

Retraction

Retracted: Development of a Mobile Application for Interaction between Patients and Doctors in Rural Populations

Mobile Information Systems

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

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- [1] M. B. Alazzam, F. Alassery, and A. Almulihi, "Development of a Mobile Application for Interaction between Patients and Doctors in Rural Populations," *Mobile Information Systems*, vol. 2021, Article ID 5006151, 8 pages, 2021.

Research Article

Development of a Mobile Application for Interaction between Patients and Doctors in Rural Populations

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This study describes the process of construction and evolution of the software development of the mobile application that allows patient-doctor-specialist interaction in rural areas of Iraq and helps the patient receive prompt medical guidance without the need for unnecessary transfers because the doctor, general or specialist, can provide it through the application. The construction of the application was carried out using the Design Thinking process to obtain the MVP3 (minimum viable product) and the Running Lean process to perform the iterations and reach the application that adds value to the user. For the application software development, the evolutionary development model and some activities of the agile scrum framework were applied.

1. Introduction

A mobile application to address the problem of specialized medical care for the rural population is a promising tool that allows users to get closer to health professionals and medical specialists. In the first place, it contributes to the fulfillment of the general objective of the National Rural Health Plan led by the Ministry of Health and Social Protection whose purpose [1–2] is to make effective the exercise of the right to health of the communities of rural areas of Iraq, ensuring coverage, access, opportunity, and quality of healthcare, with a territorial, population, and gender focus. Second, connected municipalities have been progressively included through the high-speed project of the Ministry of Information and Communication Technologies [3], intensifying the use of the internet, which gives coverage viability to the mobile application that is being developed. Indeed, according to the figures on an estimated population of 19,834,240 people, proportions of connections to the high-speed project have been achieved in 70% of the projected governorates in Iraq [4–7]. At the end of the first quarter of 2017, broadband internet connections were mainly made up of mobile internet connections, which reached a total of 2.3

million. Of these, 1.3 million were 3G mobile connections in demand mode; 1.4 million corresponded to 3G mobile connections in subscription mode; 1.2 million were 4G mobile connections in subscription mode; and 1.4 million were associated with 4G mobile connections in demand mode. On the other hand, fixed internet connections reached a total of 4.0 million, with a share of 21.21%. With these figures, it is evident that the broadband internet connection does not represent an obstacle in the face of the development of a mobile application that allows specialized medical attention to the inhabitants of rural areas [8–10].

Rural communities confront a range of access hurdles to healthcare services, which is crucial to good health. Access to Healthcare in America, a National Academies paper from 1993, described it as “the timely utilization of personal health services to achieve the greatest potential health results.” Additional definitions of access are summarized in a 2014 RUPRI Health Panel study on rural healthcare access, along with examples of measurements that may be used to determine access.

Dealing with concerns about the infrastructure required to operate an application that provides specialized medical care to the rural population [11], it will be taken into

account, first, that the capacity of the mobile devices to handle this sort of application is smartphones. It is also worth noting that, according to the indication of terminals per 100 people, more than half of Iraq's mobile phones are smartphones, up to 15% from [12]. The connection to power is another constraint that may limit the use of the application. In this regard, it is worth noting that the electricity coverage index—ICEE—at the national level is 96.10 percent, with 99.59 percent in urban areas, and 84.84 percent in rural regions [13–15]. As a result, the availability of electrical energy in rural areas does not pose a genuine threat to the usage of mobile application. On the other hand, calculating the impact of these costs on the family economics of rural residents is difficult due to the fact that, due to the peculiarities of the rural sector in Iraq, families are many and dispersed.

2. Methodology

The methodology implemented for the development of the research had two stages, and the Running Lean process was used as a reference to the two stages Figure 1.

- (i) Step 1: The essential capabilities of the mobile application that offer value to the user were defined to build a backlog of applications.
- (ii) Step 2: Sprints of four weeks were established. There were no daily meetings; instead, they were held once a week. The sprint lasted four weeks since the technique involved a prototype validation and a visit to rural Antioquia to learn firsthand about the needs, the process of digital inclusion, internet connectivity, mobile device use, and population health. The greatest method to get this knowledge is to make direct contact with individuals and build a relationship with them so that we can grasp what they want to say to us. This cannot be accomplished just by conducting an internet search; therefore, you will need to travel to the location.
- (iii) Step 3: During the development of the application, dialogues were held with people to obtain feedback regarding the usefulness of the application. (Some references should be corrected. The introduction is very confusing.)
- (iv) Step 4: The initial vision documentation was performed as suggested by the Running Lean process. The Lean Canvas format was completed, which served as the tactical and flat map of the application and the basis for defining the business model (Figure 1).

