



Implementing AR-Based Marketplace for Village-Owned Business as the Pillar of the Village Economy



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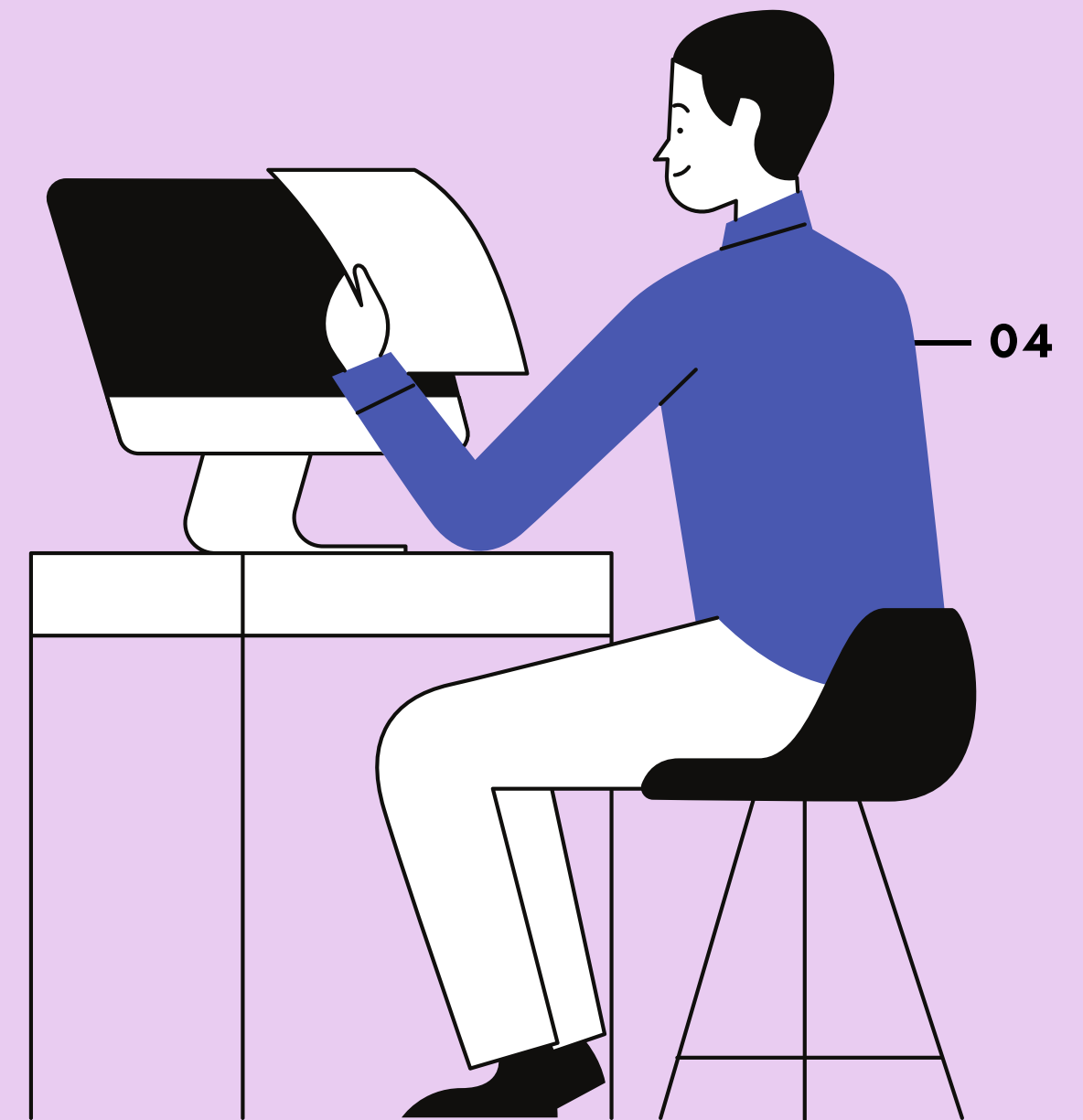
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Background

Overview of the project

- Augmented reality allows a person to see computer generated graphics in the real world.
- Augmented reality has purpose to improve user's experienced to get a more realistic and detailed view of the products, and help them with purchase decisions
- Augmented Reality to support an industrial process like product design, manufacture, assembly, and maintenance as areas for IAR implementation.
- This innovations making customers easier to see the real product to the fit in real world, so it can help customers buy some product without any doubt. Augmented Reality has been popular on mobile device with sensor for location and orientation. Smartphone have be a major driving force behind augmented reality.





