IT Kim: A Kapampangan Sweet Delicacy E-Commerce Website

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Abstract

This study aims to help Kapampangan sweet delicacy vendors, couriers, and sellers. To understand their roles, aspirations, and the impact of digital commerce on their craft and livelihood. Through qualitative interviews and participant observations, this research explores the narratives of Kapampangan sweet delicacy vendors, elucidating their traditional knowledge, craftsmanship, and the cultural significance imbued within their products. It highlights their dedication to preserving age-old recipes and techniques while adapting to the digital landscape. To illuminate the transformative capacity of e-commerce for Kapampangan skilled workers. By shedding light on the challenges encountered and opportunities presented by digital platforms, this research advocates for inclusive and empowering approaches that honor and preserve the invaluable contributions of the vendors to Kapampangan culinary heritage. The system is an accessible web-based application that supports Kapampangan sweet delicacy vendors, couriers, and sellers. In order to fulfill the project, the proponents used Agile Methodology for the development of the system, which included interactive and incremental development and solutions. The system was developed and designed using Visual Studio, JavaScript, JavaScript XML, Express, Chakra UI, Next JS, and Firebase. It was also tested using the Windows 10 operating system. The application was evaluated in terms of functionality, efficiency, compatibility, usability, reliability, security, maintainability, and portability by fifty (50) users, and three (3) IT experts. All the objectives were met according to the results of the evaluation process.

Keywords: *Kapampangan sweet delicacy vendors, digital commerce, craftsmanship, cultural significance, empowering approaches, challenges and opportunities, web-based application, culinary heritage*

INTRODUCTION

With the continuous growth of the business industry, many stores have been enjoyed since then and until now. The growth of the e-commerce market parallels the advancements in information technology and the widespread adoption of mobile devices.

As new products continually emerge, customers are dedicating more time and energy to carefully selecting items that pique their interest. Data about a customer's past purchases and behavioral habits can be gathered with information technology and the ubiquity of mobile devices (Soo young Lee, 2022). The need for recommender systems that provide clients personalized services is increasing as customer data accumulates.

By setting up an account and providing personal data, the consumer registers as a member. Upon the creation of an account, the client record is established and kept in Sterling Order Management. The product search is done through Sterling Order Management. The search has led to the provision of product information and inventory availability.

The customer adds the chosen item to their shopping cart if it is in stock. The proposed order has received approval. The product can be reserved for the customer using Sterling Order Management, which can be configured to do this. Throughout the process of fulfilling orders, product reservations are used up during the scheduling stage. The inventory picture alters after hard allocation of inventory.

The customer can choose delivery options where in office work or home base. The buyer is directed to the payment screen, where they can decide on a preferred mode of payment for the product to be purchased. The customer acknowledges getting the order. An email message and a tracking number are generated and sent to the customer. As an order progresses through the fulfillment process, Sterling

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Order Management allows the customer to track its progress based on the tracking number.

A fulfillment method is selected, and the customer enters their mailing address. Depending on the shipment address and chosen fulfillment method that the consumer specifies, the goods are delivered to a distribution center (DC), warehouse, or store. An invoice is produced for each order that the customer places.

In studying this research, we discovered that the Kapampangan sweet delicacies have been forgotten by most of its names and appearance. Other consumers are looking for the right description and enough knowledge to know the details on what they will buy, the right price and the right direction of the location where they can buy the Kapampangan Sweet Delicacy they are looking for?

The instrument for user preferences over a particular collection of objects is the recommendation system. It makes use of the preceding auxiliary data, such as reviews or ratings. A recommender system's primary goal is to engage users and improve their online experience (Wei Chen, 2019).

With an evaluation of different approaches (Maria Garcia, 2020). They examine content-based recommendation systems in this research. This concept applies to software used on the Web to suggest products to users based on product descriptions and interest profiles. First, they will define a recommendation system generically. Next, they will talk about why recommendation systems are important for modern Web users and identify the issue that they are attempting to address.

To address the problem of information overload, collaborative filtering is an effective technique that is often used in recommender systems. It makes predictions by locating users who have similar tastes or goods that have been picked in a similar manner. However, as the number of people or objects increases quickly, the typical collaborative filtering strategy suffers from data sparsity (Minh Nguyen, 2018).