As a result of this stage, it was possible to make an approach to the people of the rural area and validate the problem and the solution, in addition to having the business model.

Stage 2: In this stage, the development of the mobile application was carried out, for which concepts from the SCRUM (the scrum master, the product owner, and the development team) framework for agile development were

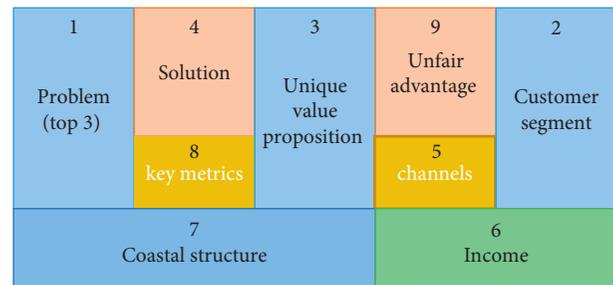


FIGURE 1: Running Lean-Lean Canvas.

applied. In the same way, validations were carried out through dialogues and interviews with people from rural areas and medical personnel, in order to perceive the reaction of the people and study the viability of the application, which part of the application they found most useful and keep improving.

At this stage, the following steps were followed:

- (i) Step 1: The basic functionalities of the mobile application that add value to the user were defined to create the application backlog.
- (ii) Step 2: Four-week sprints were defined. No daily meetings were held; the meetings were held weekly. The sprint lasted 4 weeks because the methodology included validation of the prototype and making an approach to rural areas of Antioquia, knowing firsthand needs, the process of digital inclusion, internet access, the use of mobile devices, and access to the health of the population. The best way to obtain this information is to establish direct contact with people and create a connection to understand what they want to convey to us. This is not achieved simply with an internet search, so you have to make trips to the area.
- (iii) Step 3: During the development of the application, dialogues were held with people to obtain feedback regarding the usefulness of the application.

Currently, highly changing processes are presented during the construction of a product to allow a better response to the changes that may arise throughout the project. SCRUM was used as an agile framework, guaranteeing to deliver results that add value to users with an incremental and iterative development process.

Strategic or convenience sampling was used, which is an out pass and nonrandom sampling strategy that looks for people who are easy to reach and are willing to participate in the sample. This approach was utilized in the initial phase for the selection of individuals in the observation and testing stage since it was less expensive, because we did not have the resources to do a probability sample, and it made it easier to get to know the people. Voice to voice, e-mail, and communication with relatives and close friends engaged in the health condition were used to collect data. Personal interviews, video conferences, and phone calls straight to cell phones were used as tools for interacting with medical staff. The purpose of the questions was to allow doctors to discuss

the present situation of health in Iraq and to address the health problem in Iraq's rural areas in a proactive manner. During the iterations, a step-by-step solution was demonstrated, and doctors provided feedback on improvements and their personal experiences with the usage of mobile devices for health-related concerns. People in rural regions were given step-by-step instructions on how to use the program, and a poll was utilized with questions based on what they thought of it. To get closer to the participants and to have a stronger contact with the future users of the program, the survey was conducted on paper and with pens.

3. Presentation and Analysis of Results

3.1. Route Map. The purpose of this section is to describe, in general, the stages, and each step was performed to have a reference at the time of reading the validation of the solution and to understand the steps that were followed in each of the iterations.

The steps outlined below were performed iteratively in order to get the product that works and eliminate as much risk as possible.

- (i) Step 1: Empathy: Visits were made to rural areas to interact with residents of the villages and learn about their experience when accessing specialized health services; simultaneously, interviews were conducted to learn how they access the specialized consultation and explore their thinking about the possibility of using mobile applications for healthcare. There was interaction with people in the main park, a visit to the health post was carried out, and interviews were also conducted. Interviews with medical specialists were also conducted to learn about their experience and have a professional validation of the solution.

In the same way, the results of the interviews were taken into account.

- (ii) Step 2: Define and devise: The information obtained in the field visits to rural areas and the dialogues or interviews with the population and medical personnel were an input to devise the possible solution to the needs discovered.