Objectives

What we want to achieve



- This research was conducted to make and implemented augmented reality to be applicated on the marketplace to help distribution some product from village-owned, and improving the economic village.

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- Which help customers to see real product on the real world with virtual information, so the customers could get maximum experience to examine the product.
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Overview of Research Methods



System Development Method

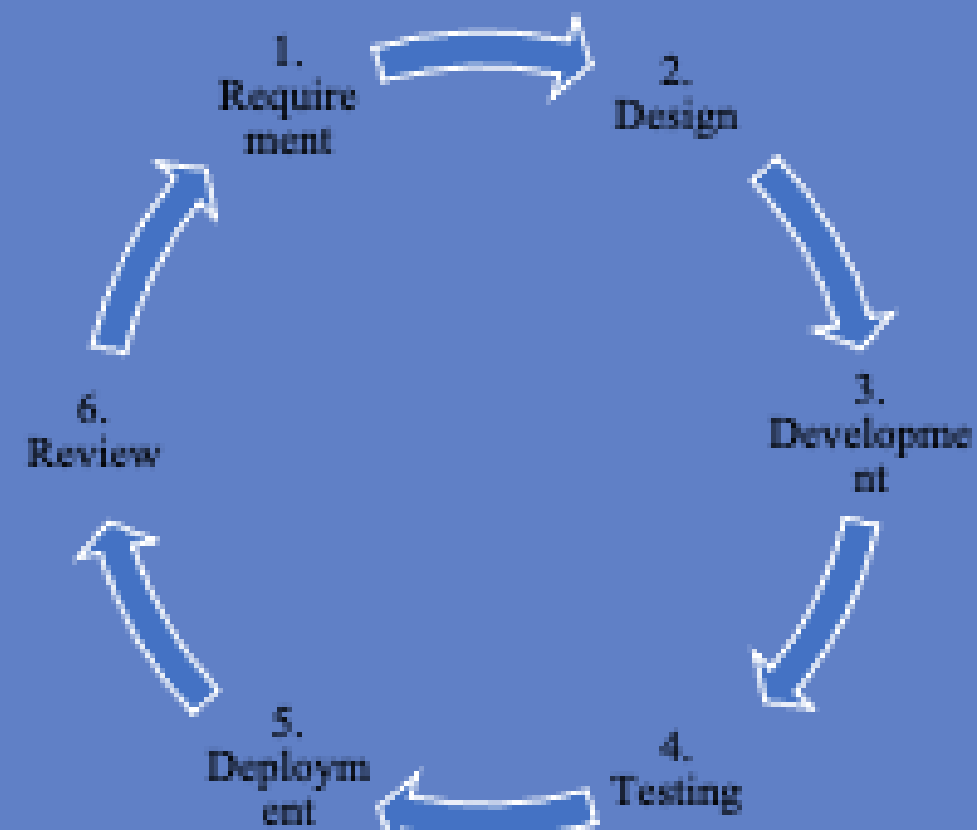
The method that will be used in this research is the Agile Development Method. Agile Development Method is a method that has a short-term system development system and rapid adaptation to changes in any form, which requires good collaboration and commitment between teams.

Agile Development divided into several more methods, these methods namely scrum, extreme programming (XP), Feature driven development (FDD), lean software development, rational unified process, crystal method, dynamic system development, adaptive software development, and agile modeling method engineering (AMME) .

Agile Modeling Method Engineering

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Agile Modeling Method Engineering (AMME) is one method of Agile Development Method. This method has several steps, namely requirement, design, development, testing, deployment, and review.



Qualitative Results

Research findings and highlights



Highlight 1

Analysis of Current System

The distribution system that currently running, products are sold by delivering to local shops. This is sufficient but the distribution of product still can be scaled more broadly by utilizing the use of technology developed at this time. To help this, marketplace is one of the perfect solutions for .

