Internship Training

at

RAXA Health

"Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery"

by

Radha Banerjee

PG/22/083

Under the guidance of

Dr Rupsa Banerjee

PGDM (Hospital & Health Management)

2022-24

International Institute of Health Management Research, New Delhi

The certificate is awarded to

Radha Banerjee

in recognition of having successfully completed her

Internship in the department of

User Research Team

and has successfully completed her Project on

"Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery"

Date- 11th March- 10th June 2024

Organisation- Raxa Health

She comes across as a committed, sincere & diligent person who has a strong drive & zeal for learning.

We wish him/her all the best for future endeavors.

Training & Development **Zonal Head-Human Resources**

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Radha Banerjee** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at **Raxa Health** from 11th March 2024 to 10th June 2024.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific, and analytical.

The Internship is in fulfilment of the course requirements.

I wish her all success in all her future endeavours.

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Dr Rupsa Banerjee
IIHMR, New Delhi

Certificate of completion of Internship from Organisation

L1/10, Hauz Khas Enclave, FF Rear, New Delhi 110016 India

Raxa Health Information Services Pvt. Ltd.

Date: 11.06.2024

To,
Radha Banerjee
Behind Mada Head Office,
Kasturba Nagar, LC Road,
Dhanbad, Jharkhand- 826001

Sub: Internship Completion Certificate

Dear Radha Banerjee,

This letter is to confirm that Ms. Radha Banerjee successfully completed the 12- week intern program with Raxa Health Information Services Private Limited (11 March 2024 to 10 June 2024). During this period, she was involved in Business Development Analysts. Her performance and attitude were considered to be sincere and enthusiastic as seen by her actions. We congratulate her on her achievements and wish her continued success in her future endeavours.

Sincerely Yours.

For **Raxa Health Information Services Pvt. Ltd.**

Dr. Surajit Nundy
CEO & Director

Certificate of Approval

The following dissertation titled **Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery** at **Raxa Health** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of PGDM (Hospital & Health Management) for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
Dr. Manisha Arora.	
Dr. Rupsa Banerjee	
Dr. Pankaj Taneja	

Certificate from Dissertation Advisory Committee

This is to certify that **Ms Radha Banerjee**, a graduate student of the PGDM (Hospital & Health Management) has worked under our guidance and supervision. She is submitting this dissertation titled **"Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery"** at Raxa Health in partial fulfilment of the requirements for the award of the PGDM (Hospital & Health Management).

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report, or book.

Dr Rupsa Banerjee
Assistant Professor
IIHMR, Delhi

Himanshu Deshwal
Head of User Research
Raxa Health

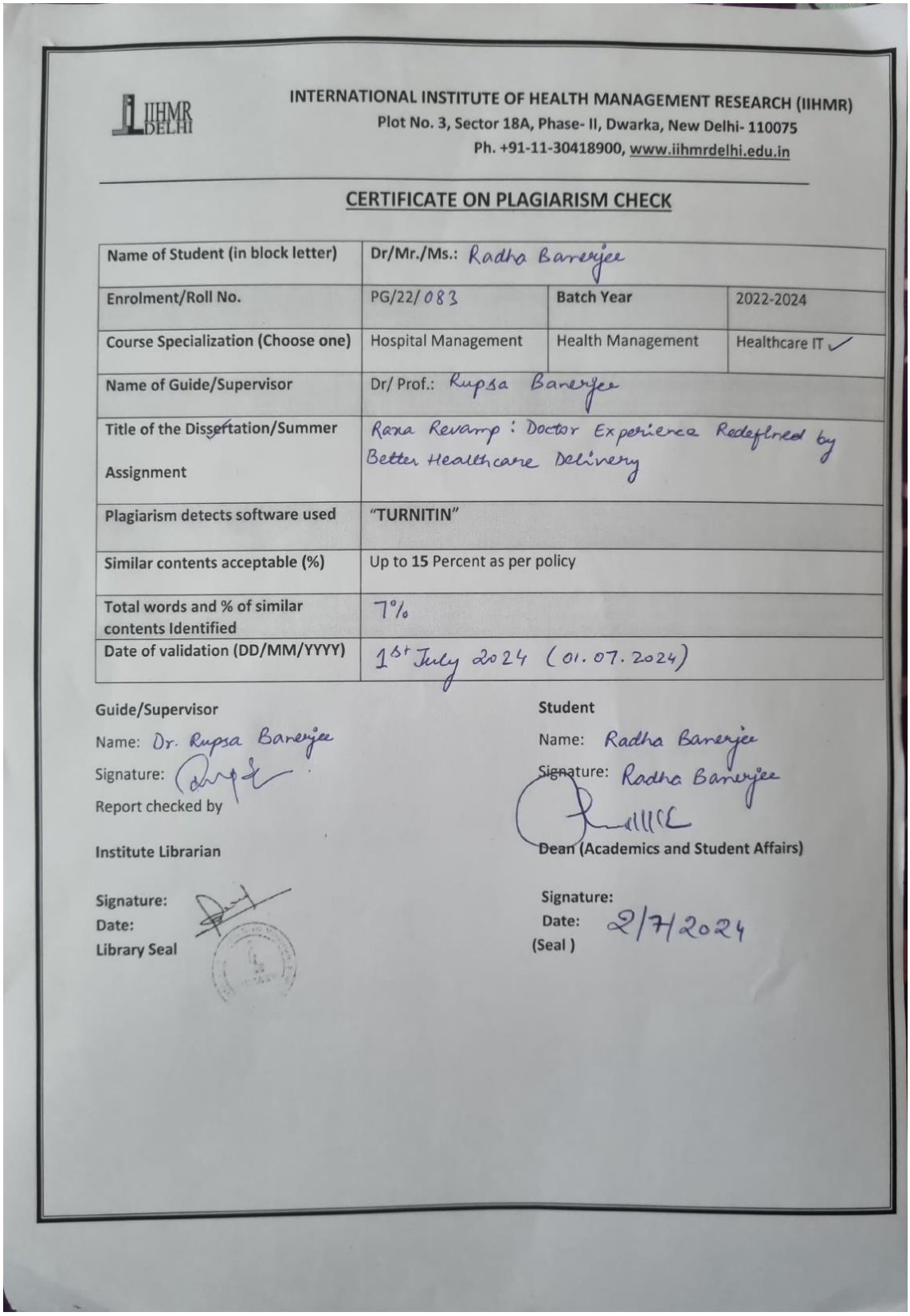
INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **"Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery"** and submitted by **Radha Banerjee** Enrollment No. **PG/22/083** under the supervision of **Dr Rupsa Banerjee** for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 11th March 2024 to 11th June 2024 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

PLAGIARISM REPORT



IIHMR DELHI

INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH (IIHMR)
Plot No. 3, Sector 18A, Phase- II, Dwarka, New Delhi- 110075
Ph. +91-11-30418900, www.iihmrdelhi.edu.in

CERTIFICATE ON PLAGIARISM CHECK

Name of Student (in block letter)	Dr/Mr./Ms.: Radha Banerjee		
Enrolment/Roll No.	PG/22/083	Batch Year	2022-2024
Course Specialization (Choose one)	Hospital Management	Health Management	Healthcare IT ✓
Name of Guide/Supervisor	Dr/ Prof.: Rupsa Banerjee		
Title of the Dissertation/Summer Assignment	Raxa Revamp : Doctor Experience Redefined by Better Healthcare Delivery		
Plagiarism detects software used	"TURNITIN"		
Similar contents acceptable (%)	Up to 15 Percent as per policy		
Total words and % of similar contents Identified	7%		
Date of validation (DD/MM/YYYY)	1st July 2024 (01.07.2024)		

Guide/Supervisor
Name: Dr. Rupsa Banerjee
Signature:
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Student
Name: Radha Banerjee
Signature: Radha Banerjee

Dean (Academics and Student Affairs)

Signature:
Date: 2/7/2024
(Seal)

FEEDBACK FORM

Name of the Student: Radha Banerjee

Name of the Organisation in Which Dissertation Has Been Completed: Raxa Health

Area of Dissertation: User Research

Attendance: 100%

Objectives achieved: All the objectives of the dissertation were met.