From the interviews with the medical specialists, suggestions considered valid were taken into account during the application development process. Some of them are related to the convenience of being able to evaluate the quality of the service to take into account the opportunities for improvement and to well define the protocols of service and care because it is possible that a large number of notifications will reach the doctor in the periods of rest where the specialist is not going to carry out the consultation, and it would avoid unnecessary travel and expedite emergency care, consider that the payment is made by consultation and not by shifts to rationalize the times invested in the consultations, keep in mind that the classification of the

trriage is automatic, and consider that an interdisciplinary staff of medical specialists can collaborate to give greater confidence in diagnoses and treatments.

- (iii) Step 3: Prototype and validate: Four wireframes of the application were created in order to show people a possible solution to the needs. Some doctors were contacted with whom the problem was discussed based on the experience obtained with step 1, and validations of the idea were carried out through the prototype.
- (iv) Step 4: Lean Canvas: The documentation of plan A was carried out through the creation of the business model using a format called Lean Canvas 5 proposed by the Running Lean process, which allows to document the initial vision and have a tactical map and product model. This business model also makes it easier for iterations to adjust until a stable business model is found that does not lead to wasted time and ends with project failure.

3.1.1. Solution Validation. The proposed solution is a mobile application that facilitates interaction between medical specialists and patients, especially those in rural areas. This section presents the process and experience of validating this solution.

Initially, outreach was made to potential users in rural areas in the Department of Computer Science, University of Baghdad, Iraq, specifically in the towns. The document recognizes that there is abundant literature on competitiveness that has given rise to a large and varied set of definitions and interpretations from the point of view of the variables that determine them and their measurement. Taking into account these difficulties, the decision was made to adopt the global competitiveness indicator as a criterion because it determines the relationship between the factors such as infrastructure, quality of life, human capital, geography and location, economic strength, public management, and natural resources, which are something, and the synthesis of the variables taken into account to define competitiveness. Methodologically, the study took into account the nine subregions that were divided and it found that the north subregion has the average competitiveness index of the department, which is why it was chosen for this study. The information obtained allowed us to know that 92.85% of the people interviewed have a cell phone, of which 53.57% have a midrange phone. About 35.71% of those interviewed connect to the internet via Wi-Fi and data, 67.85% consider that the signal is good, and 57.14% think that their phone can support a health application (Table 1).

It was possible to determine that access to the internet and a smart mobile phone is not a limitation to develop a mobile application that allows to attend specialized medical consultations to the inhabitants of rural areas, that allows an improvement of doctor-patient relations as a means, and that allows people in rural areas to interact with the doctor and specialist.

TABLE 1: Consolidated responses to the interviews.

Question	Answer	Percentage	
Question 1.1 If you have a specialized medical consultation, who do you go to first?	EPS	50.5	51.01
	General practitioner	43.3	43.71
Question 1.2 How do you access specialist care?	Appointment	43.3	43.71
	Remission	46.9	47.35
	12 weeks	18.0	18.21
Question 1.3 How long does it take to receive care from a specialist?	2-4 weeks	36.1	36.43
	4-8 weeks	21.6	21.85
	12 to 16 weeks	10.8	10.93
Question 1.4 How much time and money are spent to travel to the specialist?	7-50 thousand IQ	43.3	43.71
	60-100 thousand IQ	14.4	14.57
	120-200 thousand IQ	14.4	14.57
Question 1.5 Would you be interested in installing a mobile application that allows interaction with the specialist? Why?	Yes	97.4	98.36
	No	3.6	3.64
Question 1.6 How do you imagine a different process to access care from a specialist?	Yes	86.6	87.43
	No	14.4	14.57
Question 2.1 Do you have a cell phone?	Yes	93.8	94.72
	No	7.2	7.28
Question 2.2 If you have a cell phone, what brand of cell phone do you have, if possible additional reference data. Example: Samsung Galaxy Ace, if you don't know the brand, write "No knowledge"	Without knowledge	18.0	18.21
	High	21.6	21.85
	Half	54.1	54.65
Question 2.3 How do you access the internet through your cell phone? Specify if you have a data plan or connect only by Wi-Fi, if they have prepaid.	Wi-Fi	50.6	51.11
	Wi-Fi and data	36.1	36.43
	Prepaid	14.4	14.57
Question 2.4 Is internet access good, fair, or bad at the place of residence?	Well	68.5	69.21
	Regular	18.0	18.21
Question 2.5 Do you think that an additional application runs on your cell phone or do you consider that your cell phone is very slow?	Bad	14.4	14.57
	Yes	57.7	58.29
	No	14.4	14.57
	I don't know	21.6	21.85

*EPS: Govt., Service.