Highlight 2

Augmented reality on marketplace

The marketplace that have augmented reality in application based on website showing more transparency to their product, customers could view the product with 360° angle, it does give a trustworthiness to customer. This make the product more realistic by simulate it in the real world with phone camera and can be moved by dragging

Highlight 3

Minimum Viable Product

Minimum Viable Product (MVP) is an important part on agile software development method. Minimum viable product is a product that carrying minimum or enough functionality to satisfy customer and received feedback for the product [8]. Minimum Viable Product is required to save effort and time. The minimum requirement for this marketplace, the rural owned business can make 3D model of their product and sell them to their consumer, and consumer can view 3D model of the product and decided to buy the product.



Qualitative Results

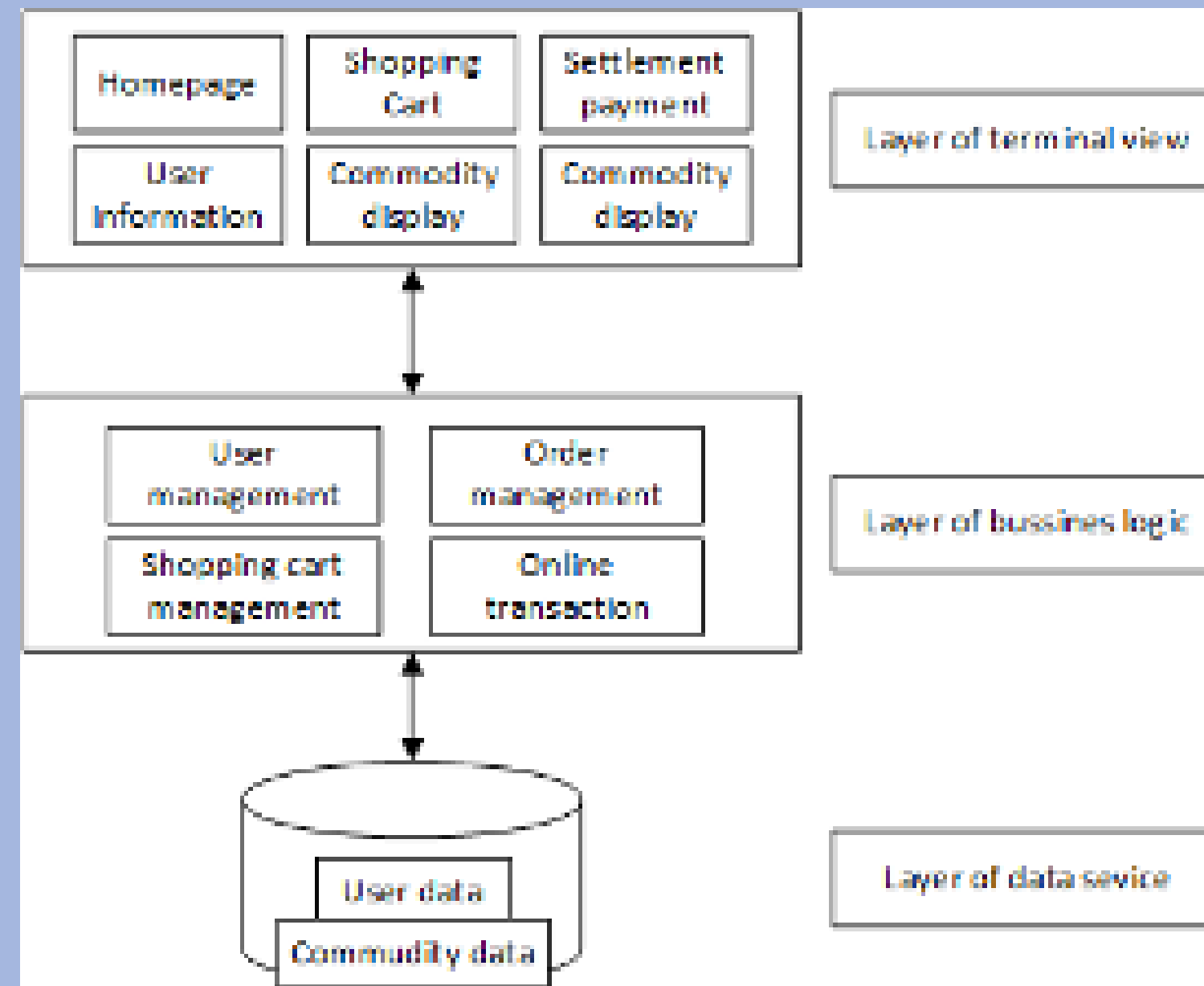
Research findings and highlights



Highlight 4

System architecture design

The figure 2 explain three layer operation system for rural online marketplace. The first layer is terminal view, it refers to user's web browser. This layer has function to provide users the information and service feature provided by system. The middle layer is business logic layer. This layer has function for the processes and application logic. The last layer is data service layer. This layer responsible for database access and management activities [9].



