

# AMAZON KINDLE

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# 1 Introduction

While the concept of e-books dates back to at least the 1970's, the industry has only begun to develop since the late 1990's and is still in its infant years.[1] As of today, there are only a handful of e-book readers available for consumers. Early entrants include Sony, Jinke Electronics, iRex, and numerous other smaller companies, but none of the companies have yet to establish a solid reputation. In November 2007, Amazon.com entered the e-book reader market with the Kindle. Amazon originally priced the Kindle at \$399 and it sold out within hours of its release. The device remained out-of-stock until April 21, 2008. It reads the proprietary Kindle (AZW) format and like its closest competitors, Kindle uses an electronic paper display which consumes little energy and gives the user the illusion of reading off physical paper. The Kindle can act as a stand-alone device by downloading content over the Sprint EVDO network. This content delivery service is called Whispernet. According to Jeff Bezos, the founder and CEO of Amazon.com, designers of the Kindle envisioned a device that would “get out of the way”, a device by which readers would become engrossed in the words and forget the medium on which they are reading. Battery life, eye strain, device portability, and user interface were all tailored to deliver the best reading experience possible.

## 2 Six Forces Analysis of the E-book Industry

### 2.1 Entry

Entry barriers to the e-book industry are few, if any. The manufacturing process is relatively simple; except for the screen, the technology is well developed. The Kindle uses an electronic paper display manufactured by E-Ink Corporation and this same display can be found in the Sony Reader, the iLiad, the Cybook Gen3, and the RADIUS.

However, there is a challenge of signing agreements with publishers so that the material can be released as an e-book. Perhaps the biggest obstacle that all the companies are facing right now is the lack of growth in the industry. Jinke has been in the business since 2000 but has sold only 150,000 readers, the most of all the companies.

### 2.2 Rivalry

The e-book market is still in an early stage and because of this, market price levels are still uncertain. There are significant variations in price between different producers of e-book readers. Amazon entered the market at a significantly higher price than Sony and many

other competitors, but there are also other readers selling at \$700 or more. Because the consumer base is so small, all producers would rather see it expand than steal customers from other manufacturers. Consequently, there is more incentive for manufacturers to improve their product and increase interest in e-books than to compete on price.

## 2.3 Supplier Bargaining Power

Supplier bargaining power is derived from the number of suppliers, availability of substitutes, and costs associated with switching to alternative inputs. There are two main inputs to the Kindle: screen and network technology. The technology used to create the specialized display on the Kindle is manufactured by the E-Ink Corporation. E-Ink is the leading firm in the electronic paper market and is a supplier to a variety of companies, including Sony and other e-book manufacturers.[2] Since the electronic paper market is relatively new and does not consist of many firms, substitutes are limited. Given the state of the electronic paper market and the fact that electronic paper is a recently developed technology, E-Ink needs customers and hence E-Ink does not have much supplier bargaining power over Kindle. This could change in the future, depending on the popularity of the Kindle and the development of the electronic paper market. Amazon uses EVDO network technology, supplied by the Sprint network. Kindle users do not need to pay to connect to the network, as Amazon covers the cost.[3] Large EVDO network providers also include Verizon and Alltel, with other competing networks using a standard other than EVDO. This means that Amazon's choice of networks for Whispernet is fairly limited. While not an issue now, if Kindle becomes much more widespread in the future, the company could face a holdup problem with Sprint if Sprint wants more of Amazon's profits. Thus Kindle's display and network suppliers currently do not have much bargaining power, but it is highly likely that if Kindle succeeds, supplier bargaining power will increase and may become a problem for Amazon.

Publisher bargaining power is also important to consider since the Kindle is fairly useless without e-books. To increase the size of Amazon's e-book library, it needs to obtain publisher permission for each book it converts. Publishers have a great deal of bargaining power in this respect; while there are many publishers, for each title one publisher has a monopoly. Thus, if Amazon wants a specific book for its Kindle, it will have to pay monopoly prices to the publisher. This effect can already be seen in the market for printed books, where much of the profit on a book is retained by the publisher. For a large publishing company like Random House, its profits are on the order of 10% of its revenue.[4] On the other hand, a book retailer like Barnes and Noble

has drastically lower profitability, with profits less than 1% of revenue.[5] Thus publishers have a great deal of supplier bargaining power since they essentially decide which books become e-books and whether those books will be available for the Kindle. Publishers can also require that Amazon sell only versions of their books that include Digital Rights Management (DRM), an attempt to prevent illegal copying of the content. Consequently, all books sold through Amazon on the Kindle are available only in the proprietary AZW format. Most competing readers also specialize in their own DRM format.

