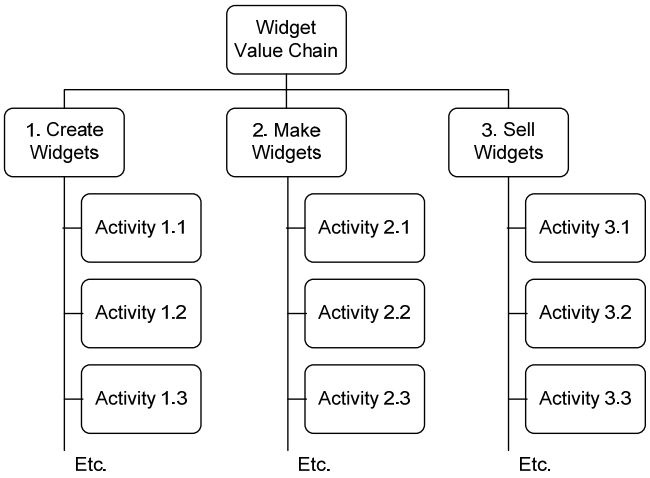

Figure 2. A What model (A hierarchy of activities.)

The WHICH model focuses on the information used by activities. At this point, xBML turns to an entity model derived from database analysis. (In fact, although they are referred to as entities, the model is closer to an object or frame-based model.) In essence there are classes, which have attributes, and there are artifacts that input or transmit information to the "entities." This could easily become a book in its own right, but the authors treat it simply and draw diagrams like the one in Figure 3, which is supposed to show an elementary concept network. (In other models they show attributes and artifacts and even XOR gates to control inheritance, but they do not talk about this when the subject in explained in the book.)

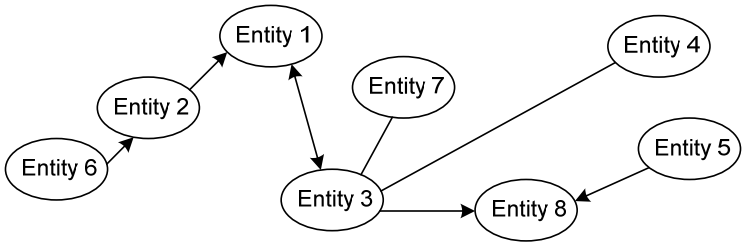

Figure 3. A Which model (A network of entities.)

The fifth model, the WHEN model, is used to record the chronology of the work. The diagram created to capture the flow of time in a process is a kind of modified state diagram. Of all the diagrams discussed in the book, this is the least adequately described. I doubt anyone could do anything with this dimension, if they only had the *Business Genetics* book as a guide. The three rules provided here are of little help.

Finally, Tyler and Baker suggest that if you have worked all the way through the first five models you are well positioned to create HOW models, which pull everything together for a single project. Figure 4 illustrates a simple HOW model.

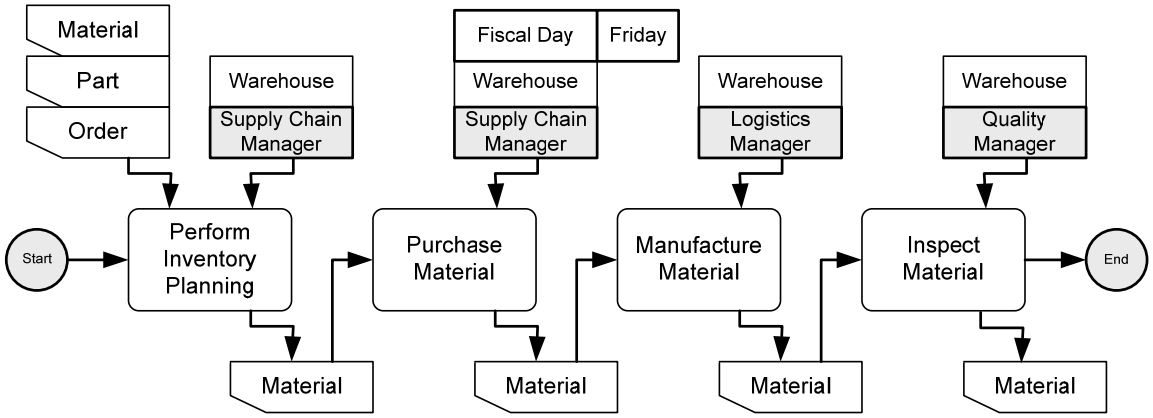

Figure 4. A How model (Combining the elements from the other five models.)

