Research Article

Phardecine Digital Apps

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Abstract: The problem involves improving the weaknesses and difficulties of Phardecine, the present digital pharmacy platform, which prevents it from offering a smooth, reliable, and user-friendly experience. Consumers currently encounter several obstacles such as the site only accepts cash-on-delivery payments, which restricts their options and keeps out people who would rather pay online or in instalments. Additionally, consumers are unable to ask questions, offer comments, or quickly address problems when there are no direct lines of communication between them and retailers. Additionally, the difficult and constrictive login procedure makes it needlessly difficult for individuals who are not as tech-savvy to utilize the platform. Modern consumers, especially when it comes to healthcare services, are expecting more convenience, flexibility, and confidence in their digital interactions, which makes this a serious issue. Medications are necessary purchases, and any difficulties with the process might cause annoyance, decreased loyalty from customers, and a decline in platform confidence. These difficulties also restrict the platform's capacity to offer services to a wider range of users, which lowers its competitiveness in a market that is changing quickly. Changing the digital pharmacy experience is made possible by addressing these problems. The platform can increase accessibility and draw in more users by offering flexible payment choices like online payments or instalment plans. Enhancing client-merchant interactions with interactive communication tools like live chat, feedback forms, or rapid inquiry alternatives can increase customer happiness and confidence. The platform can be made more accessible and user-friendly by simplifying the login process with features like social media logins or QR code authentication. The platform's reputation as a dependable, safe, and creative solution in the healthcare industry is strengthened by these modifications, which also improve the user experience.

Keywords: digital pharmacy; e-pharmacy; medication delivery; online healthcare; secure transactions; healthcare innovation

1. INTRODUCTION

Phardecine is one of the digital apps of online store using online in windo application. Online pharmacy apps which are one of medicine delivery apps, are websites or applications that let users browse for and select from a range of medications, vitamins, supplements and have them delivered right to their door. Other services that some applications provide include ordering medicine, scheduling virtual consultations, and even medical exams. Typically, the app saves the user's medical information, which facilitates further online transactions. When a medication order is placed, it is sent to the closest pharmacy. Following order preparation, the apps pharmacy can send the order to the delivery provider and ship it to the client. Users have real-time delivery tracking in the apps.

Nowadays, all technology using online can be applied to all daily convenience. The authors created this application because customer which are family member, students, adult and patients faced difficulty to buy necessary medicines, supplements at the pharmacy, especially the elderly who need it. With these apps, they can make purchases quickly and easily. Phardecine also an application for digital pharmacies that uses technology's efficiency and ease to meet the various healthcare demands of various user groups. It ensures that everyone can easily maintain their health, regardless of location or circumstances, by providing a smooth platform for access to necessary medications, healthcare items, and services. Pharmacy apps has partnered with J&T to provide dependable delivery services since it understands how important timely access is. In order to improve customer satisfaction, the primary goal of this partnership is to make sure that design orders are delivered to clients promptly and conveniently. Customers have also been given a 50% discount on delivery fees by Phardecine. Customers may choose Phardecine as their go-to online source for medical supplies because of this program.

In order to guarantee the prompt and easy delivery of drugs and services, the healthcare system must overcome significant obstacles. Due to the scarcity of local pharmacies, many patients, especially those in isolated or underserved locations, find it difficult to obtain necessary medications. This problem is made worse for the elderly and those with limited mobility, who have a harder time going to pharmacies in person. Traditional delivery systems' inefficiencies make these issues much worse by causing delays that may impair health outcomes. In today's digital-first era, capabilities like digital prescription storage, real-time tracking, and virtual consultations are also lacking in many current platforms due to a lack of digital integration.

In a post-pandemic world when digital healthcare solutions and contactless services are commonplace, the necessity of fixing these concerns has increased. The necessity for easily accessible and effective pharmacy apps is further highlighted by the global ageing of populations and the rising incidence of chronic illnesses. Phardecine and other digital platforms can help to close these gaps, guaranteeing prompt and dependable delivery of medical supplies while lessening the strain on conventional healthcare institutions.