## **2.4 Buyer Bargaining Power**

Kindle buyers have little bargaining power. Bargaining power is derived mainly from the ease of switching to a competing product and the value of the product to the buyer.[6] Because both the Kindle and competing readers use DRM schemes, books purchased for the Kindle cannot be transferred to other manufacturer's devices and vice versa. This is not the primary reason for DRM, but it is advantageous from Amazon's point of view because it increases switching costs and helps to create buyer lock-in. The market for e-book readers is still young and small, so the majority of e-book reader buyers do not have a significant existing electronic library. Existing libraries are not yet an important factor in shaping consumers' purchasing decisions. However, once the market matures a significant portion of sales will be to existing owners of e-book readers. Thus buyer bargaining power will decrease over time and be very weak in the mature market.

## **2.5 Substitutes**

The main substitutes for Amazon Kindle are libraries, both brick and mortar and online bookstores, and Google Books. However, unlike the online bookstores and Google books, Kindle does not require a computer. Kindle's free wireless connectivity which uses the same network as advanced cell phones enables buyers to shop from the Kindle Store directly from the Kindle device. Instead of having to travel to the local library or waiting for books to arrive from online bookstores, this wireless network can download a book in 60 seconds providing customers a more efficient and direct access to books. Although Kindle does not yet have access to as many books as some of these substitutes, it is progressively adding more books. Also, the Kindle stores everything a purchaser buys online; in this way, if a customer loses the Kindle, the reading material will not be lost, as would be the case if you had a paperback. The readers also do not have to deal with heavy or numerous books because of Kindle's light portability. The Kindle display looks like ink

on paper, which is easier on the eye than LCD screens and comparable to printed media. It can also increase text size which is a clear advantage over books. Physical bookstores allow customers to browse books before purchasing. Amazon attempts to emulate this feature by allowing users to download and read the first chapter of any book for free. E-book versions of new releases and New York Times Best Sellers are \$9.99, saving on average 60%, and many other books can be found for less. As for Google Books, Google's aim is to help people find and discover books and learn where to buy and borrow them. Although there are books that can be read online from start to finish, this is only the case for books in the public domain and out of copyright. For these reasons, Kindle compares favorably to these substitutes.

## **2.6 Complements**

The size of the e-book library, other file types such as .pdf, .doc, and .jpeg, and the service to convert files to Kindle format are all complements of Amazon Kindle. The most important compliment required is the number of books offered to Kindle users. The day Amazon Kindle was released last year, the Kindle Store had more than 88,000 digital titles available for download and now has over 115,000 Books, newspapers, magazines, and blogs. Amazon also offers an email-based service that converts .html, .doc, .jpeg, .gif, .png, and .bmp documents to their Kindle format, AZW, or can load unprotected Mobipocket or plain text content. This AZW format is only for the Kindle which is a good strategy on Amazon's part to tie the complement to the product. Kindle also supports formats for audio in the form of MP3s and Audible 2, 3, and 4 audiobooks, which must be transferred to the Kindle over USB or an SD card. With a variety of book options and supported formats to accommodate more customers and their various needs, the Kindle is a simple and convenient alternative to reading a paper copy book.

## **3 SWOT Analysis**

### **3.1 Strengths**

#### **Reputation and Marketing**

Amazon has already developed a flourishing marketplace that began with books and now includes a variety of goods ranging from music and video to apparel and beauty products. In the internet services and retailing industry, Amazon.com trails only Google, with 2008 revenues exceeding \$14 billion.[7] It can utilize its prominence together with

its large customer base to cultivate an interest in e-book readers that previous entrants were unable to achieve. In particular, Amazon is using its existing website to extensively advertise the Kindle. “No matter what you’re shopping for on Amazon, you will be directed, prodded, and bullied into learning about the Amazon Kindle.”

### **Infrastructure for Content**

Amazon has an existing platform for selling physical copies of books. It has spun off the Kindle store with the same website design, search engine, and recommendation system to facilitate distribution of the digital media for the Kindle. Furthermore, Amazon “leverages its existing online store to integrate a user’s account with the unit, making it easier to find, order, and manage content.”

### **Large Selection**

To encourage consumers to switch over to an e-book reader, Amazon realized the need to provide a large library of books that can be read on the device. It has worked on developing strong publisher connections and pushed publishers to release digital versions of new books and backlists. At the same time, Amazon is itself involved in scanning books to build up its available collection, much of it from its Search Inside the Book project. As Bezos remarks, “The vision is that you should be able to get any book-not just any book in print, but any book that’s ever been in print-on this device in less than a minute.” [8]

### **Partnership with Sprint**

With Kindle, Amazon introduced a feature that was not found on its predecessors-wireless connectivity through its Whispernet system. By reaching an agreement with Sprint to use their data network, Kindle users can get online access from anywhere, not just at Wi-Fi hotspots. This allows customers to browse and buy books on demand, which are then downloaded and installed directly to the device.