Qualitative Results

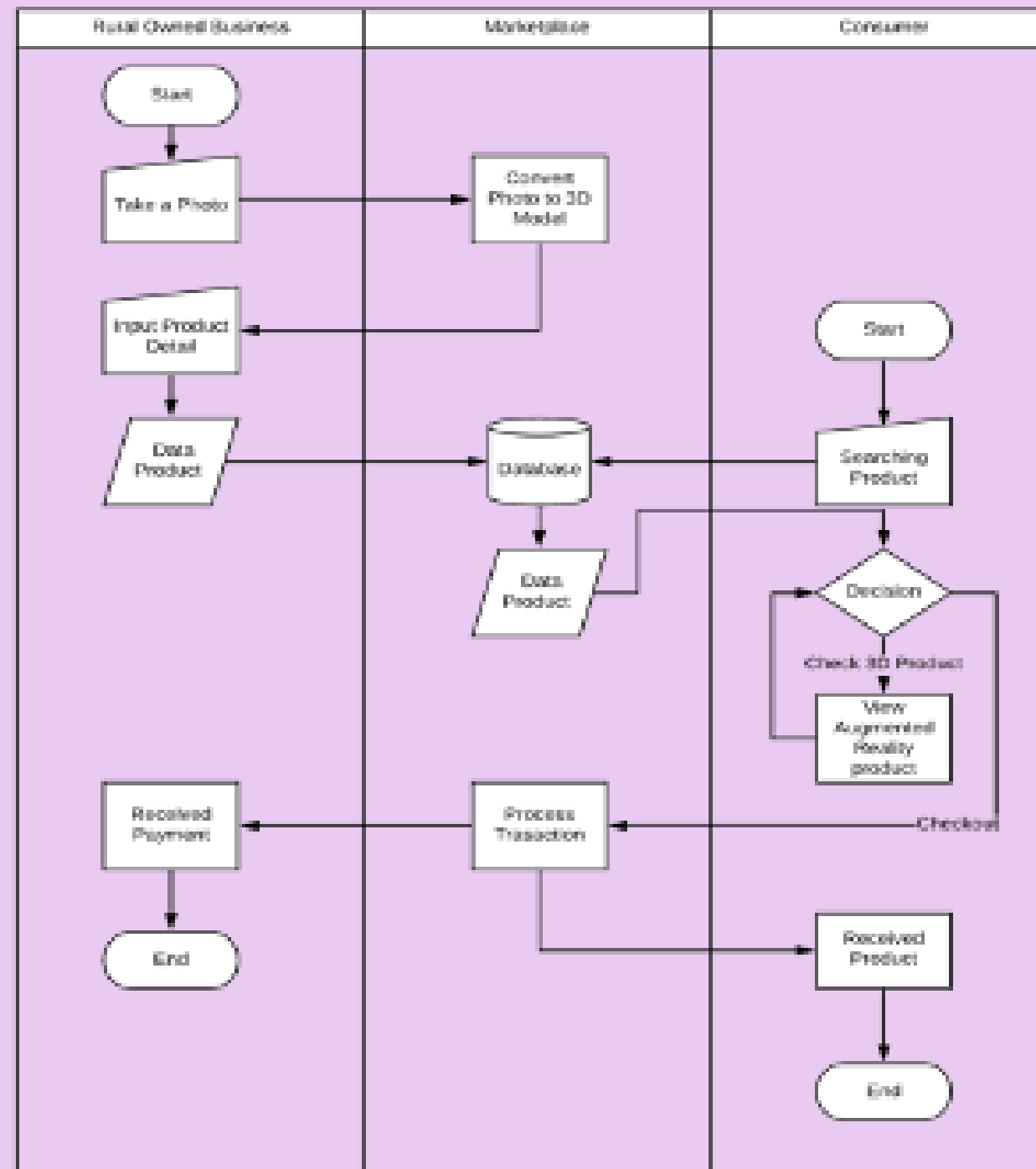
Research findings and highlights



Highlight 5

System Flow Map

Flow map is thematic maps used for visualize the movement or progress of objects, like a people, system, geographic, or goods [10]. This flow map chart, explain how the marketplace procedure from the business owner posts their product to consumer purchase the product.