Deliverables: Learnt software testing, implementing, sanity check of various builts of the application, conducted successful demonstration of app with ABDM Microsite officers of Gujarat, Aligarh and Bihar, Made marketing videos and demo videos and designed training module for call- center of the application.

Strengths: Active, prompt and knack for details, Hardworking

Suggestions for Improvement: Scope for better

Suggestions for Institute (course curriculum, industry interaction, placement, alumni): None

Signature of Organisation Mentor (Dissertation)

Date: 20.06.2024

Place: Hauz Khas, Delhi

ABSTRACT

In my dissertation titled "Raxa Revamp: Doctor Experience Redefined for Better Healthcare Delivery," I delve into the user experience of healthcare professionals utilizing the Raxa Health HMIS application. Through a mixed-method approach encompassing surveys and qualitative interviews, I gathered insights on the app's user-friendliness, navigation ease, and visual appeal. The study underscores the significance of user experience design in healthcare technology, emphasizing the need for training to facilitate app adoption, digital record organization for improved efficiency, and enhanced patient communication tools to elevate healthcare delivery standards. The research findings offer valuable recommendations to enhance the overall healthcare experience through technology integration.

ACKNOWLEDGEMENT

"Gratitude is the fairest blossom which springs from the soul." - Henry Ward Beecher

I extend my heartfelt gratitude to all those who have contributed to the success of my internship project and enriched my learning experience.

First and foremost, I would like to express my deepest appreciation to my institute mentor, **Dr Rupsa Banerjee**, for their invaluable guidance, support, and encouragement throughout this journey. Their expertise, patience, and mentorship have been instrumental in shaping my project and enhancing my skills.

I am also immensely grateful to my organization mentors, **Mr Himanshu Deshwal & Mr Manav Saini**, for providing me with the opportunity to work on meaningful projects. I extend my sincere appreciation to the CEO of **Raxa Health**, **Dr Surajit Nundy**, for his vision, leadership, and unwavering support.

To my beloved parents, to Baba, Mr Samarjeet Banerjee, your unwavering love, has been my source of strength and inspiration, I express my deepest gratitude. I hope you like this.

I extend my gratitude to my esteemed professor, **Dr Anandhi Ramachandran**, for her assistance in securing this internship opportunity for her valuable teachings, mentorship, and encouragement throughout my academic journey.

Finally, I would also like to acknowledge the invaluable support of my placement coordinator, **Mrs Anju Sherawat**, for providing guidance throughout the process.

I am truly grateful to each one of you for your contributions, support, and encouragement, which have made this internship experience truly enriching and rewarding. Thank you for believing in me and helping me grow professionally and personally.

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ABBREVIATIONS

1. API- Application Programming Interface
2. UI- User Interface
3. UX- User Experience
4. HMIS- Hospital Management Information System
5. AI- Artificial Intelligence
6. LLM- Large Language Modelling

ORGANIZATION PROFILE: RAXA HEALTH

Company summary

CEO: Dr Surajit Nundy

Name of mentor: Mr Himanshu Deshwal & Mr Manav Saini

Designation: Head of User Research Team & UX/UI Designer

Phone number: 8199988858, 9306349696

Email id: himanshu.deshwal@raxa.com,

manav.saini@raxa.com

Raxa assists healthcare professionals in using its AI-powered platform to enhance patient care. Raxa enables people to effectively care for yourself and those close to you. At Raxa, the goal is to transform healthcare quality in India using AI and technology. We're deeply committed to ensuring that every person in the country has access to top-notch healthcare. The main aim is to connect patients and doctors better through technology, creating a healthcare system that's transparent and focused on patients' needs. Raxa believes in giving individuals the tools they need to make smart choices about their health, ensuring they get the right care and have a smooth healthcare journey.

MISSION AND PRINCIPLES-

1. Ethical Medical Practice: We stand for ethical standards in healthcare, fighting against practices like overcharging and unnecessary treatments. Our platform gives patients a voice, so they can demand fair and ethical treatment.

2. Healthcare for Everyone: We're committed to making quality healthcare available to everyone, no matter their financial situation. By connecting patients with trustworthy healthcare providers and making healthcare services affordable and transparent, we're working to reduce inequalities in healthcare.

3. Innovation with Technology: We're using the latest technology to create solutions that make healthcare delivery smoother, improve communication between patients and doctors, and make medical information more accessible. Our platform is driving positive changes in the Indian healthcare system.

4. Partnerships: We're actively collaborating with healthcare professionals, organizations, and policymakers to bring about systemic changes in healthcare. Through strategic partnerships, we're pushing for policy reforms, better healthcare infrastructure, and practices based on evidence.

5. Empowering Patients: We're giving patients the knowledge and resources they need to manage their own health. With health education, personalized health records, and access to reliable medical advice, we're empowering individuals to make informed decisions about their well-being.

RATIONALE FOR THE STUDY-

The healthcare sector is rapidly evolving with the integration of advanced Health Management Information Systems (HMIS) designed to streamline operations and enhance patient care. Raxa Health, a leading HMIS application, aims to facilitate efficient healthcare delivery by providing a comprehensive digital platform for managing medical records, patient information, and clinical workflows. However, the effectiveness of such systems heavily relies on the user experience (UX) of the primary users—doctors and other healthcare professionals.

<u>Importance of UX in Healthcare HMIS:</u>

- A well-designed UX allows doctors to focus more on patient care, improving overall productivity.
- User-friendly interfaces reduce the likelihood of errors in data entry and retrieval. This is crucial in healthcare settings where accurate information is vital for diagnosis and treatment.
- Positive UX leads to higher user satisfaction, reducing frustration and burnout among healthcare professionals. Satisfied users are more likely to adopt and consistently use the system, ensuring better data quality and continuity of care.

By understanding the challenges and pain points faced by doctors, the study aims to identify areas for improvement in the application's design and functionality.

The insights gained from this study will provide actionable recommendations for improving the UX of the Raxa Health HMIS application. Enhancements based on user feedback can lead to a more intuitive and efficient system, ultimately benefiting both healthcare providers and patients. Furthermore, the findings will contribute to the broader field of health informatics by highlighting the critical role of UX in the adoption and success of digital health solutions.