Recent research and statistics demonstrate the scope of the problem and the possible effects of apps for digital pharmacies. Grand View Research's 2023 research estimates that the worldwide e-pharmacy industry is worth $80.2 billion and is expected to expand at a compound annual growth rate (CAGR) of 19.5% by 2030. Likewise, according to a Statista report from 2024, 67% of customers like online pharmacies because of their effectiveness and convenience. The significance of enhancing access to vital medications is highlighted in reports by Frost & Sullivan and the World Health Organisation (WHO). Research indicates that pharmacy applications can cut down on needless hospital visits by 18% and medication non-adherence by 23%.

Additional research validates the efficacy of online pharmacy. Features including digital records, delivery monitoring, and consultation services greatly improve patient satisfaction and medication adherence, according to a study published in the Journal of Medical Internet Research (2022). Similarly, by lowering hospital visits and expediting healthcare delivery, digital pharmacies lessen the strain on healthcare systems, according to a 2023 Harvard Health study. By offering a digital solution that guarantees prompt access to prescription drugs, boosts convenience, and optimises healthcare results, Phardecine tackles these pressing issues. The software satisfies a variety of patient needs while staying up to date with worldwide trends in digital healthcare by incorporating features like real-time tracking, virtual consultations, and an intuitive user experience. In order to guarantee that everyone has fair access to healthcare, this action is vital and crucial.

2. METHOD & MATERIAL

The project outcomes for Phardecine focus on developing a strong, accessible platform that improves access to medical supplies and responds to the unique requirements of buyers that with chronic illnesses. The method guarantees that users, particularly those with limited mobility or busy schedules, can save time and effort by including features like online shopping and reliable shipping alternatives. By resolving worries about online transactions and enhancing login choices, the platform also places a high value on security and trustworthiness, boosting buyer confidence.

Furthermore, the project also aims to ease purchasers' financial burdens by offering cost-effective solutions, such as substitute medicine selections, value-for-money services, and reduced delivery costs. Several features that guarantee a smooth and effective user experience include medication uploads, different payment options and direct communication between buyers and sellers. By serving a variety of buyer sections, such as families looking for easy healthcare options, people who need daily medicine, and students balancing education commitments, the platform encourages accessibility.

Besides, Phardecine is able to gain positive reviews and greater acceptance by resolving present systematic limits and putting the needs of those using it first, so enhancing its standing as a trustworthy and effective healthcare platform of choice.

3. FINDINGS

The findings show that users struggle to access pharmacies because of lengthy lines, insufficient inventory, and time limitations. This issue particularly impacts students and families who have caregiving duties. Despite the convenience offered by online pharmacy platforms, worries regarding security, counterfeit drugs, and the absence of direct communication with pharmacists impede their adoption. Relying on cash-on-delivery (COD) is limiting, as users favor more flexible payment methods such as online payments and instalment plans. Improved digital features such as real-time prescription uploads, virtual consultations, delivery tracking, and a simplified login system are also in high demand. Moreover, affordability continues to be a significant concern, as users are in search of economical medical solutions and trustworthy delivery services. To meet these challenges, Phardecine needs to bolster security, broaden payment methods, make usability more straightforward, and boost customer involvement so as to develop a digital pharmacy platform that is more accessible, reliable, and efficient.

3.1 Project Challenges

In order to achieve the outcomes that are desired, many of potential challenges to the development of a digital pharmacy must be overcome. Building customer trust and maintaining security are crucial since users may be hesitant to buy medications online out of concern for privacy violations, fake medications, and incorrect prescriptions. The digital pharmacy must use strong encryption, safe payment methods, and accurate medication verification in order gain control over users. Because the digital pharmacy must serve a variety of user groups, such as knowledgeable about technology students and elderly family members with various levels of digital understanding, accessibility and usability are additional difficulties. Technical limitations must also be taken seriously, such as problems with access to the internet in places far away.