## **3.2 Weaknesses**

Amazon has to date been an online retailer. Unlike Sony for example, it has no germane experience in developing and delivering consumer hardware. This means that Amazon may have trouble competing with rivals in regards to current engineering challenges for the e-book reader. Like most of its competitors, Amazon stuck with the E Ink technology

to achieve the paper-feel of a real book. Furthermore, a major criticism of the Kindle is the interface design, which users have found to be somewhat unwieldy. The page-turning buttons have been of particular annoyance because it is difficult to handle the device without accidentally hitting one of them. Thus, Amazon is relying on its content and service to overcome competing hardware makers.

### **3.3 Opportunities**

Amazon entered the e-book reader market at a relatively early stage; few other strong competitors exist, and none have been particularly successful. Thus, Amazon has the opportunity to quickly establish itself as the market leader but also faces the challenge of attracting consumer support. Amazon's DRM scheme and the lock-in that it strengthens offer it an opportunity to leverage its current advantage in media distribution into long term profitability in hardware sales. If Amazon can successfully promote adoption of the e-book reader, it is likely to establish a brand name that will allow it to maintain a significant market share in the industry. It is far from guaranteed that Amazon will have an advantage in the quality or production costs of its e-book readers. However, existing Kindle owners will be willing to pay more for a new Kindle than a new competing reader with similar hardware because of branding and switching costs.

### **3.4 Threats**

Amazon's current advantages in distribution are not necessarily sustainable. Amazon's reputation will take time for competitors to match, but lower prices paired with equivalent service can accomplish this over time. Besides the threat posed by competitors, a significant network of e-book pirating could arise. Finally, large brick and mortar stores like Borders and Barnes and Noble do not wish to see e-books become popular as the industry's success will hurt the stores' business. Amazon will need to address these issues to ensure the long term success of its device.

## **4 Strategy**

### **4.1 Marketing**

Amazon should focus on advertising to attract new customers to the e-book market. A large potential for growth in its base of consumers is with commuters and business travelers, who will benefit from the convenience of the Kindle's portability and also



possess the disposable income to afford the device in its current price range. As Ron Hawkins, vice president for portable reader systems at rival Sony, points out, “Digital readers are not a replacement for a print book; they are a replacement for a stack of print books. That is where we see people, on the go, in the subway and in airports, with our device.” [9] The Kindle delivers newspapers directly to users for, on average, \$10/month. This enables commuters to easily read the newspaper on a smaller medium without the unwieldiness of the print version. Similarly, businessmen will find the Kindle appealing to avoid carrying multiple books while traveling. By targeting these consumers through increased advertising in subways, airports, and on airplanes, Amazon can expand the market and reach out to new adopters of e-books.

In coordination with this advertising effort, Amazon should attempt to negotiate deals with major newspapers. At a time when newspapers are struggling with declining numbers in readers and revenue, Amazon can seek to capitalize on their situation. For example, the LA Times started a task known as the “Manhattan Project” seeking “to investigate solutions to reinvent the paper for the future.” [10] Amazon has the opportunity to approach them with the Kindle as a new venue to revive their business through a younger tech-savvy audience.

The primary goal of this advertising campaign is to increase the overall e-book market, rather than to steal customers from rivals, so competitors should not feel threatened by it. In fact, other firms may benefit from the increased awareness of e-book readers. Similarly, parallel campaigns by rivals do not pose a significant threat to Amazon, since the major challenge at hand is to grow the market and provide for future profitability. However, Amazon needs to ensure that rivals do not enter into exclusive contracts with newspapers or other content providers in general. These deals only serve to benefit individual firms in the short run and ultimately hinder expansion of a relatively small, nascent market.

## **4.2 Long Term Positioning**

In the long run the market for e-books themselves is unlikely to support significant profits. The main issue stems from the large amount of publisher bargaining power that currently exists in the print book market. Publishers have a significant influence in the supply chain for books, retaining the largest portion of the producer surplus in print media. The retailer only receives a small fraction of the overall profits on the book, so it is presumable that Amazon will face similar difficulty in extracting profits from e-books. In addition, Amazon’s business model is reproducible and thus their current distribution advantage is not necessarily permanent. Amazon’s reputation would be their only substantial barrier

to new entrants in the e-book sales market. Lastly, competition with free pirated e-books would present problems. Even if Amazon proves more successful than competitors in e-book retailing, as the market grows, piracy will inevitably emerge to erode profits. This has occurred over the last decade in the music industry as digital music and the Internet have matured.

These pitfalls make it unwise for Amazon to pursue a partnership with a hardware-oriented company like Sony, in which Amazon would limit itself to selling e-book reader content. Instead, Amazon should continue to produce the Kindle itself. Due to the nature of the market, the selection of complements will not distinguish the Kindle from other readers. If Amazon can maintain comparable hardware quality to other manufacturers, switching costs and brand identity should allow Amazon to keep a stable customer base and to support some level of sustainable profits.