INTRODUCTION

In recent years, there has been a significant shift towards digital health solutions, including the use of mobile applications, to improve healthcare access and delivery. One such application is **Raxa Health**, a comprehensive healthcare platform that aims to connect patients with healthcare providers and facilitate various aspects of healthcare delivery.

Raxa Health is an Ayushman Bharat Digital Mission Certified, National Accreditation Board for Hospitals & Healthcare Providers Certified and Amazon Web Services Qualified Software Certified health software which is the perfect solution to doctors and patients both for a smoother medical experience. It creates a healthcare ecosystem where doctors can add their patients, generate their clinical notes, access medical records of their patients, provide appointments (online as well as offline), teleconsultation, have their personalized drug list and much more. The patients on the other hand can book appointments, connect with doctors, text them their queries, upload their prescriptions, medical records, order their medications via prescription online in amazon and do much more. Raxa also provides the DHIS scheme benefits to healthcare professionals and healthcare facilities. The Digital Health Incentive Scheme is a new initiative by the Government of India aimed at incentivizing healthcare providers to adopt digital health technology. The scheme rewards healthcare providers for the use of digital tools such as electronic health records and telemedicine, encouraging the adoption of modern healthcare practices and improving the overall quality of care.

For healthcare providers, the user experience (UX) of such applications plays a crucial role in their adoption and utilization. A positive UX can lead to increased efficiency, improved patient care, and overall satisfaction among healthcare providers.

My dissertation project focuses on facilitators and barriers of using digital health technology among healthcare professionals while giving care to their patient with keen focus on Raxa Health. The project aims to assess the User Experience of users while using Raxa Health application, by measuring their satisfaction via user friendliness of the app, appearance and aesthetics of the app and navigation through the app.over the period of my dissertation of three months.

Key aspects of the project include conducting surveys and in-depth interviews on healthcare professionals, analysing the app's interface and features. By addressing these aspects, the project seeks to contribute to the development of Raxa on user experience front that effectively support healthcare providers in delivering quality care to their patients.

A significant outcome of this research will be the improvement in data accuracy and quality. By making the HMIS application more user-friendly, the chances of errors in data entry and retrieval will be minimized, leading to more reliable patient records and better-informed clinical decisions.

Research Question: 1. What are the facilitators and barriers while using digital technology for patient care among medical professionals?

2. How was the user experience like for people using Raxa Health application, in terms of satisfaction when measured via user friendliness of the app, appearance and aesthetics of the app and navigation through the app?

Objective: Primary: To understand the facilitators and barriers while using digital technology for patient care among medical professionals, by quantitative survey.

Secondary: To assess the User Experience of users while using Raxa Health application, by measuring their satisfaction via user friendliness of the app, appearance and aesthetics of the app and navigation through the app.

LITREATURE REVIEW

Digital Health- Digital medicine, such as smartphone apps, can help patients track their health by monitoring blood pressure, blood sugars, medication compliance, and physical activity.

Digital health involves the use of technology in healthcare to manage illnesses, promote wellness, and improve access to healthcare. It aims to enhance patient self-tracking and improve healthcare outcomes. However, challenges such as unclear regulations, reimbursement issues, and the need for clinical validation exist. Stakeholders must see the value in digital health products, and companies need to scale rapidly to attract investments. Adoption is hindered by workflow disruptions, lack of incentives, and privacy concerns. Education in digital health is needed for medical students. Patient-centered tools can engage patients in their healthcare. The COVID-19 pandemic has highlighted the importance of responsive digital health platforms. Ethical concerns include misinformation, data privacy, and potential HIPAA violations. Telehealth and telemedicine are rapidly evolving, leading to debates on billing, privacy, and security guidelines. Trust in healthcare workers and traditional patient-provider relationships may be impacted by the increasing reliance on digital health. Balancing face-to-face encounters with digital tools is crucial for the future of healthcare.

User Experience & User Interface

The literature on user experience (UX) and user interface (UI) design in healthcare applications underscores the significance of user-centered design and usability in enhancing healthcare services.

Kushendriawan et al. (2021) emphasize that a positive user experience in mobile health applications, like Halodoc, improves user engagement and efficiency, which is crucial for the successful adoption of such technologies.

Zhao et al. (2017) further explore the factors influencing mobile health service adoption, identifying age as a significant moderating factor, indicating that different user demographics may have varying needs and preferences.

Tremosa (2023) highlights the critical role of UX design in improving patient safety and reducing medical errors by advocating for simplicity, accessibility, and empathy in design, and emphasizing the involvement of healthcare professionals in the design process.

Sumarlin (2018) reviews the UX and UI design of hospital information systems, suggesting that well-designed interfaces significantly enhance healthcare service delivery by improving usability and meeting user needs.

In the context of Raxa Health, an HMIS software, my primary research focuses on the UX of users using the software, utilizing Google Playstore analytics and conducting primary research by survey. This approach aims to gather comprehensive insights into the user satisfaction, ultimately contributing to the development of more effective and user-friendly healthcare information systems.

METHODOLOGY

Research Design and Approach:

Mixed Method Approach-

This study employs a sequential mixed-method approach, integrating both quantitative and qualitative methods to comprehensively explore the user experience (UX) of healthcare professionals using the Raxa Health HMIS application. The research was conducted in two phases: quantitative data collection followed by qualitative data collection.

The quantitative data provided a broad overview of user satisfaction and usability, while the qualitative data offered deeper insights into specific facilitators and barriers, enriching the overall findings and providing actionable recommendations for improvement. This integration ensures a holistic view of the application's performance and user experience, guiding future enhancements to better support healthcare professionals and patients.

Data Collection Methods:

Data for this study was collected via surveys administered through Google Forms. This method provided a systematic and efficient way to gather information from numerous participants. The use of Google Forms made the survey easily accessible, allowing participants to complete it online.

The survey questionnaire was specifically designed to capture information related to the research objectives and questions. It included items assessing the application's user-friendliness, visual appeal, and ease of navigation. Each question was thoughtfully constructed to align with and address the study's research goals.

Study population:

People using the Raxa Health Application

Study setting:

Hospitals and private clinics across Delhi and Dhanbad, Jharkhand over a period of 3 months (March-June 2024)

Sampling Techniques and Sample Size:

Sample size of 40 healthcare professionals were sent a google survey form for quantitative data collection regarding user satisfaction, of which, 36 participants responded.

A 30 minute In- depth interview of 6 healthcare professionals within the age of 20-60 was conducted, on the modules of Raxa health and how they were a facilitator or a barrier for them while giving care to their patients.

Data Analysis Techniques:

Qualitative Analysis: The qualitative data obtained from in-depth interview will be analyzed thematically to understand the facilitators and barriers while using digital technology for patient care among medical professionals.

Quantitative Analysis: The quantitative data will be obtained from google form survey to understand the facilitators and barriers while using digital technology for patient care among medical professionals, by quantitative survey.

Iterative Design: The insights gathered from the above will be used to iteratively improve the app's User Experience (UX). This can involve implementing changes based on feedback.

RESULTS

After using the Raxa application for three months the health professionals took the survey. After analyzing the data of the quantitative research on user satisfaction the following results were obtained:

From the data, it is evident that **69.4%** of the population found the application to be user-friendly.