Another major issue is affordability, which calls for finding an agreement between offering affordable medications, like similar replacements, and maintaining high standards of quality while guaranteeing the digital pharmacy's long-term viability.

Effective management of delivery costs is also necessary, especially in locations with little population. Partnership with trustworthy pharmaceutical suppliers is necessary to maintain continuous medicine availability, and inventory and supply chain management are essential to guaranteeing real-time updates and preventing stock shortages.

Furthermore, the emergency response effectiveness, which calls for a system that can quickly handle urgent demands, particularly in times of emergency or natural disaster. It will be crucial to streamline logistics in order to prioritize and accelerate emergency orders. Moreover, managing legal compliance is a challenging undertaking because the online pharmacy needs to follow national and international healthcare laws, particularly those related to the certification and licensing of the medicines it sells.

Lastly, there is a technical and design issue in adding advanced functions like medication approvals, medication tracking, and direct connection with medical professionals into the digital pharmacy while maintaining a smooth user experience. Strategically addressing these problems is essential to the digital pharmacy's dependability and success.

3.2 Project Success Indicators

A variety of important measures can be used to assess the digital pharmacy's performance. Good feedback from a variety of user groups and high rates of user adoption and continued use will show that the apps can satisfy user needs. The effectiveness of its supply chain and logistics systems will be demonstrated by its consistent achievement of on-time delivery of medicines, especially during emergencies. The effective deployment of safe payment methods, strong data secure communication, and a few technical problems will demonstrate the digital pharmacy's dependability and security, all of which are essential for winning over buyers.

Other significant factors are affordability and financial sustainability. By providing affordable solutions, such generic medications, without sacrificing quality, the system will demonstrate its capacity to serve buyers on limited resources while maintaining its financial viability. High ratings and reviews are evidence of a favorable user's experience, which is further enhanced by an easy-to-use and simple payment processes.

Furthermore, credibility and regulatory compliance are important factors, with the digital pharmacy's reputation being confirmed by complete adherence to healthcare standards and gaining the required certifications. The benefits of the digital pharmacy will be highlighted by its effects on user convenience, such as lowering the need for in-person pharmacy visits and enhancing medication management.

The functional readiness of the digital pharmacy will also be strongly indicated by its capacity to handle requests for emergency medications. Its success will be further validated by partnerships, recognition, and positive word of reference. The durability of the digital pharmacy will be shown by operational efficiency, which includes easy inventory management and the smooth integration of cutting-edge technologies like document verification. If evaluated as an entire entity, these measurements will show how well the digital pharmacy achieves its goals.

