AI-Driven QA & Property Data Optimization for Enhanced Real Estate Automation

Thesis submitted in fulfilment of the requirements for the

Degree of

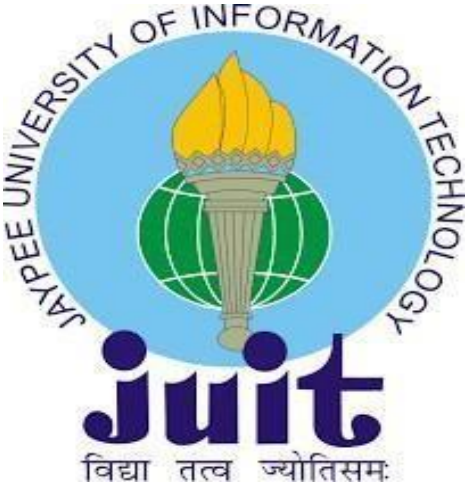
BACHELORS OF TECHNOLOGY

IN

BIOTECHNOLOGY

Submitted by:

Urvi Mittal (211811)



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DECLARATION

I hereby declare that the work presented in this Project report titled **"AI-Driven QA & Property Data Optimization for Enhanced Real Estate Automation"** submitted in fulfilment of the requirements for the award of the degree of Bachelor of Technology in Biotechnology at Jaypee University of Information Technology, Waknaghat, is my original work carried out during my industrial internship at **Verbaflo.ai**. This report is based on the practical experience I gained under the supervision of **Shabbir Sadriwala (EIR)** during my tenure as a **Quality Assurance intern** at Verbaflo.ai.

I further declare that this report has not been submitted elsewhere for the award of any degree or diploma. I take full responsibility for the contents and outcomes of this report.

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CERTIFICATE

This is to certify that the work presented in the project report titled **"AI-Driven QA & Property Data Optimization for Enhanced Real Estate Automation"**, submitted in partial fulfilment of the requirements for the award of the degree of **Bachelor of Technology in Biotechnology**, to the **Department of Biotechnology and Bioinformatics**, Jaypee University of Information Technology, Waknaghat, is an authentic record of the work carried out by **Urvi Mittal** during the period **January 2025 to May 2025**.

This was part of the industrial internship at **Verbaflo.ai**, under the supervision of **Shabbir Sadriwala (EIR)** and with guidance from **Ms. Hally Gala (Team Lead)**, following his placement in the organization.

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The above statement made is correct to the best of my knowledge.

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COMPANY PROFILE

VerbaFlo is a UK tech startup that is redefining how the real estate sector communicates and operates. Established in the year 2024 by Sayantan Biswas and Ashish Dogra, the company is on a quest to make the management of property easier and more efficient using conversational AI. By automating day to day tasks, enhancing client dealings and supporting organizations run for more productively, VerbaFlo will increase productivity and profitability.

With the help of their platform, it is easy for the real estate professionals to be connected with clients in various channels of communication – voice calls, SMS, a form of emails, WhatsApp, and live chat, all in one streamlined platform. Whether it is smart client-property matching or getting automated workflows or dynamic pricing tools or an intuitive engagement portal, making backend operations and customer service smoother is a part of this.

VerbaFlo is based on such strong values such inclusivity, innovation, customer focus and integrity. The leadership trio of CEO Sayantan Biswas, CTO Abhishek Garg, and the Chief Business Officer, Dan Smith, can mix tech understanding and real estate acumen. Based in London, the expanding team of 11-50 professionals is dedicated to developing flexible, scalable AI tools that stay in sync with the continually changing hunger of the real world of real estate..

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ABSTRACT

This report examines how Quality Assurance (QA), documentations, and data coordinations can cooperate in enhancing reliability and performance of conversational AI in the real estate industry. It begins by providing the foundations—detailing how AI is being the used in real estate realm and the main obstacles teams encounter like keeping the data accurate, making users happy, and systems working fine.

