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- Forman, Chris, Anindya Ghose, and Avi Goldfarb. 2009. "Competition between Local and Electronic Markets: How the Benefit of Buying Online Depends on Where You Live." *Management Science* 55 (1): 47–57.
- Ginsberg, Jeremy, Matthew H. Mohebbi, Rajan S. Patel, Lynnette Brammer, Mark S. Smolinski, and Larry Brilliant. 2009. "Detecting Influenza Epidemics Using Search Engine Query Data." *Nature* 457 (7232): 1012–14.
- Guzmán, Giselle. 2011. "Internet Search Behavior as an Economic Forecasting Tool: The Case of Inflation Expectations." *Journal of Economic & Social Measurement* 36 (3): 119–67.
- Hong, Han, and Matthew Shum. 2006. "Using Price Distributions to Estimate Search Costs." *RAND Journal of Economics* 37 (2): 257–75.
- Hu, Yu (Jeffrey), and Michael D. Smith. 2013. "The Impact of e-Book Distribution on Print Sales: Analysis of a Natural Experiment." Working Paper, Carnegie Mellon University.
- Johnson, Justin. 2013. "The Agency and Wholesale Models in Electronic Content Markets." Working Paper, Cornell University.
- Manley, Laura, and Robert P. Holley. 2012. "History of the e-Book: The Changing Face of Books." *Technical Services Quarterly* 29 (4): 292–311.
- Moraga-González, José Luis, and Matthijs R. Wildenbeest. 2012. "Comparison Sites." In *Handbook of the Digital Economy*, edited by Martin Peitz and Joel Waldfogel, 224–53. Oxford: Oxford University Press.
- Rysman, Marc. 2009. "The Economics of Two-Sided Markets." *Journal of Economic Perspectives* 23 (3): 125–43.
- Stigler, George. 1961. "The Economics of Information." *Journal of Political Economy* 69 (3): 213–25.

Comment Marc Rysman

The book publishing industry has provided one of the most visible and tangible digital transformations of market. Most of the focus has been on the production, distribution, and ownership rights in the context of digital e-books, or on how online booksellers compare to offline booksellers. However, little attention has been paid to how consumers find the books that they ultimately buy. Browsing bookstores, asking store employees for suggestions, and waiting for reviews in your local newspaper has been replaced by online opinions, suggestion engines, and immediate access to an enormous number of outlets that review books. Even in the case where a consumer already knows the book they want and they merely have to locate the book, digitization has important implications. It is much easier to search across a broad set of sellers on the Internet—indeed, shopping websites specifically facilitates this activity. The chapter by Baye, De Los Santos, and Wildenbeest

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fills an important void, providing one of the first looks with detailed data at the nature of the consumer search process for books.

As the authors point out, one of the important contributions of the chapter is outlining the kinds of limitations in data that we can expect as research moves forward on these issues. Their own data collection is impressive, but leaves them asking for more. They use comScore's Search Planner and qSearch databases, which follows the Internet activity of about two million survey participants. They show several interesting facts. Amazon receives 50 percent of its traffic from Google and 20 percent from people directly entering the Amazon URL in their browser. For the traffic from search engines, a large percentage of searches that lead to Amazon and Barnes & Noble websites start with searches for those websites in particular, rather than a search for a book title for which those websites would appear. However, the authors see search terms that are used infrequently that add up to a substantial portion—75 percent—of the traffic from search engines that arrives at Amazon.

While the comScore data covers only 2010–2012, the authors provide a creative method to extend the data back to 2004. Google Trends provides a relative measure of search intensity over this time, which the authors pin down to an absolute level for the 2010–2012 time period using their comScore data. They show a surprising result: search intensity starts high upon the introduction of a new book and then falls off within a few weeks, whereas the Amazon sales rank climbs just as search intensity is dropping off. Thus, the relationship between sales and search is more complicated than one might imagine. Interestingly, searches for books on Google have declined since 2007, while searches that start with the Amazon website have increased. Thus, book search appears to be shifting to book-selling websites such as Amazon, as well as to alternative systems such as the Kindle store.

The chapter identifies several interesting areas for future research such as search from tablets, search within platforms such as amazon.com or from within a Kindle, and also, distinguishing how much search is meant to learn about which book to purchase versus determining the best price for a book that has already been decided upon. I wish to point out several more areas that should prove fruitful. Book search provides a fascinating and complex example of competition between platforms. Amazon.com, barnesandnoble.com and the other bookseller websites constitute platforms in the sense that they match readers to books. Although these websites largely follow a one-sided model in the sense that they purchase books wholesale and then retail the books to consumers, there are still important elements of platform competition in this market. In particular, book publishers sell to multiple venues and make a number of strategic choices along these lines, as the Apple antitrust case makes clear.

An important result in the literature on platform competitions is that competition between platforms is governed by whether agents multihome,

that is, use multiple platforms, or single home. Most books are available on a variety of platforms, but consumer search is unclear. In this light, the result that consumers increasingly search for books within bookseller platforms rather than the broader Google website is particularly interesting. A further question would be whether consumers typically navigate to multiple bookseller sites before making their purchase, or do they go to a single one, which represents true single homing. This has implications for pricing because when a platform has a set of devoted single-homing consumers, it can extract large rents from the firms that want to reach those consumers. In this case, it would take the form of low wholesale prices for books or other terms that are attractive to the website. Can we see a change in these terms as the market moves toward single homing?

One widely acknowledged feature of the Internet is that it facilitates the service of the “long tail.” While much of the focus on the long tail has emphasized the wholesaling cost of low-demand products, it is also easier for consumers with esoteric tastes to search for low-demand products. An implication that these authors may be in a position to study is whether we see a change in the supply of esoteric products. That is, is there an increased provision of goods with relatively low expected market shares in the light of new search and distribution technologies?

Finally, the authors have added to their remarkable data set by collecting prices. This naturally opens up several new avenues for research. For instance, can we sort out the relationship between the level of search and the level of price dispersion? Each one could have a causal effect on the other, and providing empirical analyses of this topic has implications for a wide swath of literature that engages with search behavior.