

Wah Hing Online Retailer Application

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Abstract

- This study addresses the efficiency challenges faced by Wah Hing Meat Shop, a leading meat distributor in Calgary, due to its reliance on manual processes for customer and order management. **The proposed solution** is the development of an **online retail application/website** designed to automate and streamline these processes, thereby enhancing operational efficiency and scalability. The platform will enable customers to select meats, place orders, and receive notifications, while allowing Wah Hing to manage orders, payments, and maintain a customer order database. This digital transformation aims to improve customer service, expand business reach, and provide Wah Hing Meat Shop with a competitive advantage in the meat distribution industry.

Introduction

- Objective:** Modernize Wah Hing's operations by transitioning from manual to digital processes via an online retailer website.
- Problem:** Wah Hing, a leading meat distributor in Calgary, relies on handwritten records for customer and order management, leading to inefficiency.
- Solution:** Develop a comprehensive software solution that acts as an online store, enabling both customer engagement and internal management improvements.
- Features for Customers:** View available products, place orders, rate products, and make online payments with ease.
- Benefits for Wah Hing:**
 - Real-time order management.
 - Digital logs of customer orders.
 - Access to business analytics for informed decision-making.
- Outcomes:**
 - Expansion of business reach.
 - Enhanced customer service and quality.
 - Competitive advantage in the market.

Results

- Following the implementation of the online retail application at Wah Hing, the business experienced significant improvements across various operational and customer service metrics. **Key results observed include:**
- Customers able to **conveniently** order items online
 - Wah Hing successfully processes orders **both in-store and online**, diversifying sales channels.
 - The online ordering system **mitigates in-store crowding**, enhancing the shopping experience and **produces less delays**.
 - Online order management allows for **precise and timely tracking** by Wah Hing.
 - Extending Wah Hing's reach, connecting with a **broader customer base**.

Discussion

- The integration of the online retail platform at Wah Hing Meat Shop yielded significant operational and customer service improvements.
- Online ordering reduced in-store congestion, improved order tracking, and extended the business's outreach. This digital transition underscores the transformative potential of technology in enhancing service quality and market competitiveness.

Conclusions

- Incorporating the online retail platform has significantly transformed operations at Wah Hing Meat Shop, improving their approach to order management and customer service.
- This highlights the vital role of digital integration in maintaining competitiveness across this industry. Looking ahead, continued investment in technology will be imperative for Wah Hing to sustain growth and remain a strong competitor in the market.



References

- No external sources were consulted for this project. All information and ideas presented are based on our own research and analysis.

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Methods and Materials

- Methods:**
 - Conducted **customer interviews** to gather insights on shopping preferences and pain points.
 - Turned interview data into **actionable website features**, aligning with customer shopping habits and preferences.
 - All done through an iterative design process, refining the website based on **ongoing user feedback**.
 - Utilized **website analytics** to monitor user behavior, optimize navigation paths, and boost engagement.
 - Monitored **sales and user activity** metrics post-launch to measure success and help with future enhancements.
 - Performance testing**, emphasizing speed and reliability.
- Materials:**
 - Our application is built with the **MERN** tech stack
 - MongoDB** for database management
 - Express.js** for backend development
 - React.js** for frontend development
 - Node.js** for server-side execution
 - Cloud Infrastructure:** Google Cloud Hosting, ensuring high availability and scalability
 - SSL Certificate** implementation guarantees secure transactions for all users,