The second half gets into the implementation of such ideas. The QA framework was implemented and made better using various forms of communication platforms which included phone calls, chatbots, emails, and WhatsApp. The report defines a transparent testing, starting a prompts refining, and property data handling strategy – enabled by tight cooperation of QA experts and AI developers. Such collaborations resulted in significant changes, such as reduced mistakes in properties posted, easy system integration, and enhanced UX.

The report concludes with mentioning the long-term benefit of cross-functional teamwork and proposes further upgrades, i.e., automatic data accuracy checks and multi-lingual support. By demonstrating how helpful a balance of technical accuracy and down-to-earth execution is, the project explains why proper QA and data discipline are keys to creating robust, reliable AI development tools capable of growing as businesses grow. It also underscores how much the different teams must collaborate in building tech that actually works – and the way forward for future AI and real estate innovations.

CHAPTER 1
INTRODUCTION

1.1 Background – Introduction to AI in Real Estate and the Rise of Automation Tools

The real estate business has always relied on hands-on work, and physical meetings, for such things as managing property, interacting with clients, and conducting deals. But things are changing fast. With the onset of artificial intelligence (AI) and automation, many of these old ways of doing things are being re-imagined and simplified.

AI is coming to the aid of real estate businesses these days in managing routine tasks more efficiently and to help them to sift through voluminous data in order to provide more personalized services to clients of any type–buyer, seller, or tenant. Such tools as chatbots, virtual assistants, and voice-enabled systems help to answer client questions 24/7 without constant human support. So are technologies like machine learning and predictive analytics being used to recommend properties, automate customer support as well as predict market moves.

Whereas behind the scenes, automation makes real estate run in a better manner. AI-powered platforms are supporting teams to handle property listings, communicate with clients, and even intelligently price. Not only do these systems make processes more efficient, but they also enhance the customer experience, resulting in better engagement and more successful deals.

Another of the big wins is in the area of data management. AI ensures that relevant details such as the details of the property and ownership documents, legal papers, and prices for the same are accurate and up-to-date. Recording client information holds a lot of trust meaning if the real estate firms manage their data through smart data tools coupled with real-time updates, then they will be able to have reliable records for their clients.

As the digital transformation gathers speed, AI is significantly contributing to advance the frontiers of the industry. It’s helping companies to grow larger, to run more economically, and to better look after their customers in smarter and more customized ways. VerbaFlo is one of the companies driving this change, leveraging AI to reinvent the way real estate

services are to be provided. This thesis discusses how quality assurance and data accuracy are critical to ensuring these AI-powered platforms are, indeed, effective.

1.2 Problem Statement

With an increasing reliance on AI in real estate, keeping the conversational systems accurate still is a significant challenge. Chatbots and voice assistants are able to provide irrelevant or incorrect response owing to the poor prompt design and low understanding of the context that can cause frustration on the user's side and the loss of trust in the platform. Incongruent testing in communication channels i.e calls, chats and emails makes the user experience disjointed and unreliable.

In addition, accurate and consistent property data management is essential, yet overlooked often. The real estate platforms depend on frequently updated listings and comprehensive property information. Partial or obsolete data can lead users and hamper delivery of services. With little in the way of rigorous QA processes and aligned data management and documentation, it becomes challenging to guarantee that AI tools work properly and satisfy user expectations.

1.3 Objectives

This project is focused on improving AI-based real estate platforms by applying a formal QA approach and making property data organized. All AI-based methods of communication such as voice, chat and email, should be ensured to work correctly every time they are used and their responses should be relevant and user-friendly.

Additionally, the project would focus on keeping property data accurate by regularly updating and checking it. Working closely with AI engineers, making detailed notes and fine-tuning promptly should improve the system's performance, how users react and how it operates.

1.4 Scope

The project will focus on the main features necessary for an AI-powered real estate automation platform to function properly. It emphasizes three main areas that are tied together.