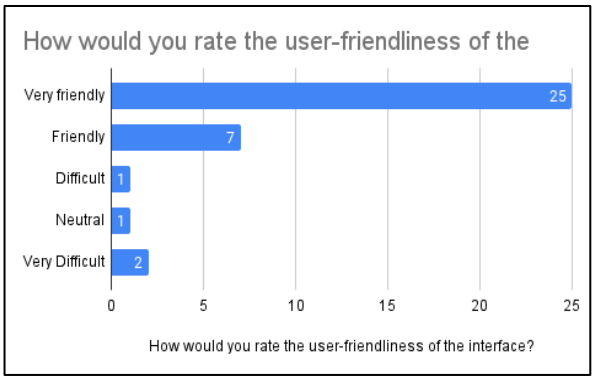

Fig 1

Even though during the beginning of the three months, many of the health professionals were hesitant about using the application, it was observed that **55.55%** of the population found it very easy to navigate through the application.

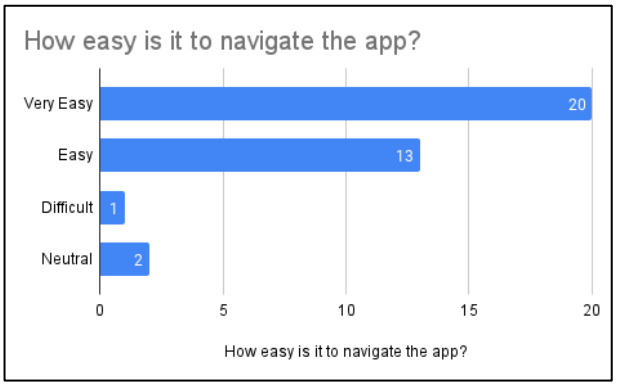

Fig 2

It was observed that **58.33%** of the population found the application to be visually appealing and aesthetic, thus suggesting that the application has a positive user interface (UI).

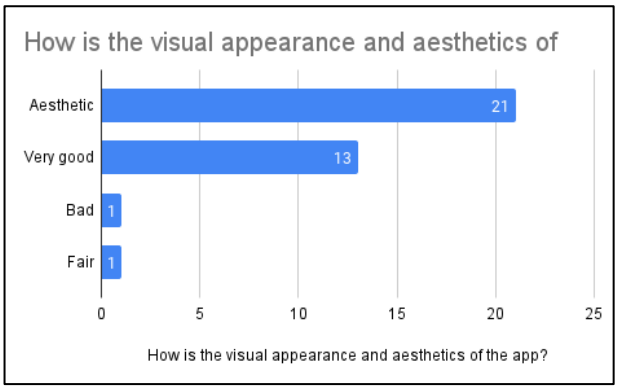

Fig 3

It was observed that throughout the period of three months, **63.88%** of the population used the Raxa application on daily basis almost everyday whereas, **30.55%** of the population used it fairly often.

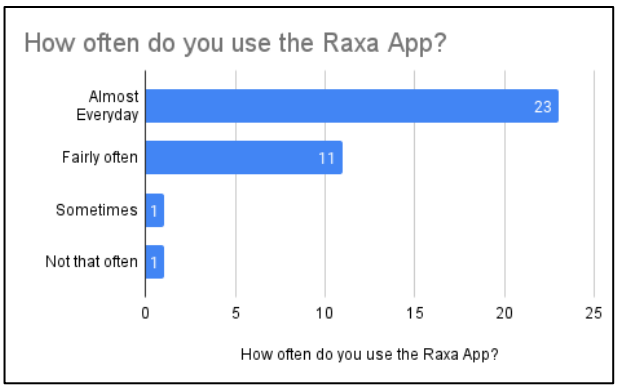

Fig 4

When asked if they would recommend the application to a friend, **72.22%** of the population said they are very likely to suggest the application to a friend or colleague.

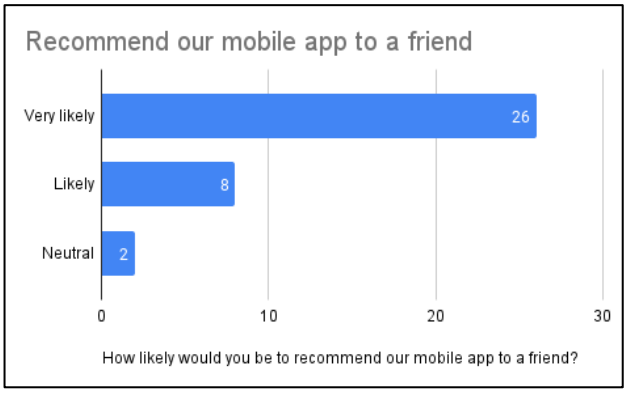

Fig 5

However, when asked if they were satisfied with the user experience of the Raxa application, 16 people i.e **44.44%** of the population, which was the highest, **disagreed.**

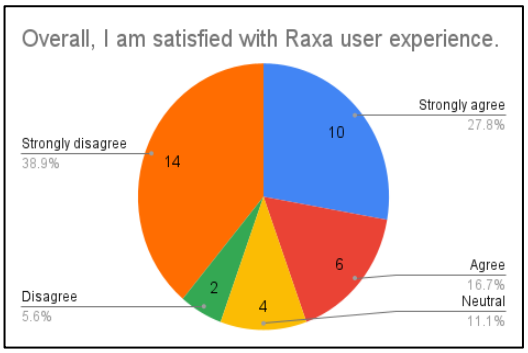

Fig 6

To understand the reason behind the disagreement in user satisfaction, I conducted a 30-minute in-depth interview with 6 healthcare professionals (others were not ready to commit that much time due to work commitments)

Results of Content Analysis

After the thematic analysis of the in-depth interview two broad themes were identified-

1. Facilitators of the use of digital technology.

2. Barriers of the use of digital technology.

Under these two themes the following sub-themes were identified and coded-

Facilitators	**Barriers**
Enhanced Workflow- Code 1	Time to adapt- Code 2
Improved Care Quality- Code 3	Technical Glitches- Code 4
Seamless User Experience- Code 5	Patient Discomfort- Code 6
	Training Required- Code 7
	Reduced Workflow- Code 8
	Interface Unfriendly- Code 9
	Data Security Concern- Code 10

Table 1

The reoccurrence of the codes suggests the importance it needs and the attention that Raxa Health must give to these areas to have a better User Experience.

Sub-Themes	**Number of occurrences during the interview with doctors**
Time to adapt- Code 2	25
Enhanced Workflow- Code 1	23
Technical Glitches- Code 4	20
Improved Care Quality- Code 3	15
Seamless User Experience- Code 5	6
Interface Unfriendly- Code 9	6
Data Security Concern- Code 10	6
Training Required- Code 7	5
Patient Discomfort- Code 6	4
Reduced Workflow- Code 8	3

Table 2

Sub-Themes and Few Verbatim responses of the doctors which express the themes

Time to adapt- Code 2

"Adapting to new ways of interacting with patients through digital means might be challenging."

Enhanced Workflow- Code 1

"It provides a convenient way to maintain patient consultations without the need for physical visits."

Technical Glitches- Code 4

“Technical issues like connectivity problems occasionally posed challenges.”

Improved Care Quality- Code 3

“Features like automated reminders are helpful in reducing no-show rates of patients.”

Seamless User Experience- Code 5

“Raxa Health's integrated modules offer a seamless user experience, ensures that patient data and workflows are well-coordinated across the system.”

