

Introduction

Foreword

The rapid growth of sales in tablet computers has taken a significant portion out of the notebook and desktop computer market. Consumers are increasingly inclined toward using fast and light mobile devices to surf the Internet, enjoy videos, and listen to music. In terms of current trends, the question is no longer whether tablet computers will surpass notebook computers but a matter of when.

According to predictions from the market research institution NPD DisplaySearch, the global sale of tablet computers this year will exceed 240 million units, while the sale of notebook computers will be 207 million units. This large difference is significant enough that even if there are errors in NPD DisplaySearch's prediction, the sale of tablet computers would still exceed that of notebook computers. Future trends suggest that 3G, 4G, or Wifi can be used to connect users to cloud services, and since markets in advanced nations have more comprehensive services and basic infrastructure, there is significant growth potential for tablet computers.

Moreover, tablet computers start up faster, have longer usage times and are lighter than notebook computers. Tablet computers, no longer limited to just surfing the web and entertainment uses, can also be utilized for regular work.

Research Background and Motivation

Market research institution IDC's survey report on the market for tablets in Q2 2012 shows that in this quarter, 25 million tablets were shipped, among which 17 million were iPads. This outcome puts Apple in a distant first place in the market for tablets with 68.2% market share. In second place, Samsung shipped 2.4 million units, followed by Amazon in third place, ASUS, and then Acer.

On January 27, 2010, Apple released the first generation iPad in San Francisco; it was loaded with iOS, the operating system which Apple developed on its own. Operating systems and hardware equipment optimize in the direction of smartphones as light as 600 grams. Even though the iPad was not expected to do well, its release created a trend in tablet computers, resulting in various major vendors promoting their own tablet computers. In 2010, Apple sold more than 8 million iPads.

The success of the iPad is not only due to the product itself, but also due to Apple's App Store, which provides a transparent way of splitting revenue: 30% for Apple and 70% for the developers. The number of paid Apps for Apple is far greater than that of other platforms, which attracts developers to develop various Apps. By the end of 2012, there were already 775,000 Apps, of which 300,000 Apps were for the iPad. Seven billion US Dollars had been paid to developers. Another key to the App Store's success is its quality demands for Apps. Any App uploaded by developers undergoes stringent evaluation before it can be downloaded by users, so that all Apps can give users good operational and usage experiences.

The iPad is light, small and portable; with continuous improvements to hardware performance, more and more relevant business Apps are being developed. With the prevalence and high market share of the iPad, there are also broader and more diverse uses for the iPad. However, there are few purchase, sales and inventory Apps that are most commonly used by mid- and small-cap corporations. After all, there are major differences between tablet and PC operations, as well as between how they are used. Thus, while most corporate applications are geared for searches, no comprehensive commercial software suite exists. This study seeks to apply user-centered angles to design a purchase, sales and inventory management system suited to tablets, so that they have functions for purchase, sales, inventory, receivables and payables.

Research Objectives

A purchase, sales and inventory management system on the iPad would be highly suited to both individual and family-style workers who could use the iPad for product orders when picking up goods from suppliers, or for managing orders and inventory at any time. The worker would be able to use the iPad to manage sales, check the conditions of orders, sales and inventory, without being constrained by space, thereby fully taking advantage of iPad's portability. All aspects from product establishment to the sale of products can be effectively controlled by changes in sales and inventory. Furthermore, since most users who utilize iPads for purchase, sales, and inventory are individual users, client relationship management is even more important, so client birthdays are also added to manage client relations. The system can also rank client sales to establish client priority, thus helping maintain client relations.