

EXAM ELECTRONIC COMMERCE (192320501) April 14, 2011

Instructions: This is an open book exam – it is allowed to consult any reading material provided by the teachers. Be sure to switch mobile phones off and store them in a closed bag. Be sure to indicate name, program and student number on each sheet. Grade for the exam is Round (Sum of Points / 10). Concise yet complete answers are better than long-winded answers. Success!!

Question 1 (35 points)

To answer the questions use Papazoglou and Ribbers (2006) and/or the corresponding slides of the lecture.

About Amazon:

Amazon.com, Inc. is an American electronic commerce (e-commerce) company in Seattle, Washington. Amazon was one of the first major companies to sell goods by Internet, and was an iconic "stock in which to invest" of the late 1990s dot-com bubble. After the collapse, the public became sceptical about Amazon's business model, yet, it turned an annual profit in 2003.

Jeff Bezos founded Amazon.com, Inc. in 1994, and launched it online in 1995. Amazon.com started as an on-line bookstore, but soon diversified to product lines of VHS, DVD, music CDs, MP3 format, computer software, video games, electronics, apparel, furniture, food, toys, etc. Amazon has established separate websites in Canada, the United Kingdom, Germany, France, China, and Japan. It also provides global shipping to certain countries for some of its products.

The company began as an online bookstore named "Cadabra.com", a name quickly abandoned for sounding like "cadaver". While the largest brick-and-mortar bookstores and mail-order catalogs for books might offer 200,000 titles, an on-line bookstore could offer more. Bezos renamed the company "Amazon" after the world's biggest river.

Amazon's initial business plan was unusual: the company did not expect a profit for four to five years; the strategy was effective. Amazon grew steadily in the late 1990s while other Internet companies grew blindingly fast. Amazon's "slow" growth provoked stockholder complaints: that the company was not reaching profitability fast enough. When the dot-com bubble burst, and many e-companies went out of business, Amazon persevered, and, finally, turned its first profit in the fourth quarter of 2002: U.S. \$5 million, just 1¢ a share, on revenues of more than U.S. \$1 billion, but the profit was symbolically important.

Merchant partnerships

The Web sites of Borders (borders.com, borders.co.uk), Waldenbooks (waldenbooks.com), Virgin Megastores (virginmega.com), and CDNOW (cdnow.com) are powered and hosted by Amazon. Until June 30, 2006, typing ToysRUs.com into a browser would similarly bring up Amazon.com's Toys & Games tab; however, this relationship was terminated as a result of a lawsuit.

Amazon.com powers and operates retail web sites for Target, the NBA (partnership terminated in 2007), Sears Canada, Sears UK, Benefit Cosmetics (US and UK), Bebe Stores, Timex Corporation, Marks & Spencer, Mothercare, Lacoste and Bombay Company (now defunct). For a growing number of enterprise clients, Amazon provides a unified multichannel platform from whence a customer can interchangeably interact with the retail website, standalone in-store terminals, and phone-based customer service agents. Amazon Web Services also powers AOL's Shop@AOL.

Product lines

Amazon has steadily branched into retail sales of music CDs, videotapes and DVDs, software, consumer electronics, kitchen items, tools, lawn and garden items, toys & games, baby products, apparel, sporting goods, gourmet food, jewellery, watches, health and personal-care items, beauty products, musical instruments, industrial & scientific supplies, groceries, and more.

The company launched Amazon.com Auctions, its own Web auctions service, in March 1999. However it failed to chip away at industry pioneer eBay's juggernaut growth. Amazon Auctions was followed by the launch of a fixed-price marketplace business called zShops in September 1999, and a failed Sotheby's/Amazon partnership called sothebys.amazon.com in November.

Amazon no longer mentions either Auctions or zShops on its main pages and the help page for sellers now only mentions the Marketplace. Old links to zShop now simply redirect to the Amazon home page, while old links to Auctions take users to a transactions history page. New product listings are no longer possible for either service.

Although zShops failed to live up to its expectations, it laid the groundwork for the hugely successful Amazon Marketplace service launched in 2001 that let customers sell used books, CDs, DVDs, and other products alongside new items. Today, Amazon Marketplace's main rival is eBay's Half.com service.

