The Importance of Business Rules in Better Decision Management

So if you think about a decision, any decision you make, any of these suitable, repeatable decisions have rules that come from all sorts of places. There are things your staff know. What their experience tells them. The tribal knowledge that exists within your organization. Those rules become part of how you make a decision. For many decisions there are regulations, laws that you have to follow. There's also a bunch of policy, internally written policies that you're supposed to apply every time you make this decision and you hope everybody applies when they do.

You probably have some of the logic of a decision embedded in some legacy system somewhere that has to be applied and you could often tell when decision making logic's embedded in a legacy system because the screen that accesses it has all sorts of little yellow stickies on the side saying when it says you've got to put this code in here in fact you have to put this code in there because the system's not working the way it used to. And then lastly your data tells you things about the rules. The data about what worked in the past and didn't work in the past tells you about things that might be a good idea. Sometimes the only way you can tell how you decide something is to go look at the data you have that recorded what decisions you made because no one's around anymore to tell you how it's done.

And in theory you could manage all these rules. The problem is they come in such a wide range of terribly unmanageable formats that this becomes very difficult. Policy and procedure manuals are not that easy to manage. Regulations and laws are often extraordinarily opaque to those of us who don't do this for a living and code, while it may be understandable to programmers, at least to the programmer that wrote it, it's not understandable to the people who understand how to run the business. And so if you want to manage this, if you try and manage it as they stand in their sort of natural state what you have is a black box. You have regulations and policies that people don't really understand. They just follow along. You have code they can't read and it's extremely difficult to get the kind of clarity and transparency that you need. So what you need to do is replace those rules. Take them out of their nat… natural state if you like and put them into a business rules management system. You need to start expressing them as simple pieces of business logic that is in a format that can be read and understood by people who aren't technical perhaps using things like decision trees, where you show the branches of a decision or a decision table like the one I showed earlier. And use these to manage the rules that go behind one of your decisions. And when you start doing this the… what you find is

There's a number of reasons why a business rules management system is a really effective tool in these circumstances.

First of all you get design transparency. Business rules, because they're independently managed, because they're little pieces of logic that can be linked together. You can see what data they use very easily. You can see how they chain together in a design context. You can understand how a decision has been put together and that makes it much easier to find out where you need to go make a change when a new regulation gets issued. You also get execution transparency. I was talking to our customer last week and… and they literally have a system that makes decisions for people, an underwriting decision I think it is if I remember correctly and when customers call up and say you've rejected me. Why? They really have no idea. You know the system said no and they really don't know why it said no. It just said no. This isn't really acceptable. Certainly in a regulated environment it's not acceptable and if you want to improve customer service it's not really acceptable either. So you have to have execution transparency. Why did I decide to do what I did in each case? Now business rules management system allows you to log exactly which rules fired and

therefore how and why you made the decision you made. And that also obviously sets you up for the kind of continuous improvement we were talking about. It lets you look at how you decided things, see what worked and what didn't work and make improvements over time. Because business rules management systems are a more business friendly syntax they tend to use vocabularies that are closer to the business. They don't use as much geeky syntax as coding languages do. It's a lot easier to bring business people into the loop. So for instance one business rule of management system customer I worked with I asked the guy who led the project, I said what's the best thing about using BRMS and he said well, I'll illustrate with a story he said. I came in this morning and I walked into the area where we work and there sitting in two chairs were one of my underwriters, it's an insurance company, and a programmer. And then looking at the business rules management system they're looking at a rule and they are arguing about the rule. Now that may not seem like that much of an advantage to say I've got my business and IT people arguing. You'd think that was something you could get without having to buy any technology. But his point was that they were arguing over whether the rule was correct or not. They weren't arguing about interpretation. They weren't arguing if the code matched the expectations of the business people. They both knew exactly what the rule did and that rule was the thing that was executing in the system. There's no other artifact behind the scenes. And so they were able to argue about whether it was the right rule even though one came from a business side and wasn't technical and one was a programmer. And that ability to collaborate is really essential.

Business rules management systems also give you the power to say well what effect would a change have? If you've ever put in a big change request for a big IT system one of the big questions is well what will it do? Will it work the way I expect from a business perspective? Even if the programmers get the change right and we don't have any errors will I get the business outcomes I was expecting. And because it's hard to make those changes you often really don't know until you run the change. With the business rules management system you often have the ability to make a change and then rerun those rules through a bunch of test data and say well is that a change that makes sense? Do I like the business outcome that I got? What is the business impact of this change and that ability is really crucial.

And then lastly but by no means least business rules turn out to be a very powerful platform for deploying analytics. I'm going to talk about predictive analytics in just a second but business rules management systems allow you to bring analytics to bear on decision making very effectively.

Quick story – how am I doing for time? I have an insurance company re… re-engineering its legacy systems, manual processes. Business users got very excited about business rules. Who's here from IT? Who would say they're an IT person? Okay. Any bus… any business people? Okay. But business people at technical companies right? It's like. Okay. The business users got very excited about business rules. They were capturing their business rules. Doing a great job and the IT guys were just like I don't see what we're going to do with all these business rules. And they have what I call the big bucket of rules problem. They just had a big bucket of business rules. They were capturing them. They knew what they were. That was great but they couldn't really see what they were going to do with them. And so again working with my… my friends at IBM we did some work with them. We did some training. We got them thinking about processes, decisions and business rules as a set. We identified the decision points in their business processes. We decomposed those to understand that decision making. Map that to the vocabularies and business rules they were collecting as well as to the key performance indicators for their business and what that let them do is be clear in the process where the rules were going to be applied. Made them able to say this decision point in the process – here's how we make that decision. These are

the rules and vocabulary we think we need at that point. And the IT guys could then take that and say okay, we can see how we're going to have to apply that and they were able to get the kind of traceability they needed. This rule impacts this decision and these processes and therefore this is how it's going to change our business. So by thinking about these things as peer concepts able to make dramatic process.