4. DISCUSSION

Concept visualization is a process of thinking and visualizing a fresh concept and new ideas. It is essential to identify the key features that integrate the outcomes and the success indicators, and the values of the solution. Figure 1 and 2 show illustrations of the concept visualization of the system.
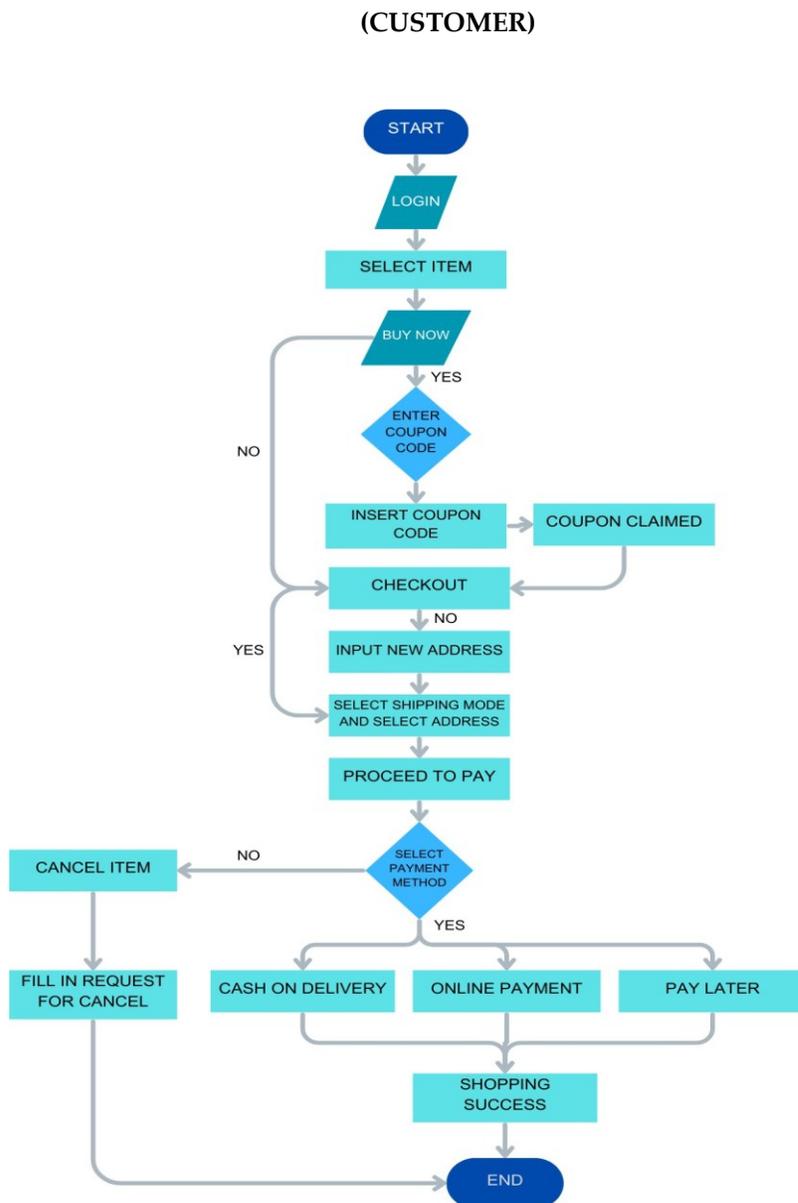
4.1 Concept Visualization

(CUSTOMER)

Figure 1. Concept Visualization of the System - Customer

Table 1. Customer's Process Flow Description

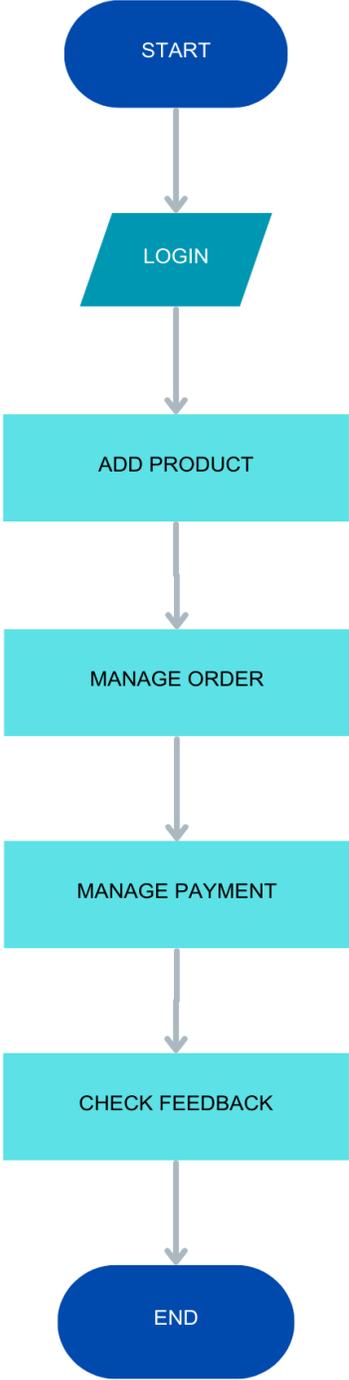| STEP	DESCRIPTION
Step 1: Start	The customer opens the Phardecine application to begin the shopping process.
Step 2: Login	The customer logs in using enhanced login methods such as QR codes, social media accounts, or traditional email/password.
Step 3: Select Item	Customers browse through a comprehensive product catalog with advanced filtering options. They select the items they wish to purchase and add them to their cart.
Step 4: Buy Now	The customer clicks the 'Buy Now' button to proceed to checkout.
Step 5: Enter Coupon Code	The system prompts the customer to enter any coupon code for discounts.
Step 6: Insert Coupon Code	The customer enters the coupon code in the provided field.
Step 7: Coupon Claimed	The system verifies the coupon code and applies the discount if valid.
Step 8: Checkout	The customer reviews their order details and proceeds to the checkout page.
Step 9: Input New Address	If the customer wants to use a new address, they input the new address details on this page.
Step 10: Select Shipping Mode and Address	The customer selects their preferred shipping mode and confirms the delivery address.
Step 11: Proceed To Pay	The customer moves to the payment section to complete the purchase.
Step 12: Select Payment Method	The customer can choose from multiple payment methods, including: • Cash on Delivery (COD) • Online Payment (Credit/Debit cards, Digital wallets) • Pay Later options (Instalment plans)
Step 13: Cancel Item	If the customer decides to cancel an item, they can do so before finalizing the order.
Step 14: Fill-In Request for Cancel	The customer fills in a cancellation request form, providing details about the item they wish to cancel.
Step 15: Shopping Success	Upon successful completion of the transaction, the customer receives an order confirmation. An automated confirmation email is also sent to the customer's registered email address.
Step 16: End	The process concludes with confirmation of the successful purchase.