Pampangeños are distinguished by the way they preserve their meals. Popular in the preparation of sweet delights. Desserts are also included in their menu culture. "Tibok-tibok" is one of their signature desserts. It is Carabao milk with coconut cream with latik on top. The Coconut cream is simmered for an hour to decrease and thicken. The dark appearance makes the dish more appealing. It is not as sweet as "Leche flan" (another Pampanga specialty), but its flavor entices you to desire more (Louie Giray, Loraine Cerillo, Bien Justine Cruz, 2021).

With the Study on Personalized Recommendation Method Based on Contents Using Activity and Location Information (Jiyeon Kim, 2017). They propose combining behavior and location information on contents on various channels, such as web to distribute user contents. Contents employing behavior as an implicit user feedback was integrated into machine learning procedure for updating user profiles and contents preference with ways to create user and contents profiles. Content-based and collaborative filtering approaches were utilized in the machine learning procedure to analyze the user's content choice. This research also suggests content location information on websites for final recommended contents.

In conclusion the system can be used by consumers looking for Kapampangan Sweet Delicacy locating in Pampanga which will help to provide exact information to customers. However, it will not cover other desserts that the consumer’s looking for. This only covers what can be recommended, Sweet Delicacy that is only available on the website. It also depends on the customers if they want to buy a delicacy based on what the website recommends

Statement of the Problem

Finding information in a consumer's browser sometimes is hard and time-consuming. Considering this, the study will focus on the following problems:

1. Customers lack knowledge of different stores that provide the best sweet delicacy in town.
2. Inconvenience for the customer to go to the Actual store.

3. If the Customer wants to search in google about sweet delicacies but the google can't properly suggest what the customer wants.
4. Customers may find sweet delicacy products in online stores, but the estimated delivery process is too long. If you're from Angeles City, we have an ordering website for you.

Objectives of the Study

This study aims to provide an easier way for consumers to acquire the information and collect some data about Kapampangan sweet delicacies. This study will focus on achieving the following goals:

1. Our system has every store that we gather to use our system that can serve you the best sweet delicacy.
2. Our system helps you to lessen your burden of going to the actual store.
3. Our system only focuses on sweet delicacy products, so the customers don't need to search for them on google.
4. Our system is strictly for Angeles's city people only.

Scope of the Study

This study focuses on the creation of a website for consumers who want an easier way to provide Kapampangan sweet delicacies e-commerce system. It consists of different modules that address the users' requirements. This study specifically covers the following:

- Admin - it manages all accounts and it can see all the users, vendors, courier of the system.
- Seller - they can post they product and update, delete their product and they can approve and dis-approve the order of the customer
- Courier - if the seller approves the order of the customer the information of the customer directly proceeds to the courier to deliver it to them.
- Customer - they can select an order for different stores or in the same store they can see it in their cart and upon checking out they must provide delivery information to the seller and pass to courier, and they must agree to no refund policy to proceed their process.

1. For the meantime we are the one who delivers the item to the customer.
2. The system has its own courier system. The seller will have contacts with a delivery rider to have their orders delivered to the customers.
3. Once your total bill reaches 250 pesos your delivery charges are 25 pesos and more than 300 pesos total bill you have free shipping fee.
4. The discount is automatically deducted once the seller posts it.
5. The system can provide notifications. All transactions may be tracked on each user's profile and notification directly to your Gmail account
6. Sellers can upload their chosen product to sell in our system.
7. customers need to agree to our agreement of non-refundable before checking out the product
8. Our system has a 5% income from the seller if they post their product in our system.
9. Courier's also have a 5 % income from the seller's product plus delivery charge once the order is placed out., for the maintenance of their motorcycle.
10. all the 5% profit of the system fee will show in the admin dashboard including the transaction of the customer and seller for evidence purposes.
11. sellers have a sales report of total purchase order.
12. Customers can give comments once the product is delivered to them, and they can give a star if they are satisfied with the taste of the product.
13. Our system is only in the Angels city only when you order in you type your location is not within the Angeles the place order button you can't click it
14. The courier also has an income report in their dashboard to see if how much money they make per delivery. And also, the 5 percent profit given by the system.