### 4.3 Pricing

It also might be tempting for Amazon to leverage their current advantage in e-book distribution into greater profits on the e-books. This trades larger short term profits for a weaker future position in the market, which will be much larger than it is now. Thus, Amazon's pricing strategy should be consistent with the long term focus on hardware and a desire to prioritize market share over short term profits throughout the growth phase. Amazon's recent price reduction from \$399 to \$359 reflects a shift from targeting quality sensitive early adopters to more price sensitive consumers. It should continue to drop prices in steady increments to attract wider consumer bases.

Consumers are less sensitive to e-book prices than they are to hardware prices, and the decision to purchase a Kindle is more likely to be triggered by the cost of the Kindle itself. Hence, Amazon should not be overly concerned with further reducing e-book prices. These prices are currently lower than most hardbacks and trade paperbacks but higher than most mass market paperbacks. Attempting to compete with mass market paperbacks is infeasible because of publishers' resistance to pricing e-books much cheaper than print versions. It already loses money on most of its e-books, priced "well below what it pays publishers," and further price cuts would likely require Amazon to take losses unjustified by the small benefits in market share.[11] However, if the Kindle is able to propel the e-book market into a fast growing phase, "[publishing executives] anticipate that it will not be long before Amazon begins using the Kindles popularity as a lever to demand that publishers cut prices." At this point, Amazon's increased bargaining power will enable it to price more competitively without the losses from subsidies.

## 5 Conclusion

With the correct strategy, Amazon can achieve a dominant and stable position in the mature e-book market. In the short run, Amazon should focus on advertising to expand the market base by targeting commuters and travelers. It should also collaborate with newspapers to expand the supply of content other than e-books. In the long run, Amazon should emphasize profits in hardware, since the outlook for e-book retail sales is unpromising. The price of e-books is already at a competitive level, but Amazon should continually decrease the price of the Kindle to attract more price-sensitive customers. This will allow Amazon to be strongly positioned to maintain leadership in the developing e-book market.

## References

- [1] Sam Vaknin. The Second Gutenberg: Interview with Michael Hart. Planet eBook [www.planetebook.com/mainpage.asp?webpageid=376](http://www.planetebook.com/mainpage.asp?webpageid=376), 2002.
- [2] E-Ink: Electronic Paper Displays. E-Ink Corporation [www.eink.com/technology/index.html](http://www.eink.com/technology/index.html), 2008.
- [3] Kindle: Amazon's New Wireless Reading Device. Amazon.com [www.amazon.com/Kindle-Amazon's-Wireless-Reading-Device/dp/B000FI73MA](http://www.amazon.com/Kindle-Amazon's-Wireless-Reading-Device/dp/B000FI73MA), 2008.
- [4] Arianne Cohen. A Publishing Company. New York Magazine [www.nymag.com/news/features/2007/profit/32906/](http://www.nymag.com/news/features/2007/profit/32906/), 2006.
- [5] Company News; Barnes & Noble Profit Dropped in Third Quarter. NY Times Online [www.query.nytimes.com/gst/fullpage.html?res=9E03EFD7153FF935A25752C1A9629C8B63&fta=y](http://www.query.nytimes.com/gst/fullpage.html?res=9E03EFD7153FF935A25752C1A9629C8B63&fta=y), 2004.
- [6] R. Preston McAfee. *Competitive Solutions: The Strategist's Toolkit*. Princeton University Press, Princeton, NJ, 2002.
- [7] Fortune 500 2008: Amazon.com. CNNMoney.com [www.money.cnn.com/magazines/fortune/fortune500/2008/snapshots/10810.html](http://www.money.cnn.com/magazines/fortune/fortune500/2008/snapshots/10810.html), 2008.
- [8] S. Levy. Technology: Will Amazon's Kindle Change the Way We Read? *NEWSWEEK-AMERICAN EDITION*-, 150(22):56, 2007.
- [9] Brad Stone. Envisioning the Next Chapter for Electronic Books. NY Times Online [www.nytimes.com/2007/09/06/technology/06amazon.html?\\_r=1&oref=slogin](http://www.nytimes.com/2007/09/06/technology/06amazon.html?_r=1&oref=slogin), 2006.
- [10] Daniel Wood. L.A. Times's Epic Battle to Retain Glory - And Profits. The Christian Science Monitor [www.csmonitor.com/2006/1027/p01s03-ussc.html](http://www.csmonitor.com/2006/1027/p01s03-ussc.html), 2006.
- [11] Edward Wyatt. Electronic Device Stirs Unease at Book Fair. NY Times Online [www.nytimes.com/2008/06/02/books/02bea.html?ref=business](http://www.nytimes.com/2008/06/02/books/02bea.html?ref=business), 2008.