(ADMIN)

Figure 2. Concept Visualization of the System - Admin

. **Table 2.** Admin's Process Flow Description

STEP	DESCRIPTION
Step 1: Start	The admin starts their session by accessing the Phardecine system.
Step 2: Login	Admin logs in using secure and enhanced authentication methods.
Step 3: Add Product	Admin adds new products to the inventory by entering comprehensive product details. Then, the system updates the product catalog in real-time.
Step 4: Manage Order	Admin oversees the order processing, ensuring orders are verified and dispatched accurately. This includes monitoring order statuses and handling any issues that arise.
Step 5: Manage Payment	Admin manages the verification of various payment methods. This includes processing online payments, tracking COD orders, and handling installment payments.
Step 6: Check Feedback	Admin reviews customer feedback and resolves any issues raised. Feedback is used to continuously improve the system and customer experience.
Step 7: End	The admin session concludes after all tasks are completed.

4.2 User Scenario

       User scenario is a story of the ideas that will generate more information on how the solution will work. It is a platform for communicating ideas about how the users' actions within the solution. Figure 3 shows an illustration of the user scenario.
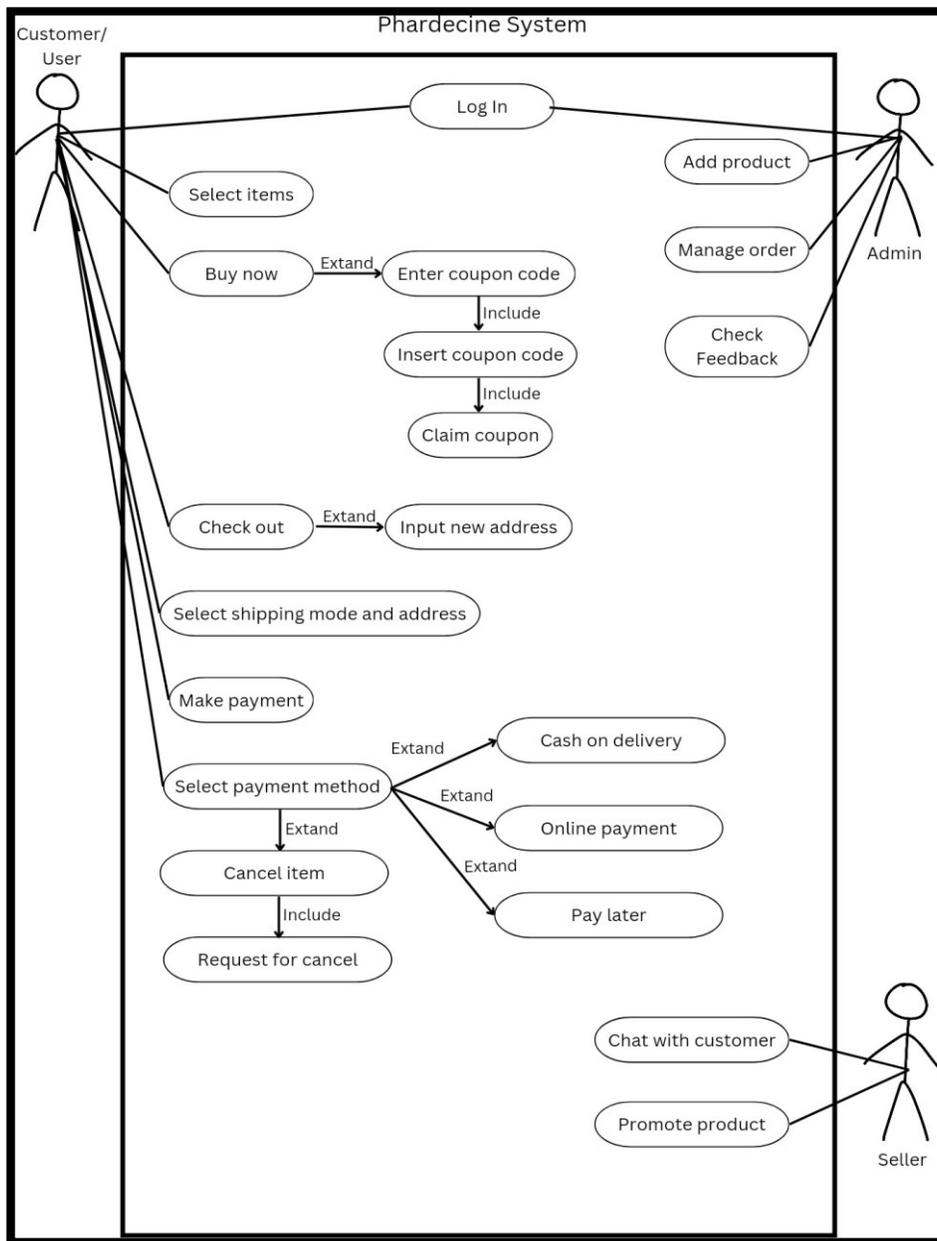
Figure 3. User Scenario of Digital Apps of Phardecine
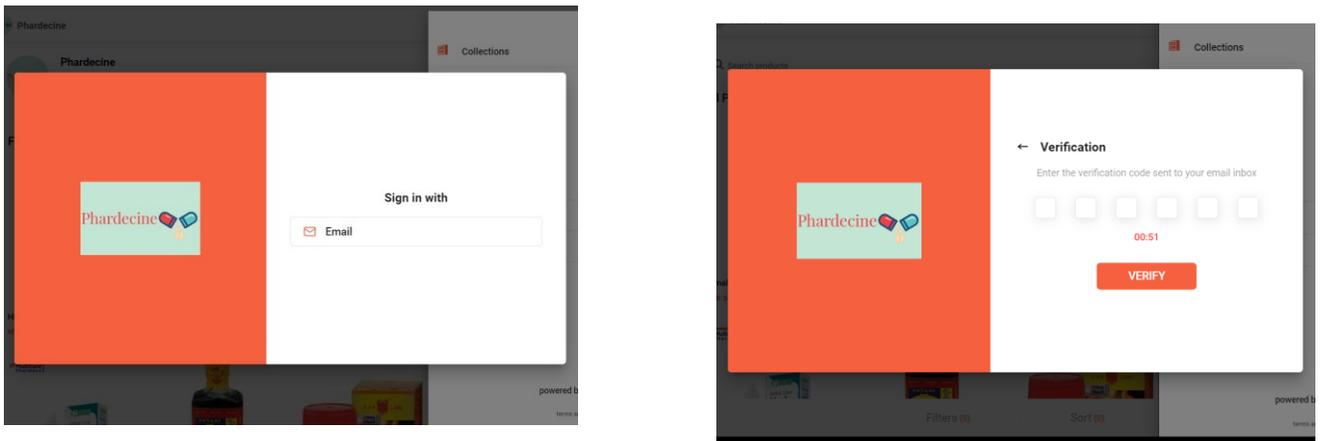
4.3 Input of New System

Figure 4. Input of the System.

