

ISyE 3103 Introduction to Supply Chain Modeling: Logistics

Spring 2006

Case Study: The Bullwhip Effect

Issued: January 17, 2006

Discussion Date: January 19, 2006

Readings:

1. Lee, H. L., Padmanabhan, P. and Whang, S., “The Bullwhip Effect in Supply Chains”, *Sloan Management Review*, volume 38, issue 3 (Spring 97), pp. 93–102, 1997. (See next page for instructions on how this article can be obtained from the Georgia Tech Library web site.)
2. Lee, H. L. and Whang, S., “Sharing Information to Boost the Bottom Line”, http://www.gsb.stanford.edu/research/reports/1999/whang_lee.html, 1999.

Questions:

1. List the causes of the bullwhip effect.
2. List measures that can be taken to reduce the bullwhip effect.
3. Which problems have to be addressed in the sharing of information between parties in the supply chain?
4. Which causes of the bullwhip effect can be corrected by the sharing of information?
5. Which causes of the bullwhip effect might not be corrected by the sharing of information? (Imagine you are a manufacturer, and you receive consumer demand data directly from the retailer. Will this necessarily improve your situation? Why or why not?)
6. How can some of the shortcomings of information sharing alone for correcting the bullwhip effect be dealt with?

How to Get a Copy of the Bullwhip Article Online

We now describe how Georgia Tech students can get an electronic copy of the following article by using the Georgia Tech Library web site.

- Lee, H. L., Padmanabhan, P. and Whang, S., “The Bullwhip Effect in Supply Chains”, *Sloan Management Review*, volume 38, issue 3 (Spring 97), pp. 93–102, 1997.

At some point in the process below you may be requested to log in. You will log in using your gtg number and password. If this does not work you’ll have to ask for assistance getting access to the system at the library.

1. Go to the Georgia Tech Library web site: www.library.gatech.edu
2. Highlight the “Search & Locate” tab at the top of the page, and click on the “Journals” link on the drop down menu.
3. On the Journals page, click on “Browse the electronic journals”.
4. On the Electronic Journals page, under Browse by Journal Title:, click on “S”.
5. A page with many electronic journals that start with “S” opens up. Scroll down and click on “Sloan management review”.
6. A new window opens up with a number of different ways you can get the item. Click on one of the options, for example, “EBSCO Business Source Premier”.
7. Another window opens up. If necessary, enter your prism username and password.
8. A page appears on which you can choose to browse various issues of the journal. Choose the 1997 issues, and then choose “Vol. 38 Issue 3 - Spring97”.
9. Scroll down to article 7, “The Bullwhip Effect in Supply Chains”. Click on either “HTML Full Text” or “PDF Full Text” to access the article.