Delimitations of the Study

The study will not cover the following:

1. The system is not responsible from returns and refunds of the item if they change their mind along the way
2. Should issues emerge, the system won't handle any significant disputes between the user/customer and the providers of sweet delicacy services.
3. The system lacks its own customer service for further information. The contact information is given on the website for the shops that serve Kapampangan Sweet delicacy.
4. Our system does not include another region of the Pampanga; it will be in Angeles's city only.
5. If the delivery of the product is taking too long our system is not liable for that situation just be patient your order will go through.
6. If your signal or internet are too slow, we can't solve that problem. It's up to you if your browsing is too slow.
7. We do not have a partnership like grab or anything else related to delivering your product, we can deliver it by ourselves.
8. Our system does not accept any credit card payment and other payment methods.
9. For now, all delivery fees are COD only.

Paradigm of the Study

The system approach input-process-output was utilized by the researchers to describe the study's paradigm. The IPO framework illustrates the input consists of the knowledge requirements, the study's context, and the hardware and software specifications. The procedure needed to finish the system is the following section. Beginning with the collection of the initial requirements, the prototyping cycle, the system's creation, and testing, and ultimately the system's updating. The IT Kim A Kapampangan Sweet Delicacy E-commerce Website.

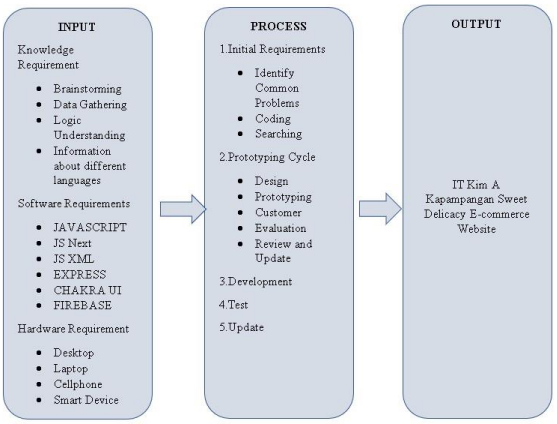

Figure 1. Paradigm of the Study

Significance of the Study

The study will be beneficial to the following:

1. To the Customer: Through this website, customers can access information about the recommended website about Kapampangan Sweet Delicacy.
2. To the Sweet Delicacies Entrepreneurs: Sweet delicacies business owners will have the chance to reach clients wherever they are by using an online platform to market and sell their goods.
3. To the Sweet Delicacies Business Service Providers: Sweet Delicacies business service providers such as manager, service crew, and rider day care will be given the opportunity to find clients, promote their services, and even ease their schedules with their clients.
4. To the Researchers: The researchers will learn how to create and manage an online marketplace. The technology will also assist them in allocating resources and meeting the needs of the parties mentioned.
5. To the Future Researchers - This paper may be used as a reference by future studies.

Definition of Terms

1. Kapampangan Sweet Delicacy – this is the sweet delights signature a Kapampangan serves like: tibok- tibok, kalame, leche flan, sampelot, suman etc.
2. Pampangeños - ethnolinguistic group found in the Philippines, primarily in the province of Pampanga in the middle plain of Luzon, but also in isolated pockets in other neighboring provinces.

3. Physical Store - a physical store, sometimes known as a brick-and-mortar store, is a retail establishment that requires a physical location. location to display and sell its goods.
4. Social Media Platforms - several well-known instances of generic social networking sites are Twitter, Facebook, and LinkedIn.
5. Input-Process-Output – is a typed text, mouse clicks, and other methods of entering data into a computer system are examples of input in the phrase "Input-Process-Output." The transformation of input data into output data is known as processing. The results of the computer's analysis of the input, which can include tactile, aural, or visual experiences, are called output.
6. Deploy - This illustrates the methods used by developers to write, test, and publish new code.
7. Phenomena - a fact or situation that is observed to exist or happen, especially one whose cause or explanation is in question.
8. Business Service Provider - a specific kind of service provider that rents commercial customers other people's software. BSPs provide a cheap means of acquiring applications across networks.
9. Context-bound - is a shorthand for expressing the common pattern of a context parameter that depends on a type of parameter. Using a context bound, the maximum function of the last section can be written.
10. Ubiquity - moving seamlessly between different devices but also using several devices simultaneously. This ubiquity imposes the need to erase the distinctions between channels and modes of interaction.