3.2. Evolution of the Application. This section is part of the validation of the solution and describes in detail steps 1, 2, and 3 outlined in Section 5.1 Roadmap, which are based on the Design Thinking phases. As the iterations were carried out and the advances were made in the presentation of the prototypes, the minimum viable product was identified.

3.2.1. Description of Iterations. Based on steps 1, 2, and 3 described in Section 5.1 Roadmap, the development of the iterations began. The process and results achieved at the end of each iteration performed are shown below.

(1) Iteration 1

Step 1. Empathy: According to the first approach and interaction with people in rural areas, it was possible to show that the waiting time to access specialized medical care is days and even months, and in addition, the money spent on transportation to attend the appointment is high, taking as a reference the economic level of the people. It is

concluded that people in rural areas need to be able to access medical care more quickly and at a low cost.

Step 2. Define and devise: The first idea that was born was based on the operation of the current health system where you go to the EPS and request a general medical appointment, and the EPS doctor refers you to a specialist who works in an IPS with whom you have an agreement. With this model in mind, an application was devised where the patient looks for the doctor in a list of hospitals classified by specialty to better see the fit of it according to the ranking.

Step 3. Prototype and validate: The first version of the application included the EPS and IPS as the initial contact of the patient. The operating steps are as follows

- (i) Iteration 1-Login
- (ii) List of hospitals by specialty
- (iii) Availability of doctors per hospital
- (iv) The Doc-Toc sent to the doctor

- (v) Doc-Toc sent
- (vi) Request for a call to the doctor
- (vii) Chat between doctor and patient

In the next stage, the chat window is shown, and a camera icon is observed to indicate that it is possible to send images. The doctor always in the first consultation sends a basic form (anamnesis). The screen shows the form (anamnesis) that the patient has to fill out during the first consultation.

Result of the first iteration: According to the dialogues carried out with the medical staff, the health sector is not at its best, and this solution includes EPS, which could lose the objective of the patient-doctor-specialist approach for the same health model. It is concluded to remove the EPS as an actor of the solution. On the other hand, a simple chat does not fully satisfy the solution.

(2) Iteration 2

Step 1. Empathy: We return to rural areas to better understand the experiences that people have when requesting an appointment with a specialist doctor, and when establishing dialogues with the population, the questions are asked: how do you identify which specialist is the one you need to your attention? And if you know the specialist you need, how do you make an appointment directly with the specialist?

Step 2. Define and devise: The synthesized responses of step 1 have as a common denominator that people do not know which specialist they need, unless it is for a pain that is already being treated, but for new symptoms they always go to the health center or to the EPS and do not ask for direct appointments with the specialist. They do not know, for example, if they need a neurologist or a cardiologist. From these dialogues with people, another factor is discovered when accessing an appointment with a specialist, which is the specialty that the patient needs, who always ends up going to the general practitioner for guidance and referral to the specialist he needs, when you may have received care directly from a specialist.

The main idea that is obtained in this iteration is to facilitate people in principle to find what specialty to go to by means of keywords or symptoms. Also thinking of people, the automatic search functionality is added in a way that allows guiding the patient so that it is not the patient who searches for the specialist one by one but rather the application that automatically sends a notification to the available specialists.

Step 3. Prototype and validate: This iteration provides users with the possibility of finding which specialty to go to by means of keywords or symptoms. To achieve this purpose, it was necessary to go to two search possibilities: one manual and one automatic. The application has two types of search, one manual and the other automatic.

When manually selecting the specialist search, a list of possible doctors is displayed where you can search by name and select it from the following options.

- (i) Search type (automatic or manual)
- (ii) Physician list

If you select the type of automatic search, a screen opens where you must enter the keywords for which you want to consult as

- (i) Keywords entered by the patient

When sending the keywords, the doctor receives a notification with a new consultation and the keywords. The doctor sends the answer to the patient and if he sees that the consultation requires a specialist, he notifies the patient and suggests a specialist enrolled in the application to assess it as

- (i) Notification to the doctor with the keywords
- (ii) Physician's response and redirection to the specialist

Result of iteration 2: The dialogues that were held in iteration 2 were well received. There was a common agreement that it is easier to access a specialist in this way than through a list of hospitals as had been proposed in the previous iteration. With this iteration, it is concluded that the solution had to combine elements from the first and second iteration.

