

Business Rule Solutions Ron Ross

## Q&A: What We're Learning from Decision Engineering - Part 2

### *Fresh Thinking about Business Process Models*

*The world around us has changed dramatically. Most business processes are already automated. Thanks to the internet, consumers are far more informed. Complexity and the rate of change are confounding traditional methods. And we wrestle with the issue of business governance and compliance at every turn. Meanwhile, Moore's Law has sent the raw power of computing skyrocketing.*

*It's time we opened our minds to fresh ideas about business process models. Old-school process models just don't make the grade anymore. Find out what you need to know to bring your thinking and practices fully up to date in the second and final part of this two-part Q&A with Ron Ross.*

#### **Q: Why do so many practitioners still create traditional process models without applying business rule techniques?**

**A:** We've turned so quickly into a knowledge economy that many people simply haven't adjusted. When the world around you is abuzz with change you naturally try to stay in your own comfort zone.

Traditional views of modeling work go back more than a hundred years to Frederick W. Taylor and his then revolutionary innovations in the steel industry. Taylor's idea was essentially to standardize labor into minimal, highly repetitive tasks that required no decisions whatsoever by workers.

When automation hit big in the second half of the 20<sup>th</sup> century, that paradigm fit perfectly. Computers were ideally suited to automating standard, highly repetitive tasks that required little thought or deliberation. It was a perfect storm of innovation.

But now the world has changed. Most business processes are already automated. Thanks to the internet, consumers are far more informed. Complexity and the rate of change are confounding traditional methods. And we wrestle with the issue of business governance and compliance at every turn. Meanwhile, Moore's Law has sent the raw power of computing skyrocketing. It's time we opened our minds to fresh ideas about process models.

**Q: Do any organizations have process models in which rules should not be segregated?**

**A:** We've worked in virtually every industry you can name – manufacturing, retail, utilities, insurance, financial services, taxation, education, and more – and we have yet to see one. I suppose not segregating rules might be OK if you were baking a process onto a computer chip. But hardcoded rules are the exact opposite of what's needed by all the businesses we come across.

The point is that some or even many rules *will* change. You must engineer your solution so they can be changed – easily and reliably.

In effect you want the latest possible binding of processes and rules – preferably at the time of performance or execution. Up until that point, separation is key to both simplification of process models and increased agility.

**Q: What's the best way to tell when your business process model has too many embedded business rules?**

**A:** If you walk into a meeting room, and all four walls are covered by processes models, it's probably a very safe bet. It happens all the time. If you have to get out of your chair and go up to the wall in a small room to read the model, that's another sure sign.

We immediately look for series of binary check points – what would be diamonds in a flowchart. I guarantee that much of the time those series of diamonds pertain to embedded business rules, and that the model is attempting to lay-out how to test or apply those business rules procedurally.

Ask yourself how many business rules pertain to the process overall. Dozens? Hundreds? More? Is it any wonder that process models become so complex? In my view the real value of process models is to trace, analyze and communicate how value-add is created in a business through a series of transforms. Embedding business rules directly subverts such use.

**Q: What's the alternative?**

**A:** Instead of embedding rules procedurally in a process model, they should be specified separately in declarative, business-friendly form. We use RuleSpeak<sup>1</sup> for that. An added advantage is that then both the process model and the rules themselves can be vetted directly.

Done properly, you can simplify a business process model by an order of magnitude or more. We've seen it happen time and time again.

**Q: Are there different kinds of business rules, and if so, do they make a difference in modeling business processes?**

---

<sup>1</sup> [www.RuleSpeak.com](http://www.RuleSpeak.com)

**A:** According to relevant standards there are two fundamental kinds of business rules – behavioral rules and definitional rules.<sup>2</sup> Both need to be separated from process models, but each is best approached in its own way.

Behavioral rules are people rules. As the name suggests, they shape people's behavior – even when that behavior is automated. The key with behavioral rules is that they can be violated. So separately from the process model, you want to ask about how strictly each behavioral rule should be enforced, and what business response is appropriate when it's violated. Those things don't belong in a process model per se.

