The LINKS Supply Chain Management Simulation has been a part of my Fundamentals of Supply Chain Management course for five years at the University of Wisconsin - Madison. Every year in evaluations, I'm told that the LINKS simulation is students’ favorite part of the course. I also ask students for suggestions to improve the simulation experience, and what I've regularly heard is that they would like more levers with which to differentiate themselves in the marketplace, beyond price and operational efficiency/cost.

I didn’t know if this would be possible because only the LINKS Supply Chain Management Simulation [Extended Edition] includes product development decisions. In my case, this version is too advanced and time intensive. I was looking for a hybrid and, after discussion with Randy, he was willing to make it happen. The solution we came up with was a minor tweak that delivered significant benefits to the student experience: allowing limited reconfiguration (product development) decisions for bandwidth and packaging only, with the other set-top box product attributes always remaining fixed at their original values for all firms.

And, in addition, I wanted to have no patent royalties and no reconfiguration costs. While these are critical considerations in any product development decision, I disabled these functions to limit complexity. I want students to focus primarily on the concept of how product strategy (i.e., functional vs. innovative products), drives operational decisions (suppliers, quality, distribution) and market decisions (pricing, demand patterns, service, market share).

A few benefits I observed from the fall semester:
1. When determining strategy, teams can design their products to fit that strategy. For example, are they positioning themselves as the Dell or Apple of the set-top box industry?
2. Allows students to apply concepts about functional vs. innovative products/industries, and the different supply chain design each requires.
3. Requires students to look in more depth at the markets to determine which product-quality “level” and corresponding pricing structure customers wanted.
4. Allows students to incorporate sustainability, and the value consumers are willing to pay for sustainability, in the packaging decision. (The students loved this.)

The enhancements did not require any significant changes in how I managed the simulation, but they enhanced the student experience by making the simulation a bit more robust, comprehensive, and meaningful. Many thanks to Randy and his development team for working with me on this change!