METHODS

This chapter describes the approaches that the researchers will employ in the system's development. It also includes the research design, respondents, sampling technique, instruments, instrument preparation and validation, data collection processes, and tools that the researchers will utilize in the study.

Research Designs

This section of the research is concerned with the methods to employ to produce the appropriate materials required to identify the issue and develop a solution.

Case Studies Research Method. According to Saul Mcleod (2023), Experiments typically yield quantitative data, as they are concerned with measuring things. However, other research methods, such as controlled observations and questionnaires, can produce both quantitative information. For example, a rating scale or closed questions on a questionnaire would generate quantitative data as this produces either numerical data or data that can be put into categories (e.g., “yes,” “no” answers). Experimental methods limit how a research participant can react to and express appropriate social behavior. Findings are, therefore, likely to be context-bound and simply a reflection of the assumptions that the researcher brings to the investigation.

The case study research method was determined by the researchers to be the most appropriate method for the study. This is because the study intends to give a solution that will provide a more efficient way using JAVASCRIPT language which then will be used to create features of the e-commerce system for Kapampangan sweet delicacy that will access consumers and sellers.

System Development Methodology

An iterative approach to system development is called the agile technique. Five to seven stages are present. Plan, Design, Develop, Test, Deploy, and Review make up the majority. The actions and goals of each phase are different from one another, and the entire phase describes the life cycle of the software up until launch. We employ the Agile Methodology since our system's objective is for us to be able to redo certain portions of it if one of the stages throughout system development contains a small error.

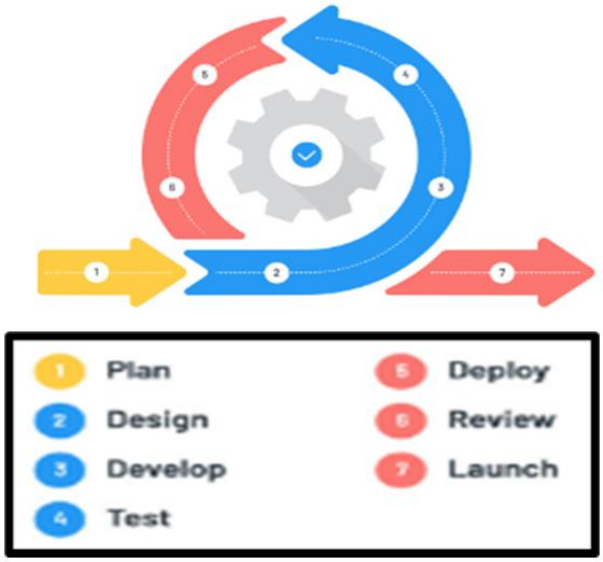

Figure 2. Agile Methodology

Plan - Researchers initially develop a plan to serve as a guide for idea collection to achieve the system's primary purpose.

Design - HTML and CSS are the languages that were used to develop this system. These are the procedures for producing and structuring the content in a way that works.

Develop - This section is where the system's construction begins.

Test - the procedures and strategies used to decide if a specific product is appropriate for deployment.

Deploy - This illustrates how the methods used by developers to write, test, and publish new code, as well as the quality of each update, will determine how rapidly a product can respond to changes in customer preferences or requirements.

Review - Researchers will determine at this stage if the system is operating effectively or needs to be improved.

Launch - Researchers can check to see if the website has any additional features.

Participants

This part of the study outlines the sample and technique that the researchers will utilize to recruit research participants. It also determines the possible volunteers who will take part in the study.

A subset of a population is chosen using a mixed method. Each person in the population has an exact equal probability of getting chosen using this sampling technique. Of all the probability sampling techniques, this one is the easiest to understand because it only needs one random selection and little prior population knowledge. Any research conducted with this sample should have high internal and external validity and be less likely to be biased by factors like sampling bias and selection bias because randomization is used Lauren Thomas (Lauren Thomas 2020).

