

E-commerce: Weighing the Impact on Bricks and Mortar

How Changing Retail-Space Demand Will Lead to the Multi-Functional Business Center

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Abstract: *The rapid growth and broadening product range of e-commerce will have a direct effect on the continuing operation of many shopping centers. It will also reduce net demand for future additional retail space. More intense use of existing services, as well as new ones, can absorb much of the expected increase in vacant shopping-center space. This will lead to an evolution of some centers from being pure retail destinations to multi-functional business centers.*

Introduction

Nonstore retail has been a business feature for many years. Catalogues and flyers still generate retail sales as do TV programs such as The Home Shopping Network. The elephant in the room, however, is business-to-consumer e-commerce, which has rapidly overtaken all other forms of nonstore retailing.

The Demand for Retail Space

The demand for retail space is directly related to the amount of money consumers have for retail expenditures, as well as the productivity of retail space. Furthermore, retail space demand can be influenced by purchases on credit, but North American consumers' debt loads are already at an all-time high.¹ Future net increases in total retail space demand will largely depend on population growth and real increases in income. With the latter increases now moderate to nonexistent, this means that the primary driver for additional retail space will be population growth.

Once an item is bought through e-commerce, and delivered from such sources as the manufacturer, wholesaler or Amazon to the home, the consumer has no need to go to the store. If the physical store loses relevancy, it needs less space, or in the worst-case scenario, no space. Many retailers employ e-commerce to improve services to customers by using Internet kiosk

access within the store, matching prices, offering better services and immediate delivery, and many other advantages, including entering new international markets. "Multichannel" and "omnichannel" retailing are the current buzz words. Yet an increasing amount of purchases are made on the Internet, without store involvement.

Initially, Internet sales were limited to a few items such as books, video, travel, banking, and software, but by now there are few items or services that one cannot buy online. While some exceptions continue to exist (e.g., haircuts, drycleaning services, gourmet restaurant meals), their numbers are shrinking.

The consumer can use the Internet to learn about product availability and reliability, research producer reputation, and compare prices. One aspect of comparison shopping, "showrooming"—the practice in which customers examine a product in the store but order it online—is forcing many retailers to match prices, which has a direct effect on survivability.

Some retailers have ceased operations; others are reducing their store numbers or store size. Examples of store-closings announcements in the United States in 2013, partially due to the growth of e-commerce, include Barnes & Noble, closing up to 240 stores out of 689; Best Buy (up to 250 stores out of 1,056 units); Office Depot (up to 150 stores out of 1,114 units); Sears Holdings (up to 125 Sears and 225 Kmart units, out of a total of

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¹ Greg Quinn, "[Canadians Turn Deaf Ear to Carney's Warning as Household Debt Hits Fresh Record at 165%](#)," Bloomberg News, reprinted in *Financial Post*, March 15, 2013; Meg Handley, "[Consumers Still Buried in Credit Card Debt](#)," *U.S. News and World Report*, March 12, 2012, both retrieved June 3, 2013.

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2,118); and Radio Shack (up to 550 units out of a total of 4,412). There are many similar examples.²

A recent article in *The Globe and Mail*, the Toronto-based newspaper, indicated that Staples is planning to downsize almost 40 of its 330 stores in Canada, partially due to the effect of e-commerce. Best Buy Canada is closing 15 of its nearly 230 stores in Canada for the same reason.³ The large stores used to offer the best prices in many retail categories, but now the Internet beats all. Sears Canada continues to report declines in same-store sales (e.g., -5.8 % for Q4 2012 and -2.6% in Q1 2013). Rona, a Canadian home-improvement retailer, is shutting or shrinking several large-format stores, and some retailers, such as Old Navy, are now trying to franchise. Many retailers are considering smaller units that resemble showrooms more than stores. Some established retailers are simply not building as many, if any, new stores as they did in the past. A good example is Marks & Spencer, which announced in May 2013 that it would not build any additional stores in its home territory, the United Kingdom.⁴ The United Kingdom has one of the highest e-commerce penetration rates in the world.⁵

On the positive side, in the United States as well as in Canada, many existing shopping centers are being modernized and upgraded, although few new centers are planned. New retailers are entering some markets, and existing stores demand increased energy efficiency and "greening," requiring new investments in shopping centers. In Canada, Target is opening 124 new stores, replacing a much larger number of Zellers stores that were closed, and Nordstrom is entering the nation by opening four full-line new stores with the potential for eight to 10 full-line stores and 15 to 20 Nordstrom Rack stores.⁶ Retailing in North America is not dead but it surely is changing.

