

Website Development for Receiving Orders of Second-Hand Tires: A Case Study of Ayara Tire Shop, Samut Prakan Province

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Abstract

This study aims to (1) develop a website for receiving orders of second-hand tires, focusing on a case study of Ayara Tire Shop, Samut Prakan, and (2) Assess user satisfaction with the website. The population includes the shop owner and 40 customers of Ayara Tire Shop. The study utilizes theories related to website design and development, e-commerce, and a customer satisfaction evaluation form for the website users. Research findings are the developed website that allowed customers easy access, supported the buying and selling of second-hand tires, and provided convenient search functionalities for product information and details. Additionally, the system efficiently stored and managed data, enabling quicker operations. From the satisfaction evaluation of 40 participants, the findings are as follows 1) Content satisfaction: Average score of 4.35, with a standard deviation of 0.58, indicating a high level of satisfaction. 2) Media quality is an average score of 4.31, with a standard deviation of 0.63, indicating a high level of satisfaction. 3) Website design and layout: Average score of 4.26, with a standard deviation of 0.68, indicating a high level of satisfaction. And 4) Practicality and usability is an average score of 4.33, with a standard deviation of 0.63, indicating a high level of satisfaction.

Keywords: Website Development, Receiving Orders, Second-Hand Tires,

1. Introduction

Nowadays, the use of personal vehicles has become increasingly popular due to their convenience, safety, and ability to transport various belongings. This has led to a significant number of vehicles on the roads, making cars an essential item for people in the modern era. There is now a wide range of vehicles available for purchase, including sedans, pickup trucks, trucks, and public buses, catering to various customer budgets and needs. Regardless of the type, all vehicles rely on tires as a critical component for their performance.

Tires serve various purposes depending on their use, such as absorbing shocks while in motion, reducing noise during travel, enhancing fuel efficiency, channeling water on wet roads, improving vehicle control and maneuverability, ensuring road grip, and supporting different driving conditions like sharp turns, inclines, rough terrain, or steep descents (Apichat, 2017).

The COVID-19 pandemic has disrupted the global economy, forcing consumers to cut costs. With tires typically having a lifespan of five years, many consumers, constrained by financial challenges, opt for second-hand tires despite potential safety concerns. Concurrently, information technology has become integral to daily life, offering convenience and fulfilling diverse societal needs. It facilitates various functions such as online shopping via websites, email communications, and online marketing channels. E-commerce platforms enable businesses to showcase and sell products online, allowing customers to purchase goods anytime and anywhere, streamlining transactions for accuracy and efficiency and in managing innovation and technological advancement, businesses must adapt and respond to changes in the environment to ensure their survival, achieve steady growth, and enhance their competitiveness in international markets. This leads to positive outcomes for the organization in the future. (Pimonratanakan, 2022)

Ayara Tire Shop currently lacks an online ordering system, requiring customers to visit the physical store to view and purchase products. This can be inconvenient, especially for those located far from the store or with limited time for shopping. Introducing an e-commerce website could resolve these time-related issues by allowing customers to browse and purchase products 24/7, thus saving time and enhancing the overall shopping experience.

In response to the challenges outlined above, a research project was initiated in collaboration with website development experts to create an online platform for second-hand tire orders. This website aims to streamline the ordering process, providing customers with easy access to product information and details. It ensures faster operations, enabling customers to order products without visiting the store. With an accessible and functional online system, customers can browse the catalog, select products, and complete purchases conveniently, making the process more efficient and user-friendly.

1.1 Research Objective

1. To develop a website for receiving orders of second-hand tires: A case study of Ayara Tire Shop, Samut Prakan.
2. To study user satisfaction with the website for receiving orders of second-hand tires: A case study of Ayara Tire Shop, Samut Prakan.