The participants for the study will be chosen by the researchers using a mixed method. The total of 50 participants will be split into the following groups: forty (40) prospective customers; five (5) prospective sellers; five (5) prospective couriers; and three (3) prospective IT specialists, are what we intend to take part in our study. All of whom will go to areas from Pampanga and evaluate, test, and respond to evaluation questions regarding the system.

Participants	Values
Prospective Customers	40
Prospective Vendor	5
Prospective Couriers	5
Prospective IT Specialists	3
Total	53

Procedures

This section of the study focuses on the methods that the researchers will employ to collect data and information.

Interview

If you're getting ready for an interview for a position as a qualitative researcher, the interviewer will probably ask you several questions to assess how you approach research, how you interact with participants and colleagues, and how you use technological tools in your work. Practice your responses to frequent and detailed inquiries about

your research background and professional experience in advance to be well-prepared (Amber Krosel, 2023).

Survey

Survey Research is a quantitative research method used for collecting data from a set of respondents. It has been perhaps one of the most used methodologies in the industry for several years due to the multiple benefits and advantages that it has when collecting and analyzing data.

Observation

As the name implies, observation is a method of gathering facts through observation. Because the researcher must immerse herself in the context where her respondents are, while taking notes or recording, this data gathering method is classed as a participatory study. Observation data gathering methods include watching, listening, reading, touching, and recording phenomena behavior and attributes.

Web Research

Web research is a type of research in which the researcher uses current technology, specifically the Internet, to find information on a certain issue. This strategy was usually employed by the researchers to look for similar studies and literature in order to make the paper more respectable. Furthermore, the web was used to research unknown topics.

Evaluation

ISO 25010, or the quality model, is an evaluation system used to measure the quality of the system. The quality characteristics as presented by ISO 205010 are as follows: Functional Suitability. This refers to the degree to which the functions of the system meet the specified needs.

Performance Efficiency. This characteristic refers to the number of resources which affects the system's performance.

Compatibility. This criterion refers to the degree to which the system can work with or share data with other systems.

Usability. Measures whether different users can use the system under specific conditions.

Reliability. Measures if the system can work under different circumstances. Security. Measures the security of the data stored in the system.

Maintainability. Refers to the system's adaptability to changes including modification, and improvements.

Portability. Refers to the system's ability to work under different environments.

Data Analysis

This section of the study covers the data analysis process that will be utilized to analyze the participants' responses.

Table 1. Five Point Ordinal Scale

Numerical Rating	Descriptive Evaluation
5	Very Satisfied
4	Satisfied
3	Neutral
2	Dissatisfied
1	Very Dissatisfied

As stated in table 2, the assessment results will be examined and interpreted for the equivalent mean interpretation.

Table 2. Scale for Interpreting Evaluation Results

Mean	Interpretation
4.30-5.00	Excellent
3.50-4.29	Very Good
2.70-3.49	Good
1.80-2.69	Poor
1.00-1.79	Very Poor

Design and Implementation

Requirement Specification Analysis

This portion will present the features of each module.

1. System Admin Module
   a) Sign in – from here, system admin may log with their google accounts this is the gateway for system administrators to securely access their admin accounts and enter the admin page of the website.

b) Admin dashboard – in here, administrators can access a comprehensive dashboard displaying the number of couriers, vendors and customers. Administrators also have the option to explore each of these data categories in greater detail.
c) Manage Vendor List - in here, administrators will see and maintain the listed accounts of vendors.
d) Manage Courier List - in here, administrators will be able to see and maintain the listed accounts of couriers.
e) Manage Customer List - in here, administrators will see and maintain the listed accounts of Customers
f) Status – in here, administrators have the capability to to review users and authority to approve the new enter accounts.
g) Actions – in here, administrators will see the name, address and contact number of users accounts. They have the authority to take actions like blocking these users.
h) Sales report - in here, administrators will see the customers transaction of orders.
i) Profit - in here, the admin will see the amount earned profit in every spend buying Kapampangan Sweet Delicacy product.
j) View item - in here, administrator will see and view customer info, courier info and the customers bought items of Kapampangan sweet delicacy product.