As for the new users input system, customers will use the QR code that directly brings them to the Phardecine website. Next, the customer needs to click the three-dot button positioned on the website's right side and click the "my account" button then click the "login" button that directly brings them to the login page. The first thing a customer needs to do is fill in their email on the login page. After that, the customer will get a verified number by email; fill in the verify number then it will go directly to the homepage and customers can proceed with shopping on the website. The customer can choose three types of payment which is paid later, cash on delivery or online banking. The website processes payments securely using user payment information, which potentially involves communication with an external payment gateway.

4.4 Output of New System
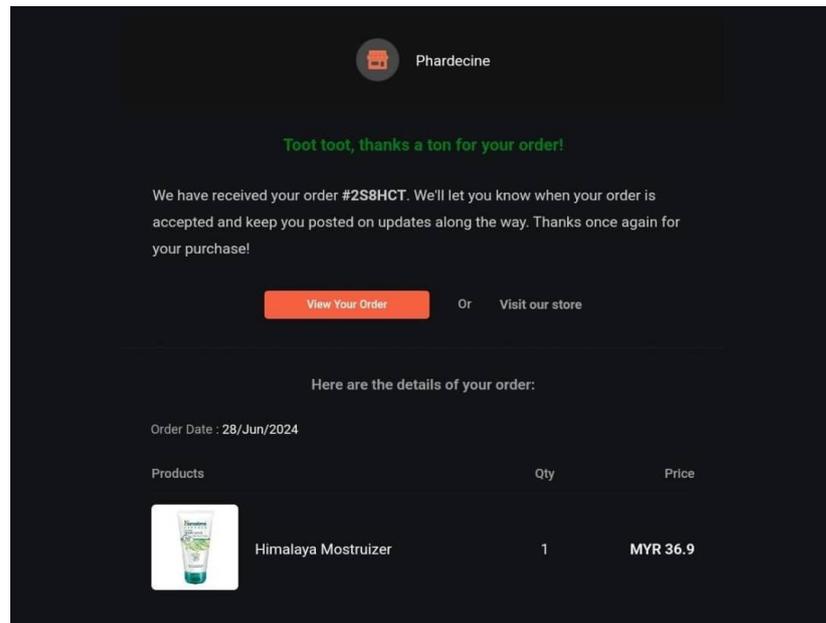
Figure 5. Confirmation message/page.

After successful processing, the website generates an immediate confirmation message or page indicating the transaction is complete, and an automated confirmation email is sent to the user's registered email address. The process is designed to be seamless and user-friendly, ensuring customers can confidently complete their purchases online. The technology used securely handles sensitive information while providing clear communication throughout the shopping experience. This strategy demonstrates the system's dedication to improving transaction integrity and regulatory compliance while increasing customer delight with the purchase experience. Additionally, customers will receive an email if they cancel their order. This email serves to confirm the cancellation and inform the customer that the status of their order has been updated. This email states the order number and item that has been cancelled. This process ensures that customers are promptly notified of status changes.
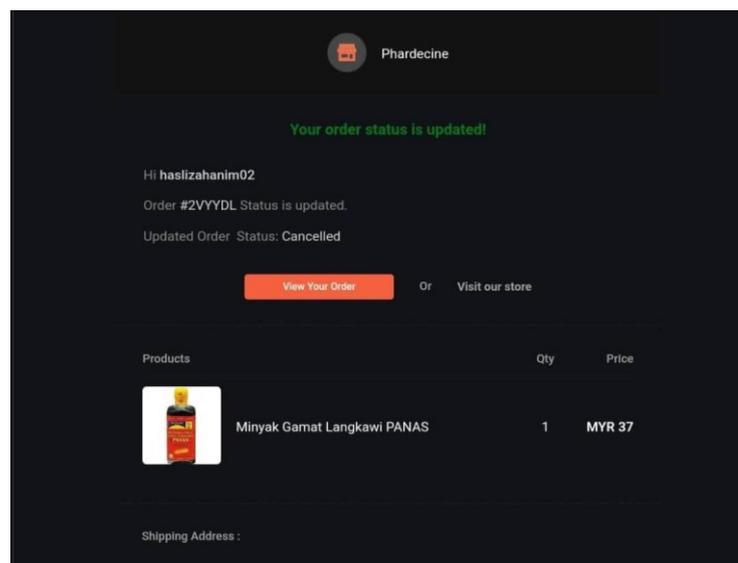