Review and Recommendation Feature

Amazon.com is known for its candid reviews and its capabilities for recommending products to its customers. The customer reviews are monitored for all negative or indecent comments that are directed at anything, or anyone, but the product itself. In regards to the reviews lacking relative restrictions, Robert Spector who is the author of the book Amazon.com, describes how "when publishers and authors asked Bezos why Amazon.com would publish negative reviews, he defended the practice by claiming that Amazon.com was 'taking a different approach...we want to make every book available - the good, the bad, and the ugly...to let truth loose'" (Spector 132).

Website

The domain amazon.com attracted at least 615 million visitors annually by 2008 according to a Compete.com survey. A popular feature of Amazon is the ability for users to submit reviews to the web page of each product. As part of their review, users must rate the product on a rating scale from one to five stars. Such rating scales provide a basic idea of the popularity and dependability of a product.

The review feature is an important and highly influential function for customers and one of the main reasons for amazon.com's success at selling books. As with book reviews anywhere, the buyer must beware that all reviewers have bias. Under normal circumstances, reviews give the reader at least a modest basis for evaluating a given book.

Because it is an open forum, the reader can benefit from a variety of perspectives. However, the anonymity of web reviewers increases the chances of abuse in the form of self-praise, praise from friends, or malicious criticism. This situation was confirmed in 2004 when the origin of reviews was accidentally made public on an amazon site, and some authors openly confirmed their glowing reviews of their own books.

Search Inside the Book is a feature which allows customers to search for keywords in the full text of many books in the catalogue. The feature started with 120,000 titles (or 33 million pages of text) on October 23, 2003. There are currently about 250,000 books in the program. Amazon has cooperated with around 130 publishers to allow users to perform these searches.

To avoid copyright violations, Amazon.com does not return the computer-readable text of the book but rather a picture of the matching page, disables printing, and puts limits on the number of pages in a book a single user can access. One author observed that his entire book could be read online by searching a few words. Amazon is planning to launch Search Inside the Book internationally. Additionally, customers can purchase access to the entire book online via the Amazon Upgrade program, although the selection of books eligible for this service is currently limited.

According to information in Amazon.com discussion forums, Amazon derives about 40% of its sales from affiliates whom they call "Associates", and third party sellers who list and sell products on the Amazon website(s).

An Associate is an independent seller or business that receives a commission for referring customers to the Amazon.com site. Associates do this by placing links on their websites to the Amazon homepage or to specific products. If a referral results in a sale, the Associate receives a commission from Amazon. Worldwide, Amazon has "over 900,000 members" in its affiliate programs. Associates can access the Amazon catalogue directly on their websites by using the Amazon Web Services (AWS) XML service.

Amazon was one of the first online businesses to set up an affiliate marketing program. AStore is a new affiliate product that allows Associates to embed a subset of Amazon products within, or linked to/ from, another website.

Amazon reported over 1.3 million sellers sold products through Amazon's worldwide web sites in 2007. Selling on Amazon has become more popular as Amazon expanded into a variety of categories beyond media, and built a variety of features to support volume selling. Unlike eBay/Paypal, Amazon sellers do not have to maintain separate payment accounts - all payments and payment security are handled by Amazon itself.

According to the Internet audience measurement website Compete.com, Amazon attracts approximately 50 million U.S. consumers to its website on a monthly basis.¹

¹ Based on Wikipedia

Questions (35 points):

- 1.1 Based on Porter's Five Forces Model, analyze the industry profitability of the online book retailing sector. *(10 points)*
- 1.2 Why does Amazon, as an intermediary, exist at all? Explain from a theoretical perspective. Describe the value adding services of Amazon. *(10 points)*
- 1.3 What are the competitive advantages of Amazon? Discuss critically if they are economies of scale, economies of scope, or network effects present. Explain. *(10 points)*
- 1.4 What kind of problems do the buyers of Amazon face in regard to asymmetric information of quality? How did Amazon mitigate these problems? Explain and give examples. *(5 points)*

Question 2 (10 points)

- 2 What are the possible purposes of creating a prototype? Discuss the pro and contra arguments for doing a paper prototype (behaves-like) vs. a working prototype (works-like).