(3) Iteration 3

Step 1. Empathy: The main conclusions of the previous validations or iterations are as follows:

- (i) In the doctor-patient interaction, there must be an exchange of content (mainly images) to support care.
- (ii) The selection of the specialty required by a patient requires not only an initial description of the patient's symptoms but generally interaction with medical personnel.
- (iii) In some cases, different specialists are involved in a consultation.

Step 2. Define and devise: Based on the previous discoveries, a social network type application is proposed in this new iteration. This last point is important for the selection of the required specialty since a specialist can invite whoever he considers useful for the patient.

In this iteration, it is decided to create a functional version of the application to allow interaction with users and in this way facilitate the understanding of the use of the application and have feedback that is closer to reality. For the first time, the user with the patient role enters the application and adds a new query from the "add query" button (floating button with the + symbol). To add a query, the reason for the query is briefly written and 3 symptoms of the disease are written as

- (i) Add query
- (ii) Physician query board
- (iii) Consultation wall, medical staff

The medical staff when selecting the consultation enters what is called the consultation wall that is observed on-

screen, a staff of doctors who share their knowledge to give the best response to the patient.

Results of the third iteration: All the dialogues that were held agree that the application is totally viable, and the idea of training the medical staff to give the patient the answer and that the patient feels confident is convenient. It should be clarified that the medical staff is variable since they conform when a consultation comes to the doctors who are currently online. The medical personnel with whom they spoke affirms that the benefits of the application are given because rural people do not have to travel to urban centers, and it adds value to primary healthcare because the consultation is attended by groups of doctors that each contributes one from the knowledge they have, and finally, it clears the emergency services. As aspects to improve, they suggest adjusting the consultation time to half an hour, classifying the typical consultations to locate them within the different triage levels, including the possibility of sending short videos and being able to monitor the evolution of the patient each 48 to 72 hours.

3.3. Business Model. In this study, the Business Model Canvas proposed by the Running Lean process called Lean Canvas was used, which is shown in Figure 1. The numbering indicates the order in which the canvas should be formulated.

The analysis and results for each of the Lean Canvas sections are presented below.

3.3.1. Identify Problems and Customer Segment. The three problems are as follows:

- (1) Insufficient access to specialized medical care by the rural population.
- (2) Few possibilities for the rural population to travel to the city due to dispersed, isolated conditions and lack of money.
- (3) Late detection of diseases in rural areas.

To define the customer segment, the following steps were carried out:

(1) Distinguish between clients and users: Through visits and dialogues with people in rural areas, it is possible to identify who are potential clients and users.

(2) Clients

- (i) Farm owners or business owners who would pay for consultations for themselves, their families, and even their employees and save transportation costs in case they have to travel to the city.
- (ii) IPSs that want to improve coverage in rural areas and thus improve their service. The IPSs have agreements with different EPSs, and through the subsidized regime, they must guarantee health to the affiliated people, for which the IPS proposes to the EPS that has expanded its portfolio in rural areas, and they would use and pay to use the application.

(iii) The specialist clinics that behave like an IPS also have agreements with the EPS and would also expand their portfolio for new care agreements in rural areas.

(iv) The Ministry of Health and departmental health secretaries that have independent programs or public universities would pay for the use of the application and guarantee access to health in rural areas.

(3) Users: People in rural areas since they are the ones who access the specialized consultation service through the application. In other words, they are the ones who make direct use of the application to answer your questions. Doctors who are in charge of receiving, studying, and responding to inquiries through the application.

(4) Divide the broad segment of clients into the smallest ones: In order to validate the operation of the application, 9 doctors were selected to attend the consultations. It is necessary to clarify that the consultations were made to the doctors for two reasons: the first, because they are the ones who will attend the queries in the first instance and, the second, because they will be the ones who the IPS will ask whether the application really works and serves to respond to users, and in this way they could propose to the EPS a new care agreement in rural areas.

3.3.2. Value Proposition. Thinking about the benefits that users can have, the value proposition that is based on remote medical care was created, such as saving travel costs and early identification of diseases.

3.3.3. Solution. Taking into account the three main problems identified and presented in the previous section, a draft proposal was made for the customer segment for each of these problems that generally address the solution.