Behavioral rules are about governance and compliance. Traditional process models have simply never yielded the traceability needed to address those issues effectively. For me, the biggest question is not how well your business process performs; but rather whether it produces correct results. That's a matter of behavioral rules.

### **Q: What about definitional rules?**

**A:** Definitional rules shape knowledge and information. In one way or another all such rules are about making decisions. Such rules can't be violated; they simply determine what outcome or result is appropriate for a business question under specified circumstances.

### **Q: Can knowledge-laden business decisions really be automated?**

**A:** Sure they can – *if* you know the rules.

### **Q: What benefits accrue?**

**A:** The biggest benefit is simple consistency. Ask experts what the three most important factors in customer experience are and they will tell you consistency, consistency and consistency.

### **Q: Do you need new techniques for business decisions?**

**A:** Yes. Process models simply don't work well for analysis of decisions and capture of decision logic. In the past several years new techniques have emerged – for example our Q-Charts or question charts.<sup>3</sup> Q-Charts are highly complementary to process models, but focus strictly on business-friendly decomposition of decisions.

In the knowledge economy, more and more of the problems and opportunities lie on the smart side of processes – not the mindless, routine work, but the parts that require deliberation. That's where we need to break free of the old process paradigm arising from Frederick Taylor's day.

---

<sup>2</sup> *The Two Fundamental Kinds of Business Rules: Where They Come From and Why They Are What They Are*, by Ronald G. Ross, <http://www.ronross.info/blog/2014/07/17/the-two-fundamental-kinds-of-business-rules-where-they-come-from-and-why-they-are-what-they-are/>

<sup>3</sup> Ronald G. Ross, "Modeling Decision Structures — Part 2: Question Charts (Q Charts™) and Hybrid Diagrams," *Business Rules Journal*, Vol. 14, No. 10 (Oct. 2013), URL: <http://www.BRCommunity.com/a2013/b722.html>

**Q: How can an organization ensure optimal results from business rules?**

**A:** An organization should know exactly what all its business rules are at any given point in time. It should also know where they are currently deployed and what authorizations are needed to change them. The rules should be well-managed and single-sourced in the automated equivalent of a rulebook. In such a repository individual rules and sets of rules could evolve easily over time and be directly reused with straightforward traceability.

That's what I call having a 'single source of business truth'.

Most organizations today are nowhere close to it. You do find relatively isolated, local-area approximations but only in a few organizations. The price organizations pay in churn and wasted effort as a result is almost beyond measure.

**Q: What telltale signs do you look for to determine whether a company is moving in the right direction?**

**A:** I'd ask whether the company has started some business-side rule management initiative. I'd also ask whether the company has begun modeling decisions using new techniques such as Q-Charts.

These steps inevitably lead companies to some critical rethinking about matters of governance and core business policy. That always proves a healthy exercise. Ultimately I believe it's the price companies will have to pay to operate effectively in the knowledge economy.

**Author**

**Ronald G. Ross** is Principal and Co-Founder of [Business Rule Solutions, LLC](#), where he actively develops and applies the IPSpeak™ methodology including [RuleSpeak®](#), [DecisionSpeak™](#) and [TableSpeak](#)

Ron is recognized internationally as the "father of business rules." He is the author of ten professional books including the groundbreaking first book on business rules *The Business Rule Book* in 1994. His newest are:

- [Business Rule Concepts: Getting to the Point of Knowledge](#) (4th edition, 2013)

- [\*Building Business Solutions: Business Analysis with Business Rules\*](#)  
with Gladys S.W. Lam (2011, An IIBA® Sponsored Handbook)

Ron can be reached at [Rross@brsolutions.com](mailto:Rross@brsolutions.com)  
<http://www.brsolutions.com/>

*Follow Ron's tweet's: [Ronald\\_G\\_Ross](#)*