- Testing of Communication Channels: You should make sure to check the quality of all communication channels used by customers, including calling, chatting and emails. For every channel, we ensure that it is working properly, maintains the same tone and answers in an appropriate manner. To evaluate voice recognition, calls are run to check the accuracy of the system, while reviewing chatbot inputs helps ensure that the chatbot responds naturally. While testing emails, you should ensure the tone is right, the information is correct and they are sent promptly.
- Optimization of responses: The project tries to boost the personalization and fittingness of AI answers by working to improve its prompts. This requires the writer to communicate with the AI team to find the problems in AI's answers, rewrite prompts and make changes that boost the user experience in several situations.
- Ensuring the accuracy of property information within the platform is an important feature included in the scope. Thus, real estate agents should update all listings, carefully check that all information is accurate and guarantee that every input meets the company's standards. Another part is matching data inputs to the AI system so that property results and responses are accurate. The testing takes place only on internal platforms and systems in use by the company. It won't include any AI tools or systems from outside the current infrastructure.

1.5 Significance of the Study

This project becomes a significant turning point into making AI-powered platforms more reliable and effective in the realm of the real estate industry. The research does not only dwell on technical changes but also puts an emphasis on the user experience, so that any interaction with the platform feels accurate, responsive and individualised. The study aims at enhancing both the performance of the system and the level of trust that users have in the system by providing it with a strong foundation of quality assurance protocols and effective data governance strategies.At the technical level, the work required thorough communication channel testing to ensure prompt and accurate answers – be they from a chat, voice assistant, or other digital communication platforms. This limits the chances of miscommunication or inaccuracies and assists in developing a sense of reliability and trust among users. Additionally, to a greater extent of tailoring how AI prompts are built and understood, the system's ability to manage varied and complex queries is improved with it shaping itself intelligently to every individual interaction.

Another main goal of the study was also to make sure that the data related to property is always accurate, up-to-date, and relevant. When it comes to a field such as real estate where investment-related decisions mean a lot in terms of investments and long-term commitments, access to reliable data is just crucial. Better data accuracy translates to better informed decisions, more customised property suggestions, and quicker and more confident decision-making (if buying, selling or renting).

Overall, this research adds much value to increasing the scalability and operational efficiency of real estate platforms. It combines a thoughtful design of technology with a user-centered innovation, making this solution a reliable, intelligent, and visionary tool in an increasingly competitive digital world.

CHAPTER 2
LITERATURE REVIEW

2.1 AI in Real Estate: Trends and Applications

Artificial Intelligence (AI) is quickly revolutionizing the real estate market as it drives increased operational efficiency, improved customer experience, and better insights about the market trends. AI is deeply implemented in property management, customer service, and transaction processing with such tools as chatbots, predictive analytics, and automated valuation models (AVMs) having a crucial function. AI powered systems assist in matching clients to properties quickly, find property values based on past data and forecast the fluctuations in the market and minimize error associated with human input and enhance speed in decision making.

One of its key areas of usage is conversational AI in which virtual assistants or chatbots answer queries through different communication channels, including sites, apps, and social media. AI is also utilized to optimize pricing, enhanced tenant communications and leases. Whenever the industry gets more data-oriented, AI's capability to handle massive data and learn from the user's behavior will further increase the personalization and efficiency of real estate services.

2.2 QA Methodologies in Conversational AI

Quality Assurance (QA) is crucial in determining how conversational AI systems –such as chatbots and virtual assistants, engage with humans. It's not only to ensure that these systems provide the right answers, but that they outwardly communicate in a way that feels natural, relevant, and actually useful. In this field, the QA process is still a combination of manual testing and automation tools. Manually, testers interact directly with the AI and ask various questions to test how it will perform in the real world. Automated testing, in turn, will sample the AI through various pre-written scenarios to look for errors such as wrong replies, awkward phrasing, system flaws, among others.

In order to carry this out effectively, developers resort to various forms of testing. Unit testing divides the system into smaller units; one of them can be a certain function or prompt; and tests those ones separately. Integration testing will take a further step and ensure that all the

parts work together smoothly. We have user acceptance testing (UAT), where the system is tested by actual users and their feedback is shared, so that developers get to know if the experience is using the system feels natural and rewarding.