Figure 6. Email notification.

Additionally, customers will receive an email if they cancel their order. This email serves to confirm the cancellation and inform the customer that the status of their order has been updated. This email states the order number and item that has been cancelled. This process ensures that customers are promptly notified of status changes.

Figure 7. 'Contact Us' page.
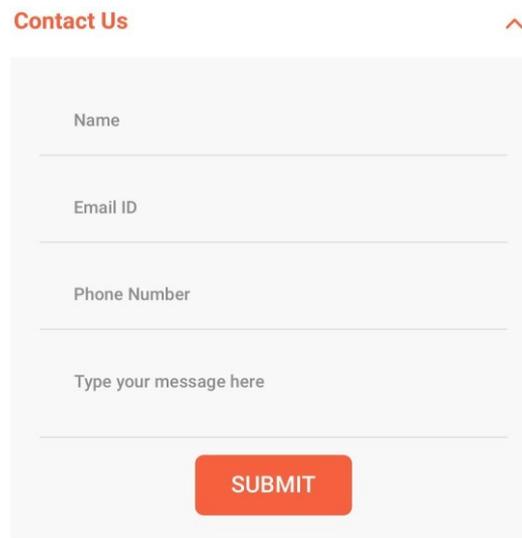
Customers also can contact the seller directly if they face any problems. The customer can fill in details like name, email ID, phone number, and message to be sent. In this way, it can be easier for both parties to interact and resolve confusion immediately. It can also increase customer confidence and trust in the platform.

5. CONCLUSION

In conclusion, Phardecine's digital pharmacy platform has the potential to completely transform healthcare product access by tackling major problems such complicated accessibility concerns, insufficient client contact, and restricted payment flexibility. It is crucial to give priority to solutions that directly address these pain points, as the evaluation of suggested ideas makes clear. Improved delivery tracking and logistics streamlined login procedures, and the integration of numerous payment methods stand out as crucial, high-priority projects that can greatly boost user satisfaction and experience. Though they demand careful evaluation of resource allocation and potential disadvantages, medium-priority initiatives like increasing collaborations with physical pharmacies, personalizing user experiences, and implementing real-time customer support offer significant value.

Although these concepts have the potential to improve consumer interaction and operational effectiveness, they come with drawbacks such as higher expenses, privacy issues, and logistical difficulties. Phardecine expanded the scope of the new system to include innovative login methods, such as business QR codes. This modern approach not only simplifies the login process but also speeds up the purchase journey, in line with the growing digitization trend in e-commerce. Overall, the

transition from the current system to the proposed new system signifies Phardecine's commitment to adapt to changing customers' preferences and increase its competitive advantage in the market.

Finally, by deliberately putting these enhancements into practice, Phardecine can establish itself as a dependable, easy-to-use, and effective digital pharmacy platform. It will ensure long-term success in a cutthroat healthcare market by not just resolving its users' immediate issues but also fostering loyalty and trust. By adopting a comprehensive strategy, Phardecine will be able to achieve its goal of offering a range of user groups seamless, easily accessible, and effective healthcare products.

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