

# Chapter 5

## E-Book Readers for Everyone: FATIH Project

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### ABSTRACT

*Mobile Technology (MT) provides many opportunities to individuals, such as talking with people, watching movie clips, and reading books whenever or wherever they want. This also allows individuals to frequently connect for learning. One of the most popular uses of MTs for learning is their use as E-book readers. This chapter consists of four sections about how mobile technologies are being used as E-book readers by learners. Furthermore, this chapter will discuss an ongoing E-book reader project in Turkey called “FATIH”. General information about E-book readers will be provided in the first section of this chapter. The second section gives an overview of various studies on E-book readers. In the third section of the chapter, the authors discuss a recent instructional project in Turkey and its possible international implications. The last section of the chapter offers the summary of presented concepts and their future applications.*

### 1. INTRODUCTION

An electronic book (E-book) is basically defined as a digitalized book which can be displayed by a range of electronic devices, including laptops, tablets, smart phones, and E-book readers. The 1970s were remarkable years for both E-books and the E-books readers. Project Gutenberg mentions E-books first appeared in the 1970s (Gray

& Copeland, 2012). During the late 1970s, The Learning Research Group at Xerox Palo Alto Research Center was working to design a digital device called “Dynabook” for reading digital documents; it was the size of a regular notebook (Kay & Goldberg, 1977). It was one of the first attempts to design smaller devices for reading digital documents. In the same article, The Learning Research Group published pictures of the future

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models of “Dynabook” which envisioned the age of E-book readers we enjoy today. More than four decades ago, researchers started to focus on how to make devices handy and accessible for digital documents.

Since then, many different E-book readers that have been manufactured. The first E-book reader was produced by Sony in 2005, with Amazon’s Kindle in 2007, Barnes and Nobel’s Nook in 2009 (Griffey, 2010) and Apple’s iPad in 2010 all following suit (Apple News, 2010). Also, many different brands have manufactured their own E-book readers such as Acer, Toshiba, and Asus. Each device has developed different facilities for their products including different sizes of screens, displays, operating systems, battery lives, and touchable options.

This rapid transition from paper-based books to electronic books has opened new markets for different brands to meet the expectations of the consumer. Many different E-book readers and brands exist in this market, including Amazon Kindle, Kindle Fire, Nook, Sony, iPad, Kobo, and also many smart phones. This chapter won’t compare each and every model, but will investigate some important features of E-book readers such as design, document support, and technical quality.

Before explaining these features, it would be good to answer one question: “Why do I need an E-book reader?” The answer might make your decision clear. For example, if you like reading wherever you want and don’t like lugging around books in your bag, it is advantageous to get an E-book reader. The question becomes a matter of choosing the right one for your needs. The advantages and disadvantages of E-book readers presented in this chapter might help you to clarify your decisions better.

Imagine you think that you need an E-book reader. First, you should know what kind of device you are looking for. Based on more than a decade of our observations of the E-book readers market, consumers tend to buy the most expensive and newest version of any device. This approach might

result in purchasing an expensive piece of technology that you never fully use. The best device for you to buy is one that meets your expectations. Your decision shouldn’t be related to the price or the appearance of the device, but rather its ability to meet your needs and expectations.

An important consideration should be the design of the screen as it is critical for not only ease of use but also for your health. E-book readers generally use 5-to-10-inch screens to display electronic books; however cell phones, which can be used for reading E-book screens are commonly 3.5 to 5 inches. Screen size is important for displaying E-books clearly and also for reading smoothly. The small screens found on cell phones may make it difficult to read E-books for an extended period of time. They are handy to carry so there is a consideration that many consumers make between convenience and usability. The converse is also true as big screens may be good for reading but not carrying. The devices for reading E-books generally 6 to 7 inches screens (e.g. Kindle Touch, Nook, Kindle Fire, Sony Kobo), so they are significantly larger than your average cell phone screen

Another important aspect of screen designs are their display features. Sony E-book readers, Amazon Kindle and several others are using E-Ink Technology for their screens. E-Ink technology was designed by the E-Ink Corporation at MIT Labs in the early to mid 2000s (Griffey, 2010). E-Ink is a display technology for E-book readers which uses considerably less energy than most E-book readers because it relies on the contrast between text and background. Power isn’t used until the consumer wants to read the next page and pushes the next page button (Griffey, 2010). It is also closely resembles printed paper which many consumers find welcoming (Falcone, 2012).

The other kind of display is LCD (Liquid Crystal Display). This is more colorful and brighter than E-Ink displays (Falcone, 2012). Although this electronic visual display option offers greater color and light presentation, as Falcone (2012) states it

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