Qualitative Results

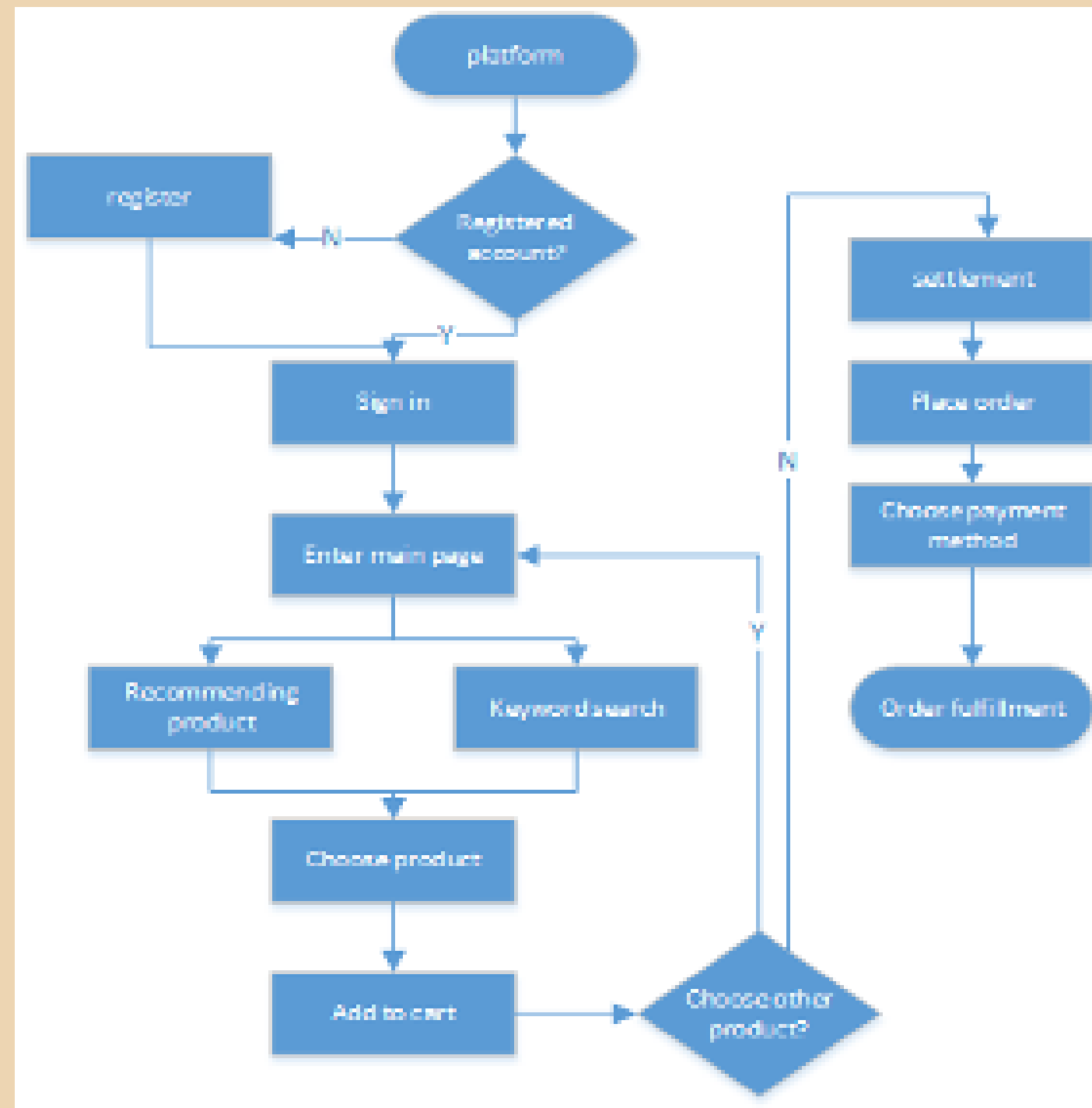
Research findings and highlights



Highlight 6

Analysis of function design

The costomers can try some feature like augmented reality without register but to purchase a product registration required.The costumers can find the product from recommended product list, or by searching with keyword on search box or selection in the main page.





Conclusion

Augmented reality is technology that integrated between real world and virtual world, such as captured the real world images with virtual information.

UNCOVERED KEY RESEARCH TRENDS

Project highlights