2. Courier Module
a) Sign in – from here, users can sign in with their google accounts to access the courier page.
b) Courier dashboard – in here, the courier can see his/her profile name, address, contact number and email address. They may also see the displaying current delivery, number of available orders and finished orders.
c) Update profile – in here, the courier may update their profile accounts
d) Available orders – in here, the courier will see the list displaying order id, date, customer, status and actions.
e) Status - here, the courier may see the order accepted, when they accept the orders.
f) Actions – in here, the courier can view the details of customer and accept the order
g) Finish Orders – in here, the courier will see already done orders.
h) Income - in here, it indicates the earned amount of money of the courier, in every purchase of Kapampangan sweet delicacy product of customers.

3. Customer Module
a) Sign in – from here, users will sign in with their google accounts to access the customer page.
b) Homepage- this is the first page of a website, where users will see featured products and navigation options will guide users to different pages.
c) Edit Profile - in this page users may edit their profile like add and delete address and phone number.
d) Featured Product - in here will see the different Kapampangan sweet delicacy product vendor sales.
e) Vendor Pages - in here users will see the different vendors selling sweet delicacy products.
f) Search Product- this will allow users to search Kapampangan sweet delicacy products available in this page.
g) Customer Cart- in here users will see the quantity of the sweet delicacy product that is added to the cart.
h) Checkout - in here will allow users to select their address, phone number and select payment method cash on delivery only.
i) Place Order- in here users will need to check the box to agree terms and conditions to no refund policy before place order the product.
j) Orders- in here user will see the status of sweet delicacy order when it will Order Placed, In Transit and Delivered.
k) Order placed - in here users will see the product order is already order placed and vendor will accept the order before customer will see the Order accepted.
l) In Transit - here the user will see the order is in transit when the courier accepts the order.
m) Delivered - here, the user will see the order received if they have already got the product.

n) Ratings and Feedback - this will allow users to give rate and feedback to the products.

4. Vendor Module

a) Sign in - from here users will sign into them google accounts to access the vendor page.
b) Vendor dashboard - in this dashboard vendor will see their profile, products, and customer orders
c) Update profile- in here vendors are allowed to update their profile image, store name, address, contact number.
d) Product list - in here vendors will see listed products posted in store and allow to make actions like view, edit, delete product.
e) Add product - here vendor will attach image file of the product, product name, price, discounted price, quantity, and description.
f) Title – Product name of their best seller in their store
g) Image – Product image of their best seller in their store
h) Info – In each picture of the sweet delicacies there is a description written on it including price
i) Order list - in here vendor will see the listed order of customer and vendor allowed to make actions like view details, accept and decline order.
j) Sales Report - in here the vendors will see the customer's transaction of orders and total of sales.

Hardware Specifications

This section shows the hardware specifications used during the development of the system, and the recommended hardware specifications for using the system.

Table 3. Hardware Specifications for the Development

Hardware Specification	Minimum Server	Minimum PC
Processor	Intel i5 Series Processor	Intel(R) Core (TM) i5-2520M CPU @ 2.50GHz 2.50 GHz
RAM	8.00 GB	4.0 GB
Storage	512 GB	118GB

Table 4. Hardware Specifications for the Implementation

Hardware Specification	Minimum Server	Minimum PC
Processor	Intel(R) Pentium(R) Silver	Intel(R) Pentium(R) Silver N5030 CPU @ 1.10GHz 1.10 GHz
RAM	8.00 GB	(7.81 GB usable)
Storage	931 GB	118 GB

Software Specification

The software resources needed to create the system are listed in this section.

RESULTS

System/Application Outputs

This section presents screenshots of the inputs and outputs of the system. (See Appendix G)

Evaluation Results

Table 6. Evaluation of IT Experts

Criteria	Mean	Descriptive Rating
Functional Suitability	4.67	Excellent
Performance	4.78	Excellent
Compatibility	4.5	Very Good
Usability	4.61	Excellent
Reliability	4.67	Excellent

Security	4.4	Very Good
Maintainability	4.73	Excellent
Portability	4.55	Excellent
Overall Mean	**4.61**	**Excellent**

Functional Suitability had the Highest rate of 4.67 that interpreted to Excellent the IT Kim this shows that the system properly meets the function of the IT Kim system.