The Retail Service Space Ratio

The retail service ratio expresses the total retail or shopping-center space on a per-capita basis. For the United States, ICSC estimates 2012 total retail space at 53.5 square feet (sf) per capita and shopping-center space at 23.8 sf per capita, or about 45% of total retail space.⁷

In Canada, total retail and related service space ranges between 30 and 50 sf per capita depending on location (e.g., urban vs. rural). Total shopping-center space in the nation amounts to 14.7 sf per capita.⁸

The Size of E-commerce

Total 2012 e-commerce sales in the United States amounted to US\$225.3 billion, about 16% more than 2011. In comparison, total retail sales increased by 5% from 2011 to 2012, including much faster growth in the e-commerce category. E-commerce represented only 2.0% of total unadjusted retail sales for the fourth quarter of 2012 but grew to 6.2% by the end of 2012.⁹

Forrester Research, an American technology and market-research company, projects e-commerce sales in the United States for 2017 at \$370 billion, which would represent about 10% of total retail sales.¹⁰ Although approximately 90% of retail sales will still be in the traditional format, US\$370 billion in sales, at an estimated average productivity of US\$400 per sf (all retail space, not just shopping centers), is equivalent to 925 million sf of bricks-and-mortar selling space that either may no longer be necessary or may need to be re-deployed with other products or services, assuming no dramatic demand change (from income, population, market share, etc.).

Due to the uncertain definition of e-commerce in Canada, currently available sales statistics for that measure are considered "soft" numbers that should be viewed with caution.¹¹ Nevertheless, they can serve to illustrate the magnitude of the likely future impact.

² Douglas A. McIntyre, Samuel Weigley, Alexander E.M. Hess and Michael B. Sauter, "[Retailers That Will Close the Most Stores](#)," *USA Today*, February 3, 2013, retrieved June 3, 2013.

³ Marina Strauss, "[Staples Looks to Downsize 39 Stores](#)," *The Globe and Mail*, April 10, 2013, retrieved June 3, 2013.

⁴ Sean Poulter and Rupert Steiner, "[M&S Gives Up on Building New Stores: Retailer Will Stop Construction in Three Years As Customers Increasingly Buy Goods Online](#)," *The Daily Mail*, May 21, 2013, retrieved June 3, 2013.

⁵ Forrester Research, *Online Retail Forecast, 2012 to 2017*, March 13, 2013.

⁶ Nordstrom, *Annual Report 2012*. Seattle, Wash.: Nordstrom, 2013. *Nordstrom: Investor Relations, SEC Filings, Form 10K*. 2013. March 18, 2013, retrieved June 3, 2013.

⁷ International Council of Shopping Centers, *eData*, "United States Country Fact Sheet," retrieved June 13, 2013. GLA estimates: Copyright CoStar Realty Information, Inc.

⁸ International Council of Shopping Centers, *eData*, "Canada Country Fact Sheet," retrieved June 13, 2013. GLA estimates: Ivanhoe Cambridge and International Council of Shopping Centers.

⁹ *Annual Revision of Monthly Retail and Food Services: Sales and Inventories—January 1992 Through April 2013: E-Commerce Time Series available in Excel Format: Not Adjusted Sales*, retrieved June 4, 2013.

¹⁰ Mashable.com, "Forrester U.S. e-Commerce Forecast 2017," March 12, 2013.

