



# Application A8-018

## 作品名稱

### 數位情境點餐體驗系統

Digital Environment for Ordering Experience System

## 隊伍名稱

轉動奇蹟 The miracle of rotation

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## 作品摘要

數位情境點餐體驗系統，其結合了許多現今科技，將無線射頻辨識技術(RFID)、無線藍牙傳輸(Bluetooth)、個人數位助理(PDA)、影像辨識系統合而為一，發展出一套顧客專屬的餐點系統。建立一套自行研發的藍牙與PDA和Server端通訊軟體，開發顧客專屬資料管理的無線化，建立無線系統的整合與創新應用。利用普通網路攝影機，搭配影像辨識軟體，讓顧客擺脫傳統點餐模式，只需要拿起桌上之調味罐，即可透過旋轉調味罐來選擇觀看所有菜色選單。結合單晶片和藍牙無線傳輸模組，當您還再處耗等餐過程中，將啟動人機互動遊戲介面，三五好友此同時拿起餐桌上的調味罐體驗著互動趣味遊戲，希望能透過此應用帶來更和諧的人際關係。

整個點餐服務從個人化至開始點餐介面，並且延伸至整個餐飲消費服務過程，讓顧客完全自在地融入賓至如歸與點餐環境的體驗之中，不僅提高餐廳附加價值，更可帶給顧客全然不同的體驗感受。

## Abstract

The proposed personal ordering system integrates RFID, Bluetooth, a PDA, an image-recognition system, and personal computer as the server. Also, the proposed system has communication software for Bluetooth, PDAs and server to transmit customer data wirelessly. This study constructs a wireless system integrated with innovative applications. This work uses a common internet camera with image-recognition software to disengage the customers from traditional ordering process. As long as taking up the caster, customers can look and change the menu contents on the display by rotating the caster. When waiting for a service, the system can start a human-machine interactive interface that integrates microprocessor and Bluetooth wireless transfer modules. Diners can use the casters to play interesting interactive game at the same time. Finally, this application should generate harmonious interpersonal relationships.

The ordering process is started by customers via the ordering interface which is extended to all the restaurant services processes, allowing customers to feel completely comfortable and experience the proposed restaurant environment. The system not only increases the restaurant value, it presents a different experience to customers.