**CHAPTER 2**

**REVIEW OF RELATED LITERATURE**

To get a better sense of the system that is about to be developed, research is being made to give the developers of the system a better understanding on the concepts of our system and the technology that will be used to develop the system. This document will exhibit literature and journals made that complements and explains our study and the technologies used such as the utilization of RFID in information dissemination, and digital signage systems.

**Chapter 2.1 RFID Systems**

According to Higgins and Cairney, "RFIDs are used on employee identification cards to allow access to buildings, for event access, and on keys to authenticate the owner of a vehicle" With this, we tend to have our research maximize the security that RFIDs bring to us.

Spring Independent School District in Texas, USA uses RFID to track their students' attendance in class. By law, students are required to attend a class 90% of the time in order to receive credit for the course.

This online research proposal states the importance of the use of an RFID to an information or management system and on how it will greatly affect our advancing IT industry as of today. Radio Frequency Identification (RFID) technology has been regarded as one of the “most pervasive computing technologies in history” (Roberts, 2006 p. 18). In the context of management, the technology has been viewed as “the next big thing” (Wyld, 2006 p. 154) and “the next revolution in supply chain” (Srivastava 2004 p. 1)

**Chapter 2.2 Digital Signage Systems**

While information printed on paper has always been the medium of passing on information to hundreds, thousands of people on a single piece of paper, it isn’t always the best manner of disseminating information. Paper has always been what it is, paper. One can only do so much on a piece of paper to attract the attention of people who see it. Screens, digital screens, on the other hand offer a much wider scope of displaying information. One can opt to display information and announcements through multimedia such as videos that play a bit of music to stimulate the audial senses.

Digital Signage has the potential to become the main source or manner of disseminating information to hundreds or thousands of people at a time. Billboard signs, announcements, and advertisements are sizeable, colorful, and reliable. Yet a problem underlies these billboard signs, and it’s that these signage are all static. With the onset of digital signage through the use of digital displays, users will be able to incorporate multimedia into their announcements, make text and graphics more readable, and have it dynamically alter to another announcement at an intermittent pace, all without having to print out a new one.

Since the bulletin boards are not visually appealing, the ways of implementing an effective digital signage may vary. We can apply the techniques that are used in advertising and visual arts and apply them to our system. In order to be more successful in Digital Signage advertising, it is necessary to know what kind of content presented by Digital Signage affects buyers’ decision- making most efficiently.

Getting the students’ attention and enticing them to use the system are some of the challenges that we will face. In marketing, we can consider the students as our buyers therefore, it is imperative that we get them to look at our products which in this case are the information that we will be delivering to them. Capturing retail customers’ attention with digital signage Guides for designing Digital Signage advertising content and locating digital displays in a retail environment.

In this era, the extensive of digital signage has proven to a very effective way to inform, educate and disseminate in various areas such as marketing and sales, healthcare, and other industries. Its educational potentials are yet to be harnessed. The use of digital signage for informal learning on campus remains a less unexplored research area. Chang, L., & Chiang, H. (2012). Designing a mixed digital signage and multi-touch interaction for social learning.

While advertising and broadcasting announcements remain important applications, developments in sensing and interaction technologies are enabling entirely new classes of display applications that tailor content to the situation and audience of the display. As a result, signage systems are beginning to transition from simple broadcast systems to rich platforms for communication and interaction.

Our system aims to effectively use digital signage as a formal media for communication in our department. It is cost effective yet it serves it purpose really well. Return on investment may not be drastic but it ensures promising results. Digital signage is an economically promising field in advertising. Yet, it is a hardly researched field, first empirical attempts focused on consumer reactions.

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