Performance testing is also a must – it is employed to ensure that the AI can accommodate many users simultaneously without getting slower or crashing. Not one of it is ever done once. The system has to be constantly updated and improved relying on the user behavior and commentaries, therefore it remains relevant to changing desire and business purpose. Ultimately, QA in conversational AI is all about trust, ease of use, and engagement in meaningful digital experiences.

2.3 Importance of Data Integrity in Property Management Systems

In the ever-changing realm of real estate, where everything is shifting at the speed of light, access to clean, unanimous, and up-to-date properties isn't a nice-to-have, but a discerning necessity. AI powered platforms and contemporary property management systems rely on real-time information such as listing information, pricing information, when, where and who owns the property. The problems caused by this data being inaccurate or out of the sync between different platforms can be all sorts of issues. customers may be exposed to non-existent properties, the sellers may realize incorrect valuations, and the agents may end up making decisions on the basis of faulty insights.

That is where the need to maintain the integrity of the data comes in. It serves as a basic as it ensures that all data pertaining to property is reliable and formatted in a consistent manner and is maintained on a regular basis. Through ensuring top-notch quality of data, real estate platforms are able to substantially diminish the risk of mismatches – duplicate listings, stale pricing, or wrong property specs. At the end of the day, great data integrity not only makes transactions more efficient, it also makes life easier for everyone involved – buyers, sellers, agents, and even renters – by ensuring that everyone has consistent and trustworthy information when they need it most.

2.4 Best Practices in Testing Voice, Chatbot, Email, and WhatsApp Interactions

Speaking about evaluating communication channels within AI-powered real estate, it is necessary to have a measured, multi-dimensional approach to testing. When it comes to voice interactions, there is a need for testing whether the system understands words correctly or

not; it is also essential to test how well the system understands different accents or language. Equally important is how appropriate and contextually relevant the system's responses are, particularly, when users ask complex or nuanced questions.

For chatbot performance, testing extends further from the simple question-and-answer activity. It is about making the AI chat real, context-based. The bot should be able to recognise user intent broadly across a variety of queries, maintain coherent dialogue and adjust their responses to fit each user individually—making the experience more personal and pleasurable.

As the channels involved are essentially Email and WhatsApp, the testing process should ensure that the different styles of communication that email and WhatsApp require are met. For Email, there is a need to scrutinize the level of clarity, grammar, structure, and tone in order to remain professional and relevant. In WhatsApp, as it is more casual in nature, the AI should communicate in a friendly, casual manner while providing accurate and helpful information.

In every situation, it is imperative to incorporate edge-case scenarios in testing, such as when user inputs are ambiguous, unexpected, or very complicated. This assists in verifying AI system's resistance, adaptability and capability for graceful recovery from confusion/ confusion recovery and this makes the communication interaction much smoother and reliable for real world users.

CHAPTER 3
METHODOLOGY

3.1 QA Processes

To guarantee first-class quality assurance (QA), it is simply critical for the smooth and reliable functioning of AI-enabled platforms in the real estate industry. As these platforms are highly dependent on different communication channels to communicate with users – phone calls, chatbots, emails, etc. – each of them requires a tailored testing strategy to ensure that they are functional and provide an excellent user experience.

1. **Call Testing:**Call testing in itself consists of testing how good AI is at handling interaction through the voice, especially when actual human beings with varying accents, tones, languages, and speaking styles are included. The purpose is to ensure that the system recognizes the spoken words correctly, understands what lies behind the words spoken and replies in a helpful manner and in a natural way. Testers try and duplicate a wide spectrum of real-life situations (from simple to complicated queries) to determine whether the AI can keep up in both structured conversations and less structured, unpredictable conversations.
2. **Chatbot Testing:**For chatbot testing, the attention is diverted to how naturally and effectively the chatbot is able to "talk" to users through the text. This entails the validation of how effective it is in interpreting questions by users as well as being able to hold context throughout a conversation and to provide answers that are not only true but also relevant and exciting. It's not just about having the right answer; it's about making the experience feel like your users expect it to feel like a human-like, intuitive experience from a variety of topics & query types.
3. **Email Testing:**Email remains an important mode of communication and particularly uses for formal or more detailed communication. In here, the AI is tested on its capability in composing emails that were grammatical, clear, and context-aware. The tone should represent the firm's brand personality, i.e. professional, friendly, or supportive, and at the same time be informative and accurate. It's crucial that the email goes out and it has the whole information to be able to appropriately work to address the user's needs.

