Eliminating Patent Royalties in LINKS?

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At Penn State, I have been using the LINKS Supply Chain Management Simulation [Extended Edition] for four years in the undergraduate capstone course for supply chain majors. I use the extended version because I want students to have the experience of planning for production of a new or reconfigured product lacking specific sales history. I have them launch or reconfigure about two-thirds of the way through the LINKS exercise. There tends to be a big “Aha!” moment when students have to enter those forecasts, as their prior approaches are not well-suited to these new products. Such an experience is fairly typical in most real-world applications involving major new product launches.

This year, I had LINKS set up to turn off all patent royalties. I did this because it seemed as teams launched or reconfigured products, every year some team(s) either launched a product very similar to what had been done before or else were reluctant to launch or reconfigure. I turned off royalties because it seemed that the teams that were conservative in their new configurations often were penalized twice — once because the similar new products did not differ much in sales and again in paying the royalties to their very closely configured competitors. On the flip side, some of the teams who waited to reconfigure got an unexpected and unnecessary windfall in patent royalties paid to them, really for doing nothing. Naturally, I told the students that I had turned off patent royalties so everyone was on equal footing.

I am going to keep patent royalties turned off for future LINKS engagements. Doing so took away one barrier to reconfiguring, and did not reward the teams that did nothing in a given round. This did have one side effect, which actually improved the experience for the class: one team launched a new product that was fairly well-received, and one other team quickly copied it. While in a real-world “patent-protected” environment this might not have happened so quickly, it was interesting for both of these firms to try and estimate how much demand would be as they competed on this specific product. In the compressed time of LINKS, this was a more fruitful discussion rather than why there should be cash flowing firm to firm on a weekly basis. We also see evidence of this in the real world, as for example Apple and Samsung seem to be in constant litigation over similar intellectual property as they compete for any advantage in the marketplace. While such lawsuits take their time to get resolved, the supply chain professionals still have to forecast and deliver right away.