Interface Unfriendly- Code 9

“The interface is not user-friendly, and it could benefit from improvements.”

Data Security Concern- Code 10

“Trust in data security and protection across integrated modules is necessary.”

Training Required- Code 7

“Understanding and adhering to ABDM compliance will require additional learning initially.”

Patient Discomfort- Code 6

“Ensuring patients are comfortable with and understand the digital tools used was a hurdle.”

Reduced Workflow- Code 8

“When the notes need frequent editing due to transcription errors, it could increase the workload instead of reducing it.”

DISCUSSION

The doctors interviewed are under the age group of 35-58years of age.

The acceptability and ease of the use of digital technology depends on a lot of factor age being one. It was observed that young doctors were keen to use the digital technology because of their knowledge and the older doctors were only keen to know how to use the digital technology in patient care and reluctant to use it.

Proper training and periodic updates to remove or minimize the technical glitches will prove to be good scope of improvement.

Limitations of the Study-

1. Sample Size and Diversity: The study had limited number of participants; hence, it was not representative of the entire population of doctors using HMIS software.
2. Subjectivity: Data collected through in-depth and structured interviews relied on participants' self-reported experiences, which can be subjective and influenced by recall bias.

CONCLUSION

The Content analysis of user responses to Raxa Health software highlights a mix of positive experiences and challenges. Key features have been well-received, with many users reporting improvements in workflow efficiency, time savings, and enhanced patient care. However, challenges such as a steep learning curve, technical issues, and data security concerns were also frequently mentioned.

The user satisfaction questionnaire further supports these findings, indicating a general appreciation for the software's core functionalities but also pointing to specific areas needing enhancement. Overall, the research suggests that while Raxa Health significantly benefits healthcare practice, continuous refinement and user feedback incorporation are essential for its ongoing development and optimization.

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ANNEXURES

User Experience Survey (Investigator Sheet)

PURPOSE OF STUDY-
You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researcher if there is anything that is not clear or if you need more information.
The purpose of the study is to assess the user satisfaction of users while using the Raxa Health platform, to enhance the overall usability and effectiveness of the platform in supporting healthcare delivery.

STUDY PROCEDURES-
If you agree to participate in the study, you will be required to participate in a survey.

CONFIDENTIALITY-
Your responses to this interview and survey forms will be anonymous. Every effort will be made by the researcher to preserve your confidentiality including the following:
Assigning code names/numbers for participants that will be used on all research notes and documents.

VOLUNTARY PARTICIPATION-
Your participation in this study is voluntary. It is up to you to decide whether to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

Instruction for the survey-
Kindly fill the form as per your satisfaction level while using Raxa Health App over a period of three months.

User Experience Survey (Questionnaire)

Please enter your age.

1. Considering your complete experience with Raxa, how likely would you be to recommend our mobile app to a friend or colleague?

Very likely
Likely
Neutral
Less likely
Will not suggest

2. How would you rate the user-friendliness of the interface?

Very friendly

Friendly
Neutral
Difficult
Very Difficult

3. How often do you use the Raxa App?

Almost Everyday
Fairly often
Sometimes
Not that often
Rarely

4. How easy is it to navigate the app?

Very Easy
Easy
Neutral
Difficult
Very Difficult

5. How is the visual appearance and aesthetics of the app?

Aesthetic
Very good
Fair
Not so good
Bad

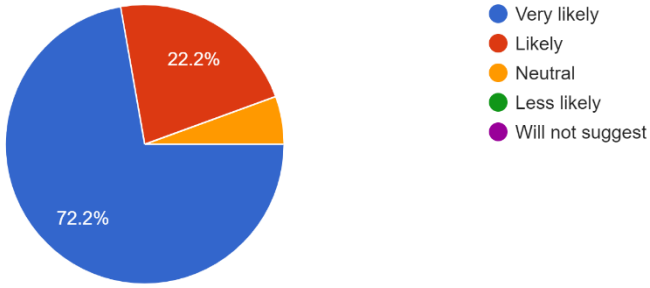
6. Overall, I am satisfied with Raxa user experience.

Strongly disagree
Disagree
Neutral
Agree
Strongly agree

Response Analysis in Pie-chart

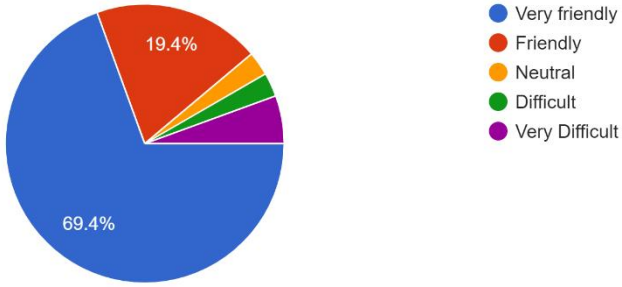
1. Considering your complete experience with Raxa, how likely would you be to recommend our mobile app to a friend or colleague?

36 responses



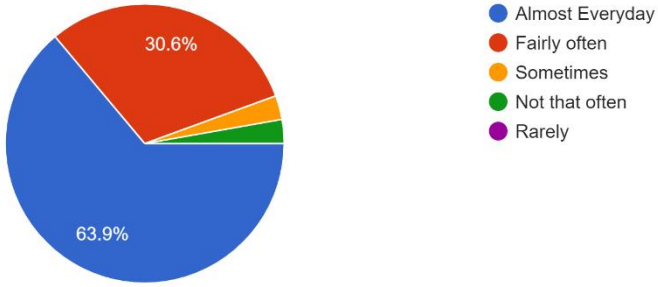
2. How would you rate the user-friendliness of the interface?

36 responses



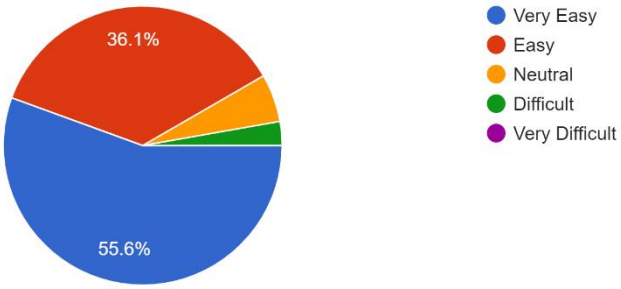
3. How often do you use the Raxa App?

36 responses



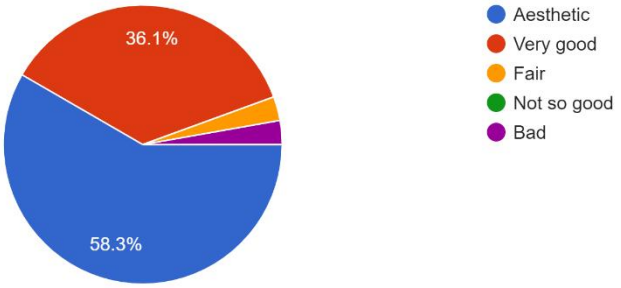
4. How easy is it to navigate the app?