Performance Efficiency 2nd highest to the assessment which interpreted to Excellent which means that the system meets the function and processing times.

Compatibility rated 7th highest and has the 4.5 that interpreted to Very Good it shows that the IT Kim is user-friendly and its resources.

Usability rated 4.61 that is interpreted as Excellent it shows that users can easily and efficiently be satisfied with the context of the IT Kim.
Reliability has the rate of 4.67 that is interpreted to meet the needs of reliability under normal operation.

Security got the rating 4.4 that is interpreted as Very Good. It shows that IT Kim ensures that data are accessible only to those authorized to have access.

Maintainability rated 2nd highest that interpreted as Excellent it shows effectiveness and efficiency with which the criteria of the IT Kim have met.

Portability rates 4.55 interpreted to Excellent it shows that expectations have met the website portability it signifies that a website, system, or product can be easily adapted and deployed across different environments, platforms, and devices without significant modification.

Table 7. Evaluation of Non-IT Experts

Criteria	Respondents	Descriptive Rating
Functional Suitability	4.6	Very Good
Performance	4.64	Excellent
Compatibility	4.42	Excellent
Usability	4.63	Excellent
Reliability	4.52	Excellent
Overall Mean	**4.56**	**Excellent**

Functionality Suitability rated 4.6 that interpreted to Very Good this means that the expectation of the users has met. Can be easily used and it works properly.

Performance Efficiency got the Highest rated 4.64 that interpreted to Excellent it shows that high level of effectiveness, optimization, and productivity within the given context.

Usability rate with 4.63 ranked 2nd in the assessment that interpreted as Excellent for Users without much instruction or direction, users can pick up the operation of the device rapidly.

Reliability rated 4.52 of the assessment that interpreted as Very Good the application is trusted to consistently meet user needs and expectations.

DISCUSSION

This chapter presents an overview of the study and the conclusion of the research endeavor. The study is examined in terms of its contribution to the field and its limitations. Recommendations could be explored for improved IT-Kim a Kapampangan sweet delicacy E-commerce website.

Summary of Findings

The primary objective of this research was to identify improved methods of sweet delicacy and to develop guidelines for their use. They can choose from the available products. Also, with benefits, they provide a service provider to deliver to their home with less hassle to travel to the store. Their feedback will help to monitor and check the detailed information to create more sweet delicacy features for upcoming.

1. IT-Kim Sweet Delicacy is a web-based application that supports the sweets product.
2. The website is focused on a user-friendly sign-in GMAIL for customers, vendors and service providers.
3. The respondents are forty (40) customers, five (5) vendors, five (5) couriers and (3) Three IT Experts.

The system was developed using the following frameworks, and languages:

Visual Studio, JavaScript, Express, Next JS, and Firebase for the backend. For the front-end JavaScript XML, Chakra UI for designing the system. And tested to a Microsoft Windows 10 operating system and to the laptop that is applicable.

Conclusion

The researcher concluded the following regarding the study.

1. A perception of IT-Kim: A Kapampangan Sweet Delicacy E-Commerce Website operation system.
2. The researchers created a website application that provides the service information details needed by the users
3. The admin manages all accounts and maintains the information of the data by the user.

Recommendation

The following recommendations are made for the upcoming future of the system-enhanced improvement.

1. Mobile applications will be available on Android and IOS.
2. Use the payment gateway as fast as possible.
3. Customer support and add a website chat plugin to connect easily for some questions.
4. Give a short clip tutorial video if you don't know how to use the website.
5. Security protocols are in place to protect data and build trust.
6. FAQ section to address common queries and provide the best answer.
7. Loading animation to improve user experience.
8. If you want to have multi-couriers you need to provide a partnership to other delivery providers.
9. Advertisement of websites if you want to have more customers
10. If the future researcher wants to promote to different location, you can simply remove the Angeles City.