¹¹ See, for instance, Statistics Canada, "[Retail Non-Store Survey](#)," record 2448, retrieved June 12, 2013, for a description of "Internet retailing activities."

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Canadian e-commerce sales were estimated at about CA\$15.1 billion for 2009 and \$21.5 billion for 2012, and are projected at about \$30.9 billion by 2015.¹² As in the United States, e-commerce sales in Canada have been growing three to four times faster than total retail sales. The 2015 estimated e-commerce sales in Canada is equivalent to approximately 62 million sf (roughly CA\$500 per sf) of bricks-and-mortar selling-space sales substitution that is being met online.

Retail Planning Needs to Recognize the Effect of E-commerce

What does it mean? E-commerce will play an increasingly more important part in the distribution of retail goods. It will not replace existing “fortress malls”¹³ but will likely increasingly impact “B” and “C” class centers. It will also play a more significant part in the planning for future retail space. There will be new retail developments, but the net decline in total physical space will be felt in older retail areas, creating opportunities for redevelopment.

Although wide variations may exist between urban and rural areas, the typical Canadian service ratio of retail and related service space—about 40 sf per capita—can be used for illustrative purposes.

A study by Ryerson University estimated that in Toronto, in 2010, “virtual” space, representing physical retail space made redundant by the Internet, totaled approximately 4.6 million sf, or roughly one sf per capita.¹⁴ E-commerce currently accounts for 1.5 to 2.0 sf per capita of the established retail service ratio. Based on the much more rapid growth in e-commerce compared to traditional retail, this is projected to grow to 4.0 to 5.0 sf per capita within the next decade.

The following example illustrates the potential impact of e-commerce on bricks-and-mortar space. Assume a market of 1 million people which is increasing its population at 1% per year. At the normal service ratio of

40.0 sf per capita, the initial total demand would be 40.0 million sf, growing by 4.0 million sf in 10 years (100,000 people increase multiplied by 40 sf per capita) for a total of 44.0 million sf.

If the service ratio declines by only 2 sf per capita during these 10 years, then the total retail space required at the end of the period is only 41.8 million sf, rather than 44.0 million. (1.1 million people times 38 sf per capita). This means that instead of requiring a net additional 4.0 million sf of new space over this 10-year interval, only 1.8 million sf is warranted. This is less than 50% of the total amount of retail space that would have been required under the standard formula of 40 sf per capita ratio. If the retail service ratio declines by more than 2 sf per capita over the next 10 years—say, by a highly probable 4 sf per capita—then the net new space demand equals zero.

The future reduction in retail space demand will create significant new vacancies in existing centers. Much of this vacant shopping center space can be absorbed through the addition of services benefiting by free parking, such as medical/dental, health and fitness, educational, government and institutional facilities. More eating and drinking establishments, small offices serving local needs, financial institutions, libraries, art galleries/museums and other exhibits are also potential uses. Numerous shopping centers will be evolving into multi-functional business centers. Nevertheless, many, if not most, of the service tenants will be paying lower rents than traditional retailers. This will impact financial performance.

For individual developers of prime sites and owners of fortress centers, e-commerce may be no more than a small annoyance at this time. No doubt, newly developing urban areas and subdivisions will require new retail space, as will retailers new to the market. However, the impact on total retail space demand created by e-commerce can no longer be ignored. Moreover, government agencies that plan for retail space 20 or 30 years into the future must take this factor into consideration.

¹² Statistics Canada, “[The Daily: E-commerce: Shopping on the Internet](#),” September 27, 2010, retrieved June 4, 2013.

¹³ These are large centers in superior locations, in trade areas with barriers considered impervious to entry. See Jones Lang LaSalle, “[The Changing Face of Regional Malls](#)” (Special Supplement to *Retail Traffic*), June 2006, p. 2, retrieved June 3, 2013.

¹⁴ Maurice Yeates with Paul Du and Tansel Erguden, “Charting the GTA,” *Research Report 2011-06*. Toronto: Centre for the Study of Commercial Activity, Ryerson University, 2011.



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