36 responses



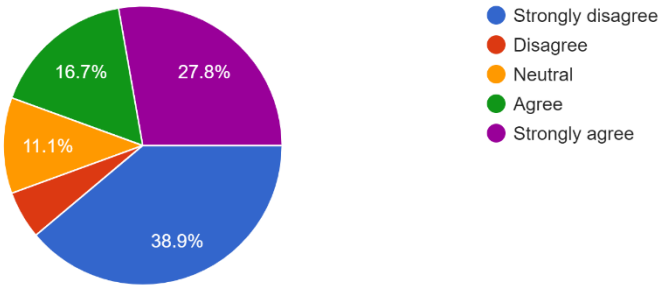
5. How is the visual appearance and aesthetics of the app?

36 responses



6. Overall, I am satisfied with Raxa user experience.

36 responses



In-Depth Interview Questions

General Use and Experience:

1. **Facilitators:**
    - Can you describe your overall experiences using Raxa Health software in your practice?
    - Which modules of Raxa Health do you find most beneficial, and why?
2. **Barriers:**
    - What challenges have you encountered while using Raxa Health software in your practice?
    - Which modules of Raxa Health do you find difficult to use, and why?

Digitalizing Medical Records:

1. **Facilitators:**
    - How has the digitalization of medical records in Raxa Health helped in the management of patient information?
2. **Barriers:**
    - What difficulties have you faced with the digitalization of medical records in Raxa Health?
    - Are there specific instances where digital records have posed challenges in patient care or workflow?

Appointment Booking:

1. **Facilitators:**
    - How does the appointment booking module impact your daily schedule and patient management?
    - What features of the appointment booking system do you find most useful?
2. **Barriers:**
    - What challenges have you faced with the appointment booking module in Raxa Health?
    - Are there any features of the appointment booking system that you find difficult to use?

Raxa Assistant:

1. **Facilitators:**
    - How has the Raxa Assistant helped you manage tasks or patient interactions?
2. **Barriers:**
    - What issues have you encountered while using the Raxa Assistant?

Raxa Scribe:

1. **Facilitators:**
    - How does the Raxa Scribe feature assist you in capturing doctor-patient conversations?

- What benefits have you observed from the real-time transcription capability of Raxa Scribe?

2. **Barriers:**
   - What challenges have you faced with the Raxa Scribe feature?
   - Are there any issues with the accuracy or usability of real-time transcriptions?

Teleconsultation Clinics:

1. **Facilitators:**
   - How has the teleconsultation module enhanced your ability to provide remote care?
   - What are the main advantages you have experienced with teleconsultations?
2. **Barriers:**
   - What challenges have you faced with the teleconsultation module in Raxa Health?
   - Are there any technical or operational issues that hinder remote care?

ABDM Compliance:

1. **Facilitators:**
   - How important is the ABDM compliance feature for your practice?
   - How does Raxa Health ensure that you meet regulatory requirements and standards?
2. **Barriers:**
   - What difficulties have you encountered in maintaining ABDM compliance using Raxa Health?
   - Are there any specific compliance features that you find challenging?

Inter-Module Integration:

1. **Facilitators:**
   - How well do the different modules of Raxa Health integrate to provide a seamless experience?
2. **Barriers:**
   - What issues have you faced with the integration of different modules in Raxa Health?

Suggestions for Improvement:

1. **Facilitators:**
   - What improvements or additional features would you like to see in Raxa Health software to enhance its positive aspects?
   - How can the existing modules be further developed to better support your needs?
2. **Barriers:**
   - What changes or fixes would you recommend addressing the challenges you face with Raxa Health?
   - How can the software be improved to overcome the barriers you experience in its use?

RESPONSE SHEETS OF THE IN-DEPTH INTERVIEW

Response Sheet 1 (Age 42)

General Use and Experience:

1. Facilitators:

- After using Raxa Health for three months, I find the software significantly enhances my workflow.

- The most beneficial modules for me are the speech-to-text transcription and the appointment booking system.

2. Barriers:

- Initially, there was a learning curve to get accustomed to the various features of Raxa Health.

- Navigating through the different modules required some time to become proficient.

Digitalizing Medical Records:

1. Facilitators:

- The digitalization of medical records has greatly streamlined patient information management.

- An example is the ease of accessing patient history quickly during consultations, improving care quality.

2. Barriers:

- At first, adapting to the digital records system was challenging, especially for historical data entry.

- Ensuring that all records were accurately digitized took some initial effort.

Appointment Booking:

1. Facilitators:

- The appointment booking module has simplified managing my daily schedule and patient appointments.

- Features like automated reminders have reduced no-show rates.

2. Barriers:

- Initially, setting up the appointment booking system required some time and effort.

- Occasional technical glitches in the booking system disrupted patient scheduling.

Raxa Assistant:

1. Facilitators:

- The Raxa Assistant has been helpful in managing tasks and patient interactions efficiently.

- It has saved time and improved task organization in my practice.

2. Barriers:

- Learning to fully utilize the Raxa Assistant's functions took some initial training.

- There were occasional issues with the assistant not recognizing certain commands correctly.

Raxa Scribe:

1. Facilitators:

- The speech-to-text transcription feature in Raxa Scribe has been very beneficial for clinical notes.

- It has saved time and ensured accurate documentation of patient interactions.

2. Barriers:

- Ensuring the transcription accuracy and making corrections required some initial adjustment.

- Getting used to relying on real-time transcriptions took a bit of time.

Teleconsultation Clinics:

1. Facilitators:

- The teleconsultation module has enhanced my ability to provide remote care effectively.

- It offers a flexible way to maintain patient consultations without physical visits.

2. Barriers:

- Managing teleconsultations effectively required some initial training and adjustment.

- Technical issues like connectivity problems occasionally posed challenges.

ABDM Compliance:

1. Facilitators:

- Ensuring compliance with ABDM standards is crucial, and Raxa Health's compliance feature is valuable.

- It helps meet regulatory requirements efficiently.

2. Barriers:

- Understanding and adhering to ABDM compliance required additional learning initially.

- Some complexities in compliance features posed challenges.

Inter-Module Integration:

1. Facilitators:

- The integration of different modules in Raxa Health provides a seamless user experience.

- It ensures patient data and workflows are well-coordinated across the system.

2. Barriers:

- Learning to navigate and utilize the integration of various modules took some time.

- Occasional integration issues disrupted workflow continuity.

Patient Interaction:

1. Facilitators:

- Raxa Health software enhances patient interactions through better data management and communication tools.

- Positive patient feedback on the use of digital tools has been encouraging.

2. Barriers:

- Adapting to new ways of interacting with patients through digital means was initially challenging.

- Ensuring patients are comfortable with and understand the digital tools used was a hurdle.

Suggestions for Improvement:

1. Facilitators:

- More intuitive user interfaces and additional training resources would enhance ease of use.

- Enhancements in system speed and reliability would be beneficial.

2. Barriers:

- Addressing initial technical issues and ensuring smooth user experiences are critical.

- Continuous support and updates to address emerging challenges would be appreciated.

RESPONSE SHEET 2 (Age 36)

General Use and Experience:

1. Facilitators:

- I have not previously used any software that digitalizes my work.

- After the demonstration, I find the speech-to-text transcription of clinical notes in Raxa Health particularly beneficial.

- The ability to access patient records from anywhere within the hospital is a significant advantage.

2. Barriers:

- Initially, there may be a learning curve to get accustomed to the various features of Raxa Health.