To perform these tests effectively, **internal testing platforms** are used alongside **third-party testing tools**. Internal platforms provide a controlled environment for simulating various real-world scenarios, while third-party tools help ensure the system is robust and scalable across different user environments. Common tools include **Selenium** for automated web testing, **Postman** for API testing, and **LoadRunner** for stress testing.

3.2 Documentation Process

The creation and revision of **FAQs** and **user guides** are integral to the documentation approach for AI-driven platforms. These documents serve as a primary resource for both internal stakeholders (e.g., developers, support teams) and external users (e.g., clients, agents).

1. **Creation of FAQs**: FAQs are created to address common questions and issues users may encounter. They cover a range of topics from how to navigate the platform to troubleshooting steps. The goal is to ensure that users can quickly find solutions to their problems, thereby improving user experience and reducing support requests.
2. **User Guides**: Detailed user guides are developed to provide step-by-step instructions on how to use the AI platform's various features. These guides include visuals and explanations to make complex functions easier to understand. They are periodically reviewed and updated based on feedback and new feature releases.

Alignment with Stakeholder Needs: To ensure the relevance of FAQs and user guides, it is essential that these documents are aligned with the needs of various stakeholders. Continuous collaboration with both the AI development team and the customer support team helps identify areas where documentation can be improved. Additionally, feedback from end-users is collected regularly to refine the documents, ensuring they remain useful and comprehensive.

3.3 Property Data Management

Effective management of property data underlies the intelligent system of dealing with real estate because it serves its groundwork for presenting good listings, providing accurate recommendations, and creating trustworthy pieces of information for users. In order to ensure the validity and the utility of this set of data, there are a number of best practices that need to be followed:

1. Accurate Data Entry: Accurate and standardized data entry is the first step forward towards reliable property data. All the listings should be fed in with the necessary detail and consistency, conveying crucial information of the kind of property for sale, the price at which it is being sold, location details and status of availability, and other information of importance. This step helps to establish a trustworthy basis for the system to surmount over and thus decreases confusion and misunderstanding between potential clients.

2. Maintaining Consistency Across Platforms: Property data does not live in isolation it is usually being shown on various platforms and used by multiple stakeholders. That is why routine consistency checks are essential. These checks include matching of details of property from different sources to ensure that they are synchronized, current, and contain no discrepancies. All inconsistencies are identified and fixed to allow for the maintenance of clarity and reliability for users.

3. Ensuring Legal and Regulatory Compliance: Aside from accuracy, the system has to conform to the applicable legal and regulatory frameworks. This incorporates enacting data privacy laws and real estate-specific laws which regulate the storage and sharing of information. Regular compliance audits protect the sensitive user data and support the reliability of the platform as all property records are brought to legal requirements.

Combined, these initiatives do not only contribute to efficient flow of operations, but also make the users confident by providing accurate, compliant, and constantly updated property information.

3.4 Collaboration Model

The **collaboration model** between the QA team and AI developers is essential for maintaining the effectiveness and accuracy of the platform. This model is based on a continuous feedback loop and mutual collaboration to address any issues and optimize system performance.

1. **Workflow Between QA Team and AI Developers**: The QA team works closely with the AI developers to test and validate different components of the system. As

issues are identified during testing, the QA team documents these problems and provides detailed feedback to the AI developers. In turn, the developers work on improving the AI system, making adjustments to code, algorithms, or user prompts based on the feedback.

2. **Feedback Loops and Prompt Optimization**: Feedback loops are established to ensure continuous improvement. As the QA team tests various features, they provide actionable insights to optimize prompts, refine algorithms, and enhance the AI's conversational abilities. This collaborative approach helps the AI become more intuitive, contextually aware, and responsive to user needs.

