



# Proposed E-Commerce Platform for Unredeemed Pawned Items

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## Abstract

**Purpose:** This work proposes a new e-commerce platform especially for trading unredeemed pawned items, so-called ePawnMart, by complying with the concept of Extended Technology Acceptance Model (ETAM), and then this work measures the user acceptance of the proposed platform. **Research design, data and methodology:** This study reviews current unredeemed pawned items selling methods and the extended technology acceptance model. This study presents work in two main parts. Firstly, it proposes ePawnMart, including use case diagram, activity flow, system requirements, system architecture, and product features, and analyses how the proposed platform complies with the concept of ETAM. Next, the research measures the user acceptance of the proposed platform by an online questionnaire survey in terms of the buyer side. **Results:** ePawnMart complies with the concept of ETAM in various features. The usage acceptance survey results suggest that the majority of both existing buyers and non-buyers would use ePawnMart to buy the unredeemed pawned items. This suggests that the proposed platform would help increasing the trading of unredeemed pawned items through online channels. **Conclusions:** ePawnMart would accelerate the growth of the pawn shop industry by improving pawn shops' working capital and promoting trustful online unredeemed pawned items trading transactions. Furthermore, it would help promoting the fair trade and Thailand's sustainable economic growth.

**Keywords :** E-Commerce, Pawn Shop, Online Platform, Extended Technology Acceptance Model (ETAM)

**JEL Classification Code :** L81, M15, G21

## 1. Introduction

The first e-commerce business was started in 1995 from advertising. Since then, it has grown very fast and has become an important means for advertising and sales (K. Laudon & J. Laudon, 2020). Especially during the Covid-19 pandemic, the e-commerce in Thailand had sharp and fast growth in 2020 and is expected to be one of the rising star industries in 2021. The government also has a policy to strengthen local online platforms to be able to compete over the international platforms (Thaiday Dot Com, 2021).

The influence of e-commerce affected various industries, including the pawn shops industry, but it seems that only big players successfully adapted into the online world, e.g., government owned pawn shop and meMoney (Nectar, 2018). According to Rocket Media Lab (2021), there are a total of 730 pawn shops in Thailand, including 277 government owned pawn shops and 453 private pawn shops. There is room for the online platform to provide an opportunity to all pawn shops, including small ones to get into the online world and also promote fair trade to the pawn shops industry.

In addition, to be able to survive in pawn shops industry, working capital is key. Without cash flow, the pawn shops will lack liquidity, not be able to run, lose trust from customers, and finally not be able to continue business (Siririn, 2018). Selling unredeemed pawned items in a short time duration is one of the main parts to maintain working capital. Based on data from one of the big pawn shops chain in Thailand, the average rate of unredeemed pawned items is 5% of total pawned items and will fluctuate according to the economic situation (Supattha, 2020). It is expected that the online platform will be able to help the pawn shops to reach more customers and sell the unredeemed pawned items quickly.

Therefore, the objectives of this study are [1] to propose a new e-commerce platform especially for trading unredeemed pawned items, so called ePawnMart, by complying the concept of Extended Technology Acceptance Model and [2] to measure the user acceptance of ePawnMart.

The rest of this paper presents Literature Review in Chapter 2, Research Methods in Chapter 3, Proposed