- Ensuring that all team members are proficient in using the software might take some time.

Digitalizing Medical Records:

1. Facilitators:

- The digitalization of medical records greatly enhances patient information management.

- The ability to access records of patients even after their visit ensures continuity of care.

2. Barriers:

- Adapting to the new digital records system was initially challenging.

- Ensuring accurate data entry and retrieval could be difficult at first.

Appointment Booking:

1. Facilitators:

- The appointment booking module simplifies managing daily schedules and patient appointments.

- Features like automated reminders are helpful in reducing no-show rates.

2. Barriers:

- Setting up the appointment booking system required some time and effort.

- Occasional technical glitches in the booking system could disrupt patient scheduling.

Raxa Assistant:

1. Facilitators:

- The Raxa Assistant is helpful for managing routine tasks and patient interactions efficiently.

- It saves time and improves task organization in my practice.

2. Barriers:

- Learning to fully utilize the Raxa Assistant's functions took some initial training.

- There were occasional issues with the assistant not recognizing certain commands correctly.

Raxa Scribe:

1. Facilitators:

- The speech-to-text transcription feature in Raxa Scribe is very beneficial for clinical notes.

- It saves time and ensures accurate documentation of patient interactions.

2. Barriers:

- Ensuring the transcription accuracy and making corrections required some initial adjustment.

- Getting used to relying on real-time transcriptions took some time.

Teleconsultation Clinics:

1. Facilitators:

- The teleconsultation module enhances my ability to provide remote care effectively.

- It offers a flexible way to maintain patient consultations without physical visits.

2. Barriers:

- Managing teleconsultations effectively required some initial training and adjustment.

- Technical issues like connectivity problems occasionally posed challenges.

ABDM Compliance:

1. Facilitators:

- Ensuring compliance with ABDM standards is crucial, and Raxa Health's compliance feature is valuable.

- It helps meet regulatory requirements efficiently.

2. Barriers:

- Understanding and adhering to ABDM compliance will require additional learning initially.

- Some complexities in compliance features posed challenges.

Inter-Module Integration:

1. Facilitators:

- The integration of different modules in Raxa Health provides a seamless user experience.

- It ensures patient data and workflows are well-coordinated across the system.

2. Barriers:

- Learning to navigate and utilize the integration of various modules took some time.

- Occasional integration issues disrupted workflow continuity.

Patient Interaction:

1. Facilitators:

- Raxa Health software enhances patient interactions through better data management and communication tools.

- Positive patient feedback on the use of digital tools has been encouraging.

2. Barriers:

- Adapting to new ways of interacting with patients through digital means was initially challenging.

- Ensuring patients are comfortable with and understand the digital tools used was a hurdle.

Suggestions for Improvement:

1. Facilitators:

- I would like lab reports of IPD patients to be available and updated at regular intervals.

- Separate access for lab technicians and nurses would streamline patient monitoring and reduce the need for physical report handovers.

2. Barriers:

- Addressing initial technical issues and ensuring smooth user experiences are critical.

- Continuous support and updates to address emerging challenges would be appreciated.

RESPONSE SHEET 3 (Age 51)

General Use and Experience:

1. Facilitators:

- Yes, I am currently using DocOn for digitalizing my work.

- I am willing to learn about and implement Raxa Health based on the demonstration.

- Raxa Health is compatible with Android, iOS, phones, tablets, and laptops, which enhances accessibility and flexibility.

2. Barriers:

- Transitioning from DocOn to Raxa Health might require time and training.

- Ensuring seamless integration with existing workflows and systems could be challenging initially.

Digitalizing Medical Records:

1. Facilitators:

- Raxa Health's digital record system improves the organization and accessibility of patient data.

- The refer system is useful, though I would prefer the ability to refer patients to external doctors directly.

2. Barriers:

- Adapting to a new digital records system from an existing one might take time.

- Incorporating external referrals into the current system requires additional functionality.

Appointment Booking:

1. Facilitators:

- The appointment booking module in Raxa Health could streamline my scheduling process.

- Automated reminders about appointments can reduce no-show rates and improve patient compliance.

2. Barriers:

- Transitioning to a new booking system might have an initial learning curve.

- Ensuring the reliability and user-friendliness of the booking module is essential.

Raxa Assistant:

1. Facilitators:

- The Raxa Assistant can aid in managing tasks and patient interactions efficiently.

- It can improve organization and save time in my daily routine.

2. Barriers:

- Getting accustomed to the Raxa Assistant's functionalities might require some training.

- There are issues with the assistant not recognizing certain commands correctly initially.

Raxa Scribe:

1. Facilitators:

- The drug-drug interaction prompts for doctors are a crucial feature that enhances patient safety.

- Speech-to-text transcription of clinical notes can save time and improve documentation accuracy.

2. Barriers:

- Ensuring transcription accuracy and dealing with varying dialects might pose challenges.

- When the notes need frequent editing due to transcription errors, it could increase the workload instead of reducing it.

Teleconsultation Clinics:

1. Facilitators:

- The teleconsultation module can expand my ability to offer remote care.

- It provides a convenient way to maintain patient consultations without the need for physical visits.

2. Barriers:

- Managing teleconsultations effectively requires some initial training and adjustment.

- Technical issues, such as connectivity problems, could disrupt remote consultations.

ABDM Compliance:

1. Facilitators:

- Raxa Health's compliance with ABDM standards is a valuable feature for meeting regulatory requirements.

- It ensures that my practice adheres to necessary legal and professional standards.

2. Barriers:

- Understanding and implementing ABDM compliance features might require additional learning.

- Ensuring all staff members are proficient in compliance procedures could be challenging.

Inter-Module Integration:

1. Facilitators:

- Raxa Health's integrated modules offer a seamless user experience.

- This ensures that patient data and workflows are well-coordinated across the system.

2. Barriers:

- Learning to navigate and utilize the integrated modules might take some time.

- Occasional integration issues used to disrupt workflow continuity.

Patient Interaction:

1. Facilitators:

- The software enhances patient interactions through better data management and communication tools.

- Automated reminders about medication to patients improve compliance and care quality.

2. Barriers:

- Adapting to new ways of interacting with patients through digital means might be challenging.

- Ensuring patients are comfortable with and understand the digital tools used could be a hurdle.

Suggestions for Improvement:

1. Facilitators:

- The ability to print hard copies of prescriptions or clinical notes prepared in Raxa Health is beneficial.

- It would be helpful to refer patients to external doctors with the help of a hard copy of signed prescriptions.

2. Barriers:

- Managing different dialects of patients and doctors is crucial for accurate speech-to-text transcription.

- Addressing initial technical issues and ensuring smooth user experiences are critical.

RESPONSE SHEET 4 (Age 37)

General Use and Experience:

1. Facilitators:

- I have previously tried using Raxa Health.

- Despite having trust issues, I am open to learning more and potentially implementing it.

2. Barriers:

- The interface is not user-friendly, and it could benefit from improvements.

- I have concerns about data breaches and data storage security.

Digitalizing Medical Records:

1. Facilitators:

- Digitalizing records can streamline patient information management and improve efficiency.

2. Barriers:

- Trust issues related to data security and storage need to be addressed.

- The interface needs to be more intuitive for better user adoption.