3.3.4. Channels. The channel is the medium through which the application is to be disseminated, and for the definition of the channels, it is important to take into account all of them, even if some are not applicable at the beginning, but they can be scaled and applied in a later stage of the project. It was planned to start with friends who work in the health sector and then contact the health secretariats, the health ministry, the IPSs, the educational centers in rural areas, and finally the dissemination through Google, Facebook, and broadcast ads through radio and television.

3.3.5. Key Metrics. A company or startup lives as long as it has money to support itself and grow. It is important to have metrics to know in what state the company is, and there are life and death metrics such as to know how quickly we spend money, to know when it can enter a financial crisis, growth metrics to know whether the company is in increase and how the company is growing, with what speed, and to know whether the goal was met

and performance metrics such as KPIs that are measurable objectives. In the particular case of the proposed application, the following metrics will be used:

Burn rate: How much money is being spent per month, and how much money is in the bank.

Retention rate: The percentage of users who continue with the app installed (using it).

Customer acquisition cost: How much does it cost me to acquire a client, if the client obtained it through a paid or free channel.

Income-monthly expenses.

3.3.6. *Unfair Advantage*

- (i) Acceptance and database of specialists
- (ii) Acceptance and patient database
- (iii) The acceptance and database of IPSs

3.4. *Software Development.* The application software development was performed using React Native, which is a project created by Facebook, to develop multiplatform mobile applications. Multiplatform applications are attributes conferred on computer programs or computational methods and concepts that are implemented and interacted on multiple computer platforms.

Applications created with React Native are called bridged applications, that is, applications that make use of web technologies, in this case, the Reacts library and native components. In the end, you get a native application, which is a form of programming code that is configured to work on a specific operating system.

3.4.1. *Used Tools*

- (i) The user history map was created with the cardboardit application
- (ii) The wireframes were created with the Cacoo application
- (iii) The prototype was created with the Justinmind program
- (iv) For the code repository, GitHub (2018) was used
- (v) For the administration of epics and user stories, the ZenHub tool was added to GitHub.
- (vi) The code editor used was Visual Studio Code
- (vii) To create the Android emulator, the Genymotion program was used

3.5. *Minimum Viable Product.* While the characteristics of the application defined in the third iteration were being developed, in parallel the minimum viable product was consolidated, which consisted of the mobile application compiled for mobile devices with the Android operating system. A functional minimum viable product was obtained with the approval of the people contacted for its review. The

functionalities and characteristics of the application are described below.

After all the development, the degree of satisfaction of potential users was consulted through an interview. The results show that 50% think it is a very good solution, 100% see it as viable, 100% would be willing to use it, 40% say it saves them avocado and time, and 60% think that the most useful part of the application is that it allows them to interact with various doctors.

4. **Conclusions**

It is possible to verify that the Running Lean process allows to iterate from plan A to the plan that works. Following the Running Lean process, products are generated that do add value to the user. The application manages to overcome insufficient access to specialized medical care by the rural population due to the fact that specialist doctors are available in greater numbers because the connection is via the internet. The application makes it possible to shorten the distances that rural inhabitants have to travel and reduce their expenses because they would no longer have to travel long distances due to the conditions of dispersion, isolation, and lack of money. Diseases can be detected more quickly because the consultations are made through the internet and the presence of a doctor is not required. The application generates educational reports that guide health education depending on the frequency with which diseases occur. With this application, not only one but several doctors give the answer, which gives the patient confidence. Despite the rise of mobile applications, even in the field of health, there are still many unresolved needs for different actors such as general practitioners, specialists, patients, and health entities. This study contributed to one of the most common issues raised by physicians and patients: connecting doctors via a mobile application. According to the perspectives of the doctors questioned, it is feasible to consider ways to enhance the application, such as outlining care procedures to minimize unclear or unnecessary messages. The program enables rural individuals in need of specialist medical treatment to travel in a timely way, preventing them from going when it is not essential or from waiting too long when the situation is truly critical. The physicians consulted believe that working with payment for consultations is more motivating since it develops a higher commitment to them, and they prefer to inform those doctors who are more active in the application. The categorization of common inquiries that automatically handle and specify the triage is a gradual development.

Data Availability

The data underlying the results presented in the study are available within the manuscript.

Conflicts of Interest

The authors declare that they have no conflicts of interest regarding the publication of this paper.

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