**中 國 文 化 大 學**

**資 訊 工 程 學 系**

**資 訊 系 統 專 題**

**無人商店**

**學 生：陳 宥 睿**

**黃 姵 瑄**

**邱 郁 涵**

**指導教授：洪 敏 雄**

**中 華 民 國 106年 5 月**

**無人商店**

**專題學生：陳宥睿、黃姵瑄、邱郁涵**

**指導教授：洪敏雄 博士**

**中國文化大學 資訊工程學系**

**摘要**

隨著資訊與網路科技的快速發展，電子商務迅速崛起，消費型態轉變，使得消費管道變得更加多元，實體通路變得不再是主流，舊的商業模式不再適用，零售物流業將面臨新的改革。我們的專題想要研究新的零售模式——無人商店。無人商店的風潮襲捲全球，新革命性的零售商店所依靠進技術分為三大類：AI人工智慧、RFID無線射頻、自動販賣機。身為中、美兩大電商龍頭，亞馬遜與阿里巴巴皆已投入無人商店的市場，如亞馬遜的「Amazon Go」、阿里巴巴的「淘咖啡」，而兩大電商所掌握的關鍵技術——如何偵測、蒐集、及分析消費者移動軌跡及消費行為為我們專題研究方向，研究各店商所掌握的優勢技術，且找出我們自身能力所及的領域來進行簡單的實作。

**關鍵詞**：物聯網、RFID、新營運模式

**指導教授\_\_\_\_\_\_\_\_\_\_(簽名)**

**Unmaned Store**

**Student:You-Rui Chen, Pei-Xuan Huang, Yu-Han Chiu**

**Advisor: Prof. Min-Xiong Hong**

**Department of Computer Science and Information Engineering**

**Chinese Culture University**

# Abstract

With the rapid development of information and network technology, the rapid rise of e-commerce and the shift in consumption patterns have made the consumption pipeline more diversified, the physical channel has become less mainstream, and the old business model is no longer applicable. Retail logistics industry will face new reforms, and our topic is to study new retail models — unmanned stores. The trend of unmanned stores is sweeping the world, and the new revolutionary retail stores rely on technology to fall into three categories: AI artificial intelligence, RFID radios, and vending machines. As the two major e-commerce leaders in China and the United States, Amazon and Alibaba have invested in the market of unmanned stores, such as Amazon's "Amazon Go" and Alibaba's "Tao Coffee", and the key technologies mastered by the two e-commerce companies — How to detect, collect, and analyze consumer movement trajectories and consumer behaviors as our special research direction, Study the superior technologies mastered by each store and find out the areas in which we can work to make simple implementation.

**Keywords:** Cloud Computing, Internet of Things, RFID, New Business Model