Appointment Booking:

1. Facilitators:

- The appointment booking module has potential but needs to be more user-friendly.

2. Barriers:

- The current interface of the booking module poses usability challenges.

- Ensuring data security during appointment scheduling is crucial.

Raxa Assistant:

1. Facilitators:

- The Raxa Assistant has potential if its scientific accuracy is improved for doctors.

2. Barriers:

- Currently, the Raxa Assistant is more useful to patients than doctors.

- Ensuring accurate and reliable assistance for doctors is necessary.

Raxa Scribe:

1. Facilitators:

- Speech-to-text transcription can be beneficial if it accurately captures clinical notes.

2. Barriers:

- Dialect issues can affect the accuracy of speech-to-text transcription.

- Frequent editing of transcribed notes increases the workload instead of reducing it.

Teleconsultation Clinics:

1. Facilitators:

- Teleconsultation features enhances remote patient care if data security is ensured.

2. Barriers:

- Trust issues regarding data security during teleconsultations need to be addressed.

- Ensuring secure access across multiple devices is important to prevent data theft and malpractice.

ABDM Compliance:

1. Facilitators:

- Compliance with ABDM standards is beneficial for meeting regulatory requirements.

2. Barriers:

- Ensuring compliance without compromising data security is essential.

- User trust in the system's compliance features needs to be built.

Inter-Module Integration:

1. Facilitators:

- Seamless integration of various modules can improve overall efficiency if the interface is user-friendly.

2. Barriers:

- The current interface issues could hinder the effective use of integrated modules.

- Trust in data security and protection across integrated modules is necessary.

Patient Interaction:

1. Facilitators:

- Improved data management can enhance patient interactions if security concerns are addressed.

2. Barriers:

- Trust issues related to data breaches and storage need to be resolved.

- Ensuring patient comfort with the digital tools use was a challenge.

Suggestions for Improvement:

1. Facilitators:

- Enhance the user interface to make it more intuitive and user-friendly.

- Improve the scientific accuracy of the Raxa Assistant for better doctor utility.

2. Barriers:

- Address data breach and storage security concerns comprehensively.

- Ensure secure access across multiple devices to prevent data theft, hacking, and malpractice.

- Consider dialect variations in speech-to-text transcription to reduce the need for frequent editing and improve accuracy.

RESPONSE SHEET 5 (Age 40)

General Use and Experience:

1. Facilitators:

- I am not currently using any software to digitalize my work, but I am open to learning more and potentially implementing it.

- I am willing to explore and implement digital solutions for better efficiency.

2. Barriers:

- Initial hesitation in adopting new digital systems.

- Lack of current digital infrastructure in practice.

Digitalizing Medical Records:

1. Facilitators:

- Raxa Health highlights clinical reports and centralizes all information, which is convenient.

2. Barriers:

- Transitioning to a digital system may require overcoming initial resistance and ensuring data security.

Appointment Booking:

1. Facilitators:

- Potential for streamlined appointment booking if integrated with clinical reports and patient data.

2. Barriers:

- Ensuring ease of use and data security during the booking process.

Raxa Assistant:

1. Facilitators:

- The assistant offers a personalized drug list and can suggest alternative generic medicines.

- It can book tests and show their costs when instructed by the doctor.

2. Barriers:

- Accuracy and reliability of the assistant need to be ensured for effective use.

Raxa Scribe:

1. Facilitators:

- Speech-to-text transcription of clinical notes is very useful.

- Separate dashboards for pathology reports, similar to vitals dashboards, enhance usability.

2. Barriers:

- Dialect issues might affect the accuracy of speech-to-text transcription.

- Continuous improvement is needed to ensure accurate and efficient transcription.

Teleconsultation Clinics:

1. Facilitators:

- Teleconsultation features can significantly enhance patient care.

2. Barriers:

- Trust issues regarding data security during teleconsultations need to be addressed.

- Accessibility across various devices while maintaining security is essential.

ABDM Compliance:

1. Facilitators:

- Compliance with ABDM standards is beneficial for regulatory requirements.

2. Barriers:

- Ensuring ABDM compliance without compromising data security is critical.

Inter-Module Integration:

1. Facilitators:

- Centralizing information across modules improves overall efficiency.

2. Barriers:

- User interface improvements are needed for seamless integration.

Patient Interaction:

1. Facilitators:

- Enhanced data management improves patient interactions.

2. Barriers:

- Addressing trust issues and ensuring data security is crucial.

Suggestions for Improvement:

1. Facilitators:

- Provide a user-friendly interface.

- Add a list of tests and costs that patients can book through Raxa.

2. Barriers:

- Ensure data security and address trust issues.

- Incorporate an alternative generic medicines list for patients with cost concerns.

RESPONSE SHEET 6 (Age 57)

General Use and Experience:

1. Facilitators:

- I am not currently using any software to digitalize my work but am open to exploring options.

- I find many features of Raxa Health appealing and useful for medical practice.

2. Barriers:

- The system is too technical and difficult for me to understand, though younger doctors might find it easier to use.

- Initial adoption might be hindered by the technical complexity and subscription plans.

Digitalizing Medical Records:

1. Facilitators:

- Centralizing information and streamlining clinical data could improve efficiency and patient care.

2. Barriers:

- Technical complexity makes it challenging for some professionals to adopt.

- Need for ongoing support and training to ensure smooth implementation.

Appointment Booking:

1.Facilitators:

- Potential to streamline the booking process and integrate with other modules for better efficiency.

2. Barriers:

- Complexity of the system may hinder its initial adoption.

Raxa Assistant:

1. Facilitators:

- Helpful for various clinical tasks, potentially enhancing productivity and accuracy.

2. Barriers:

- Too technical for some users, requiring simpler interfaces or additional training.

Raxa Scribe:

1. Facilitators:

- Valuable for transcribing clinical notes and reducing manual entry workload.

2. Barriers:

- Complexity in understanding and using the system may be a barrier for some healthcare professionals.

Teleconsultation Clinics:

1. Facilitators:

- Can significantly enhance remote patient care and improve access to healthcare services.

2. Barriers:

- Trust issues regarding data security during teleconsultations need to be addressed.

- Ensuring ease of use and understanding for all healthcare professionals.

ABDM Compliance:

1. Facilitators:

- Ensures regulatory compliance, beneficial for standardizing healthcare practices.

2. Barriers:

- Need to ensure that compliance features are easy to understand and implement.

Inter-Module Integration:

1. Facilitators:

- Integration across various modules improves overall efficiency and patient care.

2. Barriers:

- Technical complexity in using integrated modules may be challenging for some users.

Patient Interaction:

1. Facilitators:

- Enhanced data management and streamlined processes improve patient interactions.

2. Barriers:

- Addressing the technical complexity to ensure all users can effectively interact with patients using the system.

Suggestions for Improvement:

1. Facilitators:

- Simplify the user interface to make it more accessible to all healthcare professionals.

- Offer training and support to help users understand and utilize the system effectively.

2. Barriers:

- Address subscription plan concerns to ensure cost-effectiveness.

- Investigate DHIS schemes to offer incentives for using the system.

- Ensure the system is user-friendly for both experienced and less experienced healthcare professionals.

Radha B Dis 1

ORIGINALITY REPORT

7%	4%	3%	3%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

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