The HOW model shown in Figure 4 isn't very complex. Imagine a diagram with 20 activities and some branching points and you can see that these diagrams get quite complex. (HOW models can apparently have X/OR and other gateways, but Tyler and Baker don't define the semantics of their HOW models in sufficient detail so that one grasps just how complex they can be.) In fact, a large xBML HOWW model would look as complex as some of the more complex ARIS models, or a complex IDEF model.

Consider what's missing. There are no process measures. The authors suggest you can measure everything and discuss ROIs, but they don't show them on the model and don't suggest how to align them with specific processes. Similarly, there are no business rules or any way to capture them. Most modeling tools allow one to double click on an activity and enter information on who is involved in the activity, what items are consumed, how long things take and what they cost. Further, they allow analysts to record rules. You need this information if you are going to do simulations. Conceptually, this is apparently all missing from xBML HOW models. Worse, there is no sense of scoping – it's as if you have to define everything down to the bottom of every hierarchy, and then you can use the resulting information to assemble any HOW model you want. Obviously, that isn't a realistic assumption. In the real world, you would scope a project, and then only model what you need to model to define your redesign project. Where are the rules for how to do that in this book? Where does one get any sense that a process should be managed? Where are process managers? xBML simply captures the existing management structure and assumes it will serve. They apparently assume that having modeled everything, you will have no trouble figuring out what elements are needed to describe a specific problem.

There may be more to this approach than the authors have included in the book. So much is missing that one assumes this book was assembled rather hastily. But based on the book alone, it would be difficult for any new analyst to figure out where to begin or how to proceed.

Unfortunately, rather than spending more time explaining their ideas, the authors chose to spend quite a bit of time dismissing other approaches. They suggest that "its time to throw out the flow charts," as if their How models aren't flowcharts. They suggest that their new approach gives companies a comprehensive view – which is true if the companies have a few years and hundreds of analysts to create the hierarchies the authors recommend, and, if the company's idea of comprehensive doesn't include any way of aligning performance measures and business rules, or managing processes across business unit silos.

The authors never refer to swimlanes, and so insist on referring to most process modeling approaches as one dimensional. They show BPMN diagrams without swimlanes, thus conveniently skipping the fact that swimlanes capture the information about organizations and roles that they claim the "one dimensional diagrams" are missing. They don't consider organization diagrams of any kind, and don't have a way of modeling stakeholders. Hence, they are always focusing on internal processes and lack an overview of how a process might relate to a supplier, to business partners, or to regulatory agencies. None of this would be so offensive if the authors were not constantly pointing out the inadequacies of competing approaches and suggesting that theirs is the one scientific approach.

The simple fact is that xBML isn't a business process methodology, for either business or IT. It certainly isn't a reasonable way to approach business process analysis or redesign. It's a set of models that are derived from IT. The simple What-Who-Where-Which-When-How overview is appealing on the surface,, but once you take a closer look, you conclude that some of those models aren't models business people would be able to use or be interested in using. (Find me a business manager who would be willing to try to model all the information used in his or her organization with an entity/class diagram.) If a company were to launch a program to define all of these models completely, before moving on to doing any real process redesign work, the team would never finish – in that sense xBML is a prescription for analysis-paralysis. If the team decides to somehow cut short the potentially endless task of identifying all their activities, all the entities-attributes-artifacts they employ, etc., then one wonders how they are expected to go about doing that.

In effect, xBML is a kind of Enterprise Architecture methodology – in the narrow sense that one associates with IT-focused Enterprise Architecture efforts. It's an approach to defining the architectural elements that Zachman defines in his framework or, perhaps, an approach to populating an EA repository. IT savvy readers who are interested in Zachman or in developing an Enterprise Architecture repository will probably find this book interesting. Business managers and process improvement practitioners won't find much here that's useful.

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