The purpose of this rural marketplace application, is mainly to improve the user's experience of using Augmented Reality to inspecting simulated products in real world.

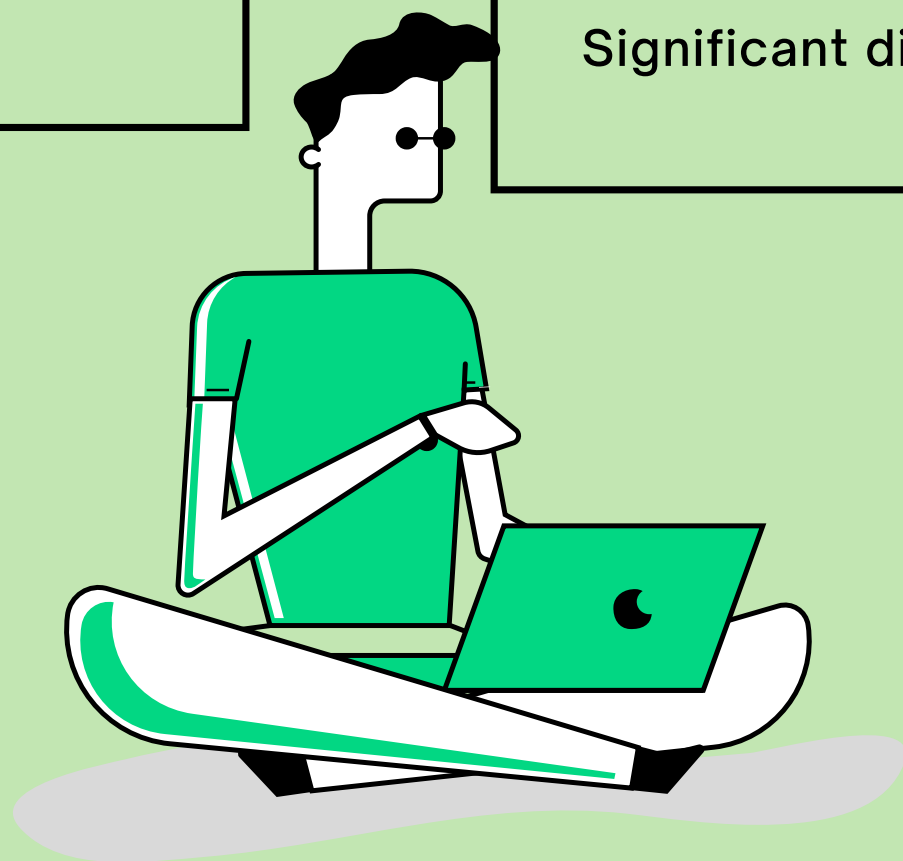
NEW UNDERSTANDING OF THE PROBLEM

Significant discovery

Marketplace already become a solution for online sales, but rural products are difficult to compete with factory product. That specific marketplace for rural owned business are needed for help marketing and scale rural product to help increase village economy.

AGREEMENTS WITH THESIS STATEMENT

Interpretation of findings



THANK
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