Question 3 (22 points)

3.1 In this course, we referred to the statement *"In some situations, acquiring free customers in the early stages of a business is crucial"*.

Give an example of an e-commerce site for which this statement holds. Explain how you conclude that this statement holds in your example. (4 points)

3.2 Which of the following can be considered as a value object:

f1: the number of your order when you buy a book from amazon.com?

f2: the book itself?

f3: the bill you receive from Amazon.com?

f4: the convenience to order online?

f5: the option to get a free-of-charge delivery if you buy books for more than 40 dollars?

f6: the credit card number you use on amazon.com?

Motivate your answer. (5 points).

3.3 Assume that Amazon.com gives money to the Red Cross charity organization. What is the reciprocal value object Amazon.com obtains? (3 points)

3.4 Suppose a reader writes a review of a book on Amazon.com and then rates the book. Identify two actors for whom this review is a value object. Motivate your answer. (2 points)
Hint: Use the text in the Amazon case study.

3.5. Suppose two actors in an e-3-value model are part of a partnership. Is it possible that the partnership owns the two actors? Explain your answer by using an example. (4 points)

3.6. The National Tax Office provides a **free** online service to the country's residents to file their annual income tax declarations. For residents, this is a convenience. What is the reciprocal value object the government (the Tax Office) obtains? (4 points)

Question 4 (12 points)

4.1. Consider the description below. Make an e3-value model that presents this situation (7 points).

Amazon spent ten years and \$2 billion developing a world-class technology and content platform that powers Amazon web sites for millions of customers. Developers are now excited to learn that there is a separate technology arm of the company, known as Amazon Web Services (or AWS). Using AWS, developers can build software applications leveraging the same robust, scalable, and reliable technology that powers Amazon's retail business. AWS has now launched eleven services with open Application Programming Interface (APIs) for developers to build applications. Amazon says, over 200,000 developers from companies in 12 business sectors have registered on Amazon's developer site to create applications based on these services. Developers pay only for what they use. There is no minimum fee, and no start-up cost.

4.2 Amazon Web Services (AWS) provides discussion forums for software developers. They can post their questions and their feedback to these forums. This is to help accelerate their development efforts and to engage with the AWS community. A forum is an example of value co-creation. Explain how value is co-created in this case. (5 points)

Question 5 (21 points)

5.1 Consider the following situation:

In 2007, Amazon introduced the Kindle, an electronic book reader (see Figure 5.A.). It's a small device which lets you carry hundreds of books, search, or jump to any spot in the text and bump up the type size when your eyes get tired. People who bought the Kindle e-reader have direct access to the Kindle Store on your Kindle through the built-in *Whispernet* feature. This allows customers to purchase their Kindle books, newspapers, magazines, and blogs directly from their Kindle e-readers by using Amazon 1-Click. Currently, Amazon has contracts for content provisioning with 16 book-publishing houses, with the top 20 biggest newspapers in USA, and with the 20 most frequently read business and hobby-related magazines.

Figure 5.A.



Make an e-3value diagram to present the actors and the value exchanges in the revenue-sharing model which Amazon uses for the Kindle line of its business. Write any assumption you make. (9 points)

5.2. Consider the following fragment of business news in Business Week, published in 2009.

Amazon and Facebook are doing some technological partnering to bring you a new layer in product recommendations. Now Amazon users will be able to link their Facebook account to their Amazon account. At the outset, this will allow Amazon to show you recommendations based on your Facebook interests and activity. This integration will also help you figure out what kinds of gifts your friends might like by letting you better search for your Facebook friends' Amazon Wish Lists and by pulling in information from your friends' profiles. Of course, it will remind you of Facebook friends' birthdays, too. It will show you interests you have in common with your friends, and it will show you which items are popular with all the people in your social graph.

Draw an e-3 value model, which presents the revenue-sharing model of Facebook and Amazon, and which reflects the information in the news. Motivate your modeling choices. When writing the motivation, please use maximum of two sentences per choice. (7 points)

5.3. In the paper "Which form of collaboration is right for you?" by Pisano and Verganty, the authors present four basic modes of collaboration: elite circle, innovation mall, innovation community and consortium. Which of these four modes will work best for the collaboration of Facebook and Amazon? Motivate your answer. (5 points)

