My Response to the Solutions for the Recreational Fee Challenge

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The Recreational Fee Challenge posted on *Decision Management Community* in April, 2019 (https://dmcommunity.org/challenge/challenge-apr-2019/) sorta took on a life of its own. Read to the very end of this short summary response to find out why.

I've had a look at the solutions submitted to date for the challenge (5). Good response! Remember the behavioral business rule was: *A senior citizen must not be charged a recreational fee for use of facilities*. Here are some general comments that to one degree or another apply to all the solutions:

1. *Not charging vs. charging $0.* No charge is simply not the same thing as a charge in the amount of $0. A robust business solution should distinguish between the concept of *usage* (of recreational facilities) vs. the concept of *charge* (for usage). A *usage* can occur without any corresponding *charge*. The rule says so explicitly. If we think the business person who came up with the rule doesn't understand their business, maybe we should at least ask! Am I 'playing semantics' here? No, why should anyone, including auditors or senior citizens themselves, ever have to review charges of $0 that were not supposed to be charges at all?! To create charges in the amount of $0 might simplify the problem from an IT perspective, but not a business perspective.

2. *Two decisions, not one.* From what I was able to see, all the solutions reduced the problem to a single decision. From a business perspective, however, there are *two* decisions, not one:

   - *Should a person be charged for use of a recreational facility?*
   - *If so, how much should the recreational facility user be charged?*

   The second decision needs to be addressed only if the answer to the first decision is 'yes'. In our approach, *DecisionSpeak*™ (http://www.brsolutions.com/publications/decision-analysis-a-primer/), this kind of dependency is called a *relevance dependency*. Why is the distinction important? For one thing, you want to avoid the trap of false assumptions (e.g., no charge being the same as a $0 charge). Also, you must do everything possible in practice to keep decision logic simple and free of exceptions. Real business problems, unlike this toy example, are *hard*. Rushing into implementations will trip you up.

3. *Behavioral business rule untraceable.* The recreational facility challenge started with a clear business rule, written out as earlier. Since the rule represents a clear, definitive policy for the business, you'll want to trace it. Do I see the statement in any of the solutions, or even anything closely resembling it? No, all I see is rows in decision tables! The policy has been translated into a representational dialect, *decision-table-ese*. Why does it matter? Simply because business friendliness, readability, and traceability matter.

> In each solution presented, a business person will need someone capable of reading *decision-table-ese* to bring the policy back to life. Burying business policies in decision tables might not be as bad as burying them in procedural code, but why should that be the measure(!?).

The Issue of Completeness

James Taylor argued (and some solution providers agreed) that the 'requirements' were "terribly incomplete". Huh?! *Nonsense!*

After (a) specifying the business rule for senior citizens clearly and unambiguously and (b) providing the fee logic for appropriate usage charges, how could a business person be accused of not having supplied all the necessary logic (at least within the scope of this simple challenge)?! Yes, there's a lot about the *process* we don't know (as Nick Broom points out), but none of that matters for getting the business logic correct. Look at it this way. These 'requirements' are adequate to run the business, no matter *what* the process or implementation. *That's* the real test of completeness.

The 'requirements' are incomplete only if you expect business people to speak *decision-table-ese* for all their policies and logic. *Good luck with that!* The real world naturally uses *language* for a great many rules. Don't believe me? Go read any rule book. I'm not making it up.

About the Life of Its Own

Here's the bottom-line answer to the question I raised starting off this summary. How did this challenge manage to take on a life of its own?

The source of this challenge, which Jacob Feldman graciously acknowledged (http://www.brcommunity.com/articles.php?id=b987), was about an altogether different matter than the solutions addressed. The original article pointed out that behavioral business rules (think laws, regulations, contracts, service level agreements, MOUs, etc., etc.) can be broken, and therefore have enforcement level. (Ever get a ticket for speeding?) The recreational facility fee policy was an example of a behavioral business rule.

Ever wonder why decision tables have trouble injecting human discretion and sentiment in real time? It's as simple as this: Their logic is *unbreakable*. It's rigid, and therefore brittle. Not a great fit for significant swathes of real-world business activity, I'm afraid.

To read more see http://www.brcommunity.com/articles.php?id=b990.