2. Methods

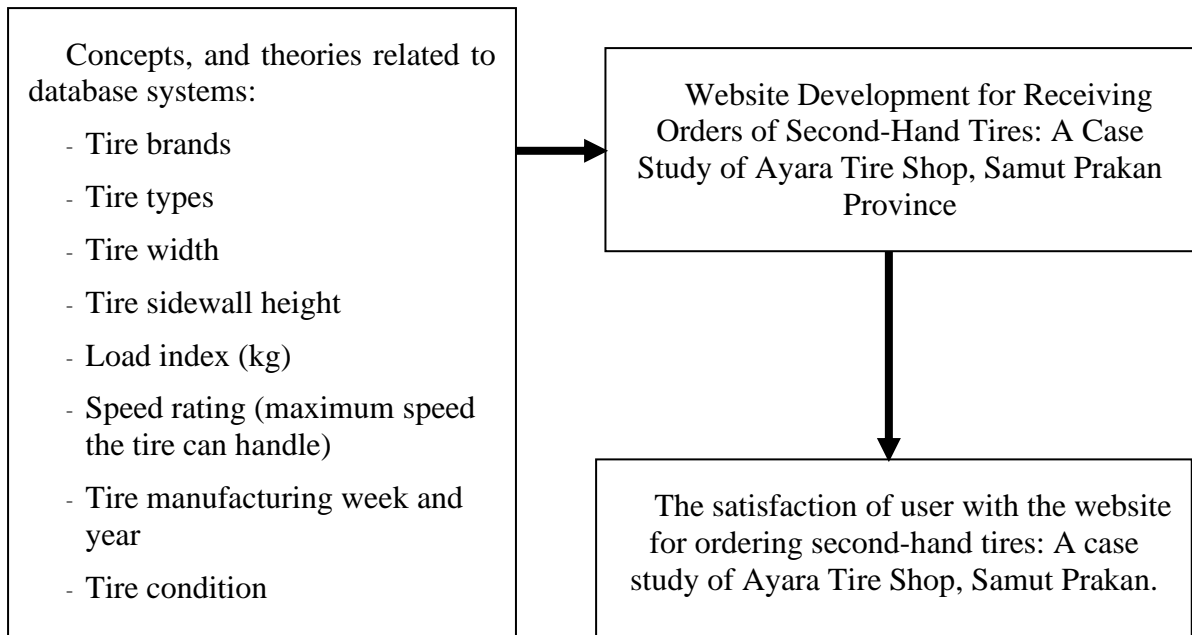
This research on the development of a website for receiving orders of second-hand tires, a case study of Ayara Tire Shop, Samut Prakan, involves on-site visits and interviews with the shop owner, as well as the use of related documents, theses, and research studies on website development.

The population scope is shopping owners and customers: 40 customers who use the services of Ayara Tire Shop, Samut Prakan.

Time Scope was conducted over a period of 8 months, from May to December 2024.

Geographical Scope was study and data collection were conducted at Ayara Tire Shop, Samut Prakan.

Figure 1: Research Framework



3. Results and Discussion

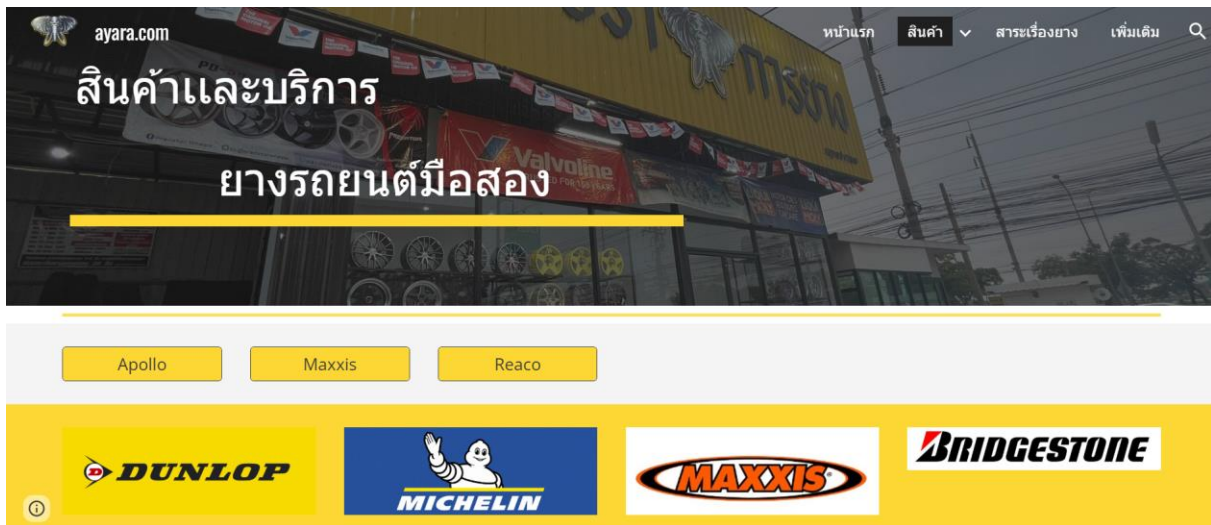
Home Page: Displays the shop's contact information, menu bar options including Products, Order Products, Inventory, Tire Knowledge, and About Us to showcase the shop's services, as illustrated in Figure 2.

Figure 2: Homepage of the Website



Products Page: This page allows users to select their desired product brands and includes menu options for Order Products and Inventory, as shown in Figure 3.

Figure 3: Product Page



Order Products Page: This page links to a Google Form for placing orders, providing a shipping address, contact details, or specifying the time for in-store service and payment. As shown in Figure 4.

Figure 4: Order Product Page



Google Form for Ordering Products: This page allows users to select their desired products, provide a shipping address, contact details, specify the time for in-store service, and make payment, as shown in Figure 5

Figure 5: Google Form for Ordering Products

Inventory Page: This page allows users to search for products within the store by tire brand, tire width, sidewall height, tire size, manufacturing week/year, type, price (per set), and product code, as shown in Figure 6.

Figure 6: Inventory Page

ayara.com

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สินค้า

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สาระเรื่องยาง

เพิ่มเติม

สินค้าในคลัง

ค้นหาข้อมูล

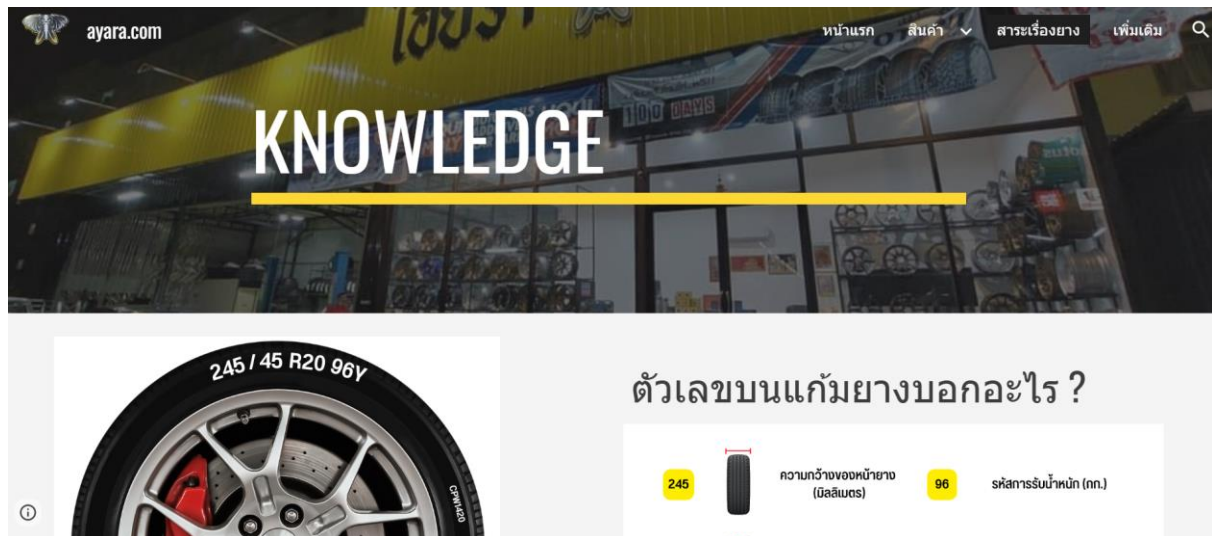
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แบรนด์ยาง	หน้ายาง	แก้มยาง	ขนาดยาง	สัปดาห์ปี	ประเภท	ราคา (ชุด)	รหัสสินค้า
Apollo amazer 3g max	195	65	15 22/19	Radial		2,500	A001
Maxxis Bravo HP	235	60	18 40/18	Radial		2,700	A002
REACO RH888	255	55	18 40/20	Radial		2,700	A003

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Tire Knowledge Page: This page provides information on how to read tire information, tire maintenance tips for longevity, and other related topics, as shown in Figure 7.

Figure 7: Tire Knowledge Page



About Us Page: This page provides additional information about the services offered by the shop, as shown in Figure 8.

Figure 8: About Us Page



4. Conclusion

The study found that the developed website can support the buying and selling of second-hand tires, as well as accurately store data, resulting in faster operations. This program can also be developed for businesses with similar operations. It has improved operational efficiency, speed, and accuracy. Customers interested in the products can place orders through the website without needing to visit the shop. The products are displayed on the website, allowing customers to view and order them directly.

The results of the website satisfaction evaluation from 40 participants show that:

- 1) In terms of content, the average score was 4.35 with a standard deviation of 0.58, rated at a high level.
- 2) In terms of media quality, the average score was 4.31 with a standard deviation of 0.63, rated at a high level.
- 3) In terms of website design and layout, the average score was 4.26 with a standard deviation of 0.68, rated at a high level.
- 4) In terms of benefits and usability, the average score was 4.33 with a standard deviation of 0.63, rated at a high level.

5. Acknowledgment

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