

A walk through “webonomics”

Doing business on the Internet offer the companies to take advantage of multitudes of advantages:

Data can be exploited far more readily on the Internet than in the real world (see figure 33).

Everything can be recorded and this can produce a formidable array of data that makes possible both one-to-one marketing – direct sales pitches at particular individuals – and “mass customization”- changing product specifications, to match individual orders to the individual customer’s preference.

One of the obvious gains is cutting out shop front costs and intermediaries

Price comparisons become far easier.

That suggests

that the

Internet can

be a strong

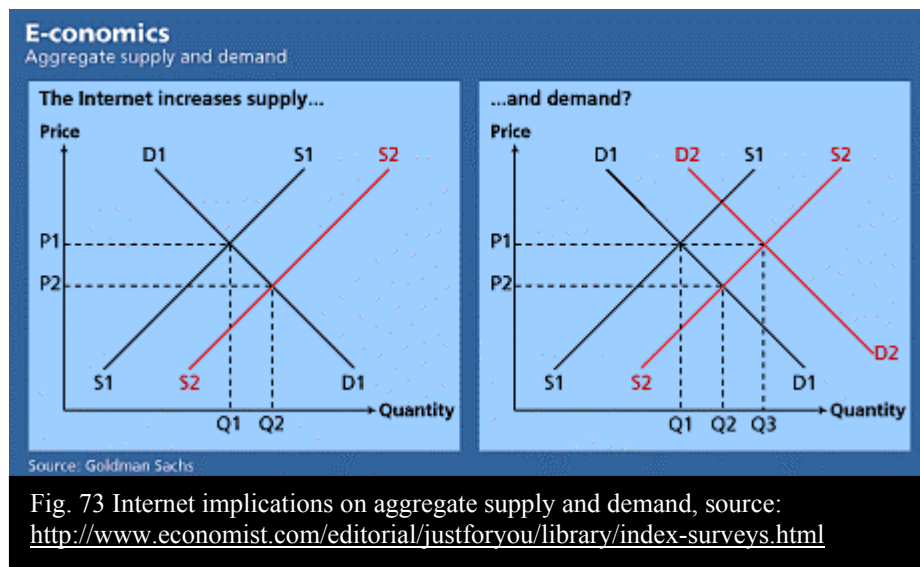
price-

deflation

mechanism:

raising the

prices is harder when he customers instantly compare them with everyone else’s.



Economist (2000) suggests “that the Internet may push down the inflation in the short run, and in the longer run it will bust growth. Internet affects both the aggregate supply and demand.

“The Internet is an exponentially greater threat to major brands and prices”(Sinha, 2000):

- Internet technology erodes the “risk premium” that sellers have been able to exact from wary buyers
- Buyer-led pricing and reverse auctions allow consumers to see the “price-floor” more easily than they can with traditional methods
- Internet encouraging highly rational shopping

Economies of scale and scope (see figure 32) are also easier to obtain online than offline. A single website can be used to cover the globe. It is far easier for a website that is successful at selling one product to branch into others. And the web allows things like customer aggregation and auctions to be done in ways that are impossible in the physical world.

Source: [MBA dissertation – Aurel Voiculescu MBA](#)

Fallacies of Electronic Commerce fulfillment

We're selling over the Web, so we must be making money over the Web.(see figure 50)

Because most companies fail to capture the true costs of fulfillment, many delude themselves into thinking their Web commerce transactions are profitable. To understand the financial impact of Web commerce, companies must capture the additional back-end costs they may be incurring because of poor processes. These may include the cost of manually inputting Web orders into traditional order management systems, back-order costs (particularly if multiple shipments are sent to fulfill a single order), cost of handling increased call center volume due to fulfillment problems, cost of handling Web returns, and added warehouse labor and inventory carrying costs.

Action point: Companies must have a cost monitoring system in place for the web activities.

Our differentiation on the Web will come from our front-end processes. (see figure 54)

A front-end Web site is often the easiest and least differentiating section of an effective Web strategy. Posting product information on a Web site and taking electronic orders are activities almost any competitor can duplicate. E-commerce leaders are now looking to differentiate themselves through relationships with suppliers and optimizing the physical flow of goods - creating improved margins and better customer service. Companies that wish to sell mass customized goods over the Web often must make fundamental changes to their procurement, manufacturing and distribution processes. These changes are less

easily imitated by competitors and thus translate into more-sustainable competitive advantage. E-commerce leaders are also creating real-time visibility to inventory, capacity and transportation availability and are translating this into accurate order status and delivery date information for customers. Pioneers will take this a step further and create dynamic pricing; promotions and product mix optimization (e.g., Web cross-selling) based on real-time supply and demand data.

Action point: Companies must seek to differentiate Web commerce activities through providing guaranteed delivery, mass customization and online order status information.

Our logistics operations can handle Web commerce fulfillment. (See figure 51)

Companies with highly automated warehouses optimized for shipping full pallets in truckloads to wholesalers and retailers will find that their operations are ill-suited to picking and packing the much smaller orders typically purchased over the Web and shipping these by small parcel. Companies can choose either to outsource Web commerce fulfillment to third-party logistics providers or to restructure their internal warehouse operations and systems (e.g., adding a small parcel transportation management system and reconfiguring their warehouse to support picking and packing of small order quantities). Companies with multiple warehouses must decide whether to reconfigure all their warehouses to support this activity or whether they should designate one warehouse as the Web commerce fulfillment center. Companies with seasonal spikes or frequent product shortages will also need to set clear business rules about how to

prioritize existing channel relationships vs. Web orders or risk damaging both relationships. An efficient process will also need to be set up for handling returned goods. *Action point: Companies must conduct an audit of physical processes and map out short- and long-range plans to handle the impact of Web commerce, accounting for rising Web commerce volume.*

Our existing supplier relations will support Web commerce. (See figure 52)

For retailers in particular, Web commerce will require a dramatic change in mindset toward suppliers. In the brick-and-mortar store world, retailers often squeeze suppliers and maintain adversarial relationships. In the Web commerce world, retailers must create a partnership with manufacturers to enable efficient fulfillment and to discourage manufacturers from selling direct, disintermediating the retailer. Retailers setting up a Web storefront must determine the optimal fulfillment strategy, and this may include having suppliers fulfill certain items (e.g., those with high transportation costs, high product value or sporadic demand) directly rather than fulfill them from a retail warehouse.

Action point: Companies must rethink their relationships with suppliers and sourcing and fulfillment strategies using network and capacity planning tools to determine the costs of different fulfillment scenarios and build a cost-optimized physical network to support Web commerce.

Company's order management system can handle e-commerce.

Many order management systems are designed to support a small number of pre-defined customers. Selling over the Web requires these systems to be revamped to support transactions (including credit checks and billing) from vast numbers of previously unknown customers. Effective Web commerce also requires sharing internal information with customers. Web customers no longer find it acceptable for their orders to disappear into a black hole. They want Web access to information on product availability, delivery dates, and order status information; they want the ability to see past-order history, and they want to make incremental changes to the order up until time of shipment.

Action point: Companies must plan to extend the capabilities of their order management system, especially in the area of Web self-service. Also, conduct benchmarking tests to ensure that the system can handle the higher transaction volumes found with Web commerce.

We can now sell effectively to anyone around the globe. (See figure 53)

Most companies are excited about the increased global presence Web commerce will provide, while overlooking the fact that they have become de facto exporters. Companies' back-end systems are often ill equipped to handle international trade deals. Companies that overlook the complexities inherent in shipping internationally will alienate customers by giving them unreliable information about lead times and total shipment costs, including import customs and excise duties. Furthermore, these companies are exposing

themselves to increased risk of violating export compliance laws, resulting in fines and negative publicity.

Action point: Examine export policies and processes to determine the overall level of exposure. External factors (i.e. government policies, differences in culture) must be taken into consideration, when the companies take the decision to export through the e-commerce application.

Source: [MBA dissertation – Aurel Voiculescu MBA](#)

Internet as a “disruptive technology” for the traditional firms

Christensen (1997) describes the Internet as a “disruptive technology which overturns a traditional business model, which makes it harder for an establish firm, with its own cultural inertia, to embrace.”

Amongst the reasons why the traditional companies do not embrace e-commerce are as follow:

Fear of cannibalization.

A new distribution channel is vulnerable to the charge that it is not creating a new market or extra sales but merely siphoning off existing sales from other channels.

Partly because of fear of cannibalization, a legacy **firm moving on to the web risks “channel conflict”**. Existing sales forces and intermediaries will fight hard against a new distribution channel that seems to threaten their business.

The high valuations placed on Internet shares have also caused problems over both pay and acquisitions.

Offline companies might be expected to have an advantage in distribution, **but their distribution systems tend to be of the wrong sort**, geared to shifting pallets of goods from large warehouses to store shelves. Selling over the web requires a completely different warehouse-cum-truck system that can deal with delivery of a single package to an individual household.

Thanks to their brands and their customer base, established firms may indeed be able to spend less than pure plays on marketing. But **their information about customers also turns out to be of the wrong sort.**

Lastly, the economics of the Internet seems to offer a powerful **first-mover advantage.**

An e-commerce operation on the web can be scaled up at low cost in a way that its physical equivalent cannot.

Source: [MBA dissertation – Aurel Voiculescu MBA](#)

E-commerce implications: emergent forces

There is no doubt that surviving the e-business revolution will require a critical transformation of the existing “brick and mortar” business mentality. The emergent forces for the e-commerce environment are as follow:

For many retail products, Internet-based software agents called "shop bots" will search for products, compare prices, conduct transactions, and arrange for delivery-all based on instructions that consumers provide them. Aggressive price competition will transfer net benefits from many producers to consumers; yet branding and advertising will still have roles to play in the process.

Certain types of products will "morph" into digital bits in order to be transported from producer to consumer. These products will adapt their form so they can be delivered over the Internet in order to minimize transactions and transportation costs.

Internet transactions will alter the traditional form of money as security and privacy solutions allow for extensive use of digital cash; shop-bots as well as humans will begin to use "electronic" wallets to complete their purchases.

The desire for security, "seals of approval" and privacy will lead to markets for "trust." This function will address the needs of both buyers and sellers of services in a world where human interaction in the transaction process is reduced.

Governments will revise the taxation of transactions to deal with the inadequacy of traditional assessment and collection methods as companies and markets seek to use cyberspace to save money.

Source: [MBA dissertation – Aurel Voiculescu MBA](#)

Conclusions

The findings of my dissertation demonstrate that electronic commerce is shaping the way in which business of the future will be transacted. Although e-commerce is relatively recent phenomenon, those companies that are seizing the opportunities it offers will reinforce their market position.

“Given the general recognition of the role of electronic commerce in overcoming national, geographical and temporal boundaries to trade, it is now clear that companies that wish to be at the front of global competition in their particular markets cannot afford to ignore electronic commerce any longer” (KPMG Consulting, 1998)

Source: [MBA dissertation – Aurel Voiculescu MBA](#)

Bibliography/ References:

Alvin Toffler, Future Shock, Bantam Books, 1991

AOL/ Roper Starch Cyberstudy, 1999, Internet Research, source:
<http://www.corp.aol.com/press/study/cyberstudy.pdf>

Blair, T., 1999, e-commerce@its.best.uk, source: <http://www.cabinet-office.gov.uk/innovation/1999/ecommerce/>

Business Pages Midlands 2000/2001, Business Pages Publication

Cabinet Office Report, 1999, E-commerce@its.best.uk, source: <http://www.cabinet-office.gov.uk/innovation/1999/ecommerce/>

Chatterjee, Hoffman and Novak, 1998, Modeling the clickstream: Implications for Web-Based Advertising Efforts, source: <http://ecommerce.vanderbilt.edu/papers/clickstream/clickstream.html>

Chatterjee, Patrali and Anand Narasimhan (1994), "The Web as a Distribution Channel," Owen Doctoral Seminar Paper. Source: http://colette.ogsm.vanderbilt.edu/seminar/patrali_anand_final/first.htm

Christensen, C., The innovator dilemma, Harvard Business Press, 1997

Cisco, White Paper, 1998, The new economy is the Internet economy, source:
http://www.cisco.com/warp/public/750/johnchambers/internet_economy/white_paper.pdf

Colony, G.F., Forrester Research 1998, Press releases, source:
<http://www.forrester.com/ER/Press/Release/0,1769,114,FF.html>

Cutler, B. (1990), "The Fifth Medium," *American Demographics*, 12(6), pp. 24-29.

Darby, I., 1999, Banks face their on-line challengers, *Marketing*, March edition, Haymarket Publishing Ltd, p.17

Diaz, M., Hoffmann, G.D., Muron, O., 1999, Interim report of an Advisory Group, The future of the Internet – What role for Europe?, source: <http://www.cordis.eu/esprit/src/i2eurepo.htm>

DTI, 1998, Net Benefit: The electronic agenda for the UK, source:
<http://www.dti.gov.uk/cii/netbenefithigh.pdf>

Edwards, A. and Talbot, R., A research handbook for the caring professions, The Hard-pressed researcher, pp.97-138, Longman Publishing, New York, 1994

EITO, 1997, European Information Technology Observatory 1997, Frankfurt

European Commission, 1997, A European Initiative in Electronic Commerce, source:
<http://www.ispo.cec.be/ecommerce>

Forester Research, 1999, source: The Economist, Survey: Business and the Internet, The Net imperative, 26th of June 1999 edition, <http://www.economist.com/editorial/justforyou/library/index-surveys.html>

- Gates, B., 1996, Get on-line to get ahead, *The Banker*, v146 n839, Business Enterprises, p12
- Glazer, Rashi (1991), "Marketing in an Information-Intensive Environment: Strategic Implications of Knowledge as an Asset," *Journal of Marketing*, 55(October), pp. 1-19.
- GVU WWW User Surveys, 1998, GVU's 8th WWW User Survey, source: http://www.cc.gatech.edu/gvu/user_surveys
- Hafner, Katie and Matthew Lyon (1996), *When Wizards Stay Up Late: The Origins of the Internet*. Simon & Shuster.
- Jankowicz, A., D., 1991, *Business Research Projects for students*, Chapman & Hall, pp.137-257
- Kalakota, R. and Whinston, A.B., *Electronic Commerce – A Manager's Guide*, pp.7-28, Addison Wesley Longman, 1997
- Kosiur, D., 1997, *Understanding Electronic Commerce, How online transactions can grow your business*, Microsoft Press, Washington
- KPMG Consulting, *Electronic Commerce – Research Report 1998*, source: <http://www.kpmg.co.uk/uk/services/manage/pubs>
- Lessig, L., 1999, *Code and Other Laws of Cyberspace*, Basic Books
- Licklider, J.C.R. (1988), "Some Reflections on Early History," in *A History of Personal Workstations*, Adele Goldberg (Ed.). New York
- Meeker, M., *The Internet Advertising Report*, Morgan Stanley, 1997
- Microsoft's Electronic Commerce Strategy, source: <http://www.microsoft.com/DigitalNervousSystem/ecommerce/CommerceWP.doc>
- Miya, Eugene (1990), "Re: Internet: The Origins," alt.folklore.computers, comp.misc, USENET News, October 16.
- Mohr, Jakki and John R. Nevin (1990), "Communication Strategies in Marketing Channels: A Theoretical Perspective," *Journal of Marketing*, 54(October), pp. 36-51.
- NUA Survey July 1999, source <http://www.nua.ie/surveys>
- OECD, 1997, *Electronic commerce, Opportunities and challenges for governments*, Paris 1997
- Roberts, Larry (1988), "The ARPANET and Computer Networks," in *A History of Personal Workstations*, Adele Goldberg (Ed.). NY.
- Seitz, J. and Stickel, E., 1999, *Internet Banking*, <http://www.arraydev.com/commerce/JIBC>
- Seybold, P.B., 1998, *Customers.Com, How to create a profitable business strategy for the Internet and beyond*, pp.65-340, The Patricia Seybold Group, 1998
- Shapiro, A., L., 2000, *The Control Revolution*, Public Affairs,
- Sinha, I., *Cost transparency: The Net's real threat to prices and brands*, Harvard Business Review, March-April 2000, pp.43-53

The Economist, 1997, Electronic commerce: In search for the perfect market, Economist Newspaper Limited, London, 10th of May 1997

The Economist, 1999, Survey E-commerce, First America then the world, source:
<http://www.economist.com/editorial/justforyou/current/index-survey.html>

The Economist, 1st of April 2000, Business special: A thinker's guide – Internet economics, source:
<http://www.economist.com/editorial/justforyou/library/index-surveys.html>

The Economist, 2000, Survey E-commerce, In the great web bazaar, source:
http://www.economist.com/editorial/justforyou/library/index_foci.html

The Economist, 26th of June edition, Survey: Business and the Internet, You will never walk alone, source:
<http://www.economist.com/editorial/justforyou/library/index-surveys.html>

The Economist, Economics Focus: Competition and the Internet, Frictions in cyberspace, 20th of November 1999, source: http://www.economist.com/editorial/justforyou/library/index_foci.html

The Economist, Finance and Economics, Europe's economic prospects: Wo Ist Goldilocks?, 8th of February edition 2000, source: <http://www.economist.com/editorial/justforyou/current/index-survey.html>

The Economist, Should the net be regulated?, The Internet: Founding myths, 17th of June 2000 edition, source: http://www.economist.com/editorial/justforyou/library/index_foci.html

The Economist, The next revolution: Government and the Internet, 24th of June 2000, source:
http://www.economist.com/editorial/justforyou/library/index_foci.html

The White House, July 1997, A Framework for Global Electronic Commerce, source:
<http://www.ecommerce.gov/framework.htm>

U.S. Government Working Group on Electronic Commerce, Towards Digital equality, Second Annual Report, 1999, source: <http://www.ecommerce.gov>

Vernon, M., Survey - electronic business: cherry pickers move online, *Financial Times*, 24th of March edition 1999

Wang, Huaqing, Lee, Matthew K.O., and Wang, Chen. "Consumer Privacy Concerns About Internet Marketing," *Communications of the ACM*, March 1998, Volume 41, Number 3, pp. 63-70.

Wilson, B., 1996, The Internet, the Web and community banking, www.banking.com/

Woolley, S., 1998, Virtual Banker, *Forbes*, June edition, v161, n12, pp.127-29

Young, K., 1999, Commercial break, *the Banker*, March edition, Business Enterprises, pp.72-3

Source: [MBA dissertation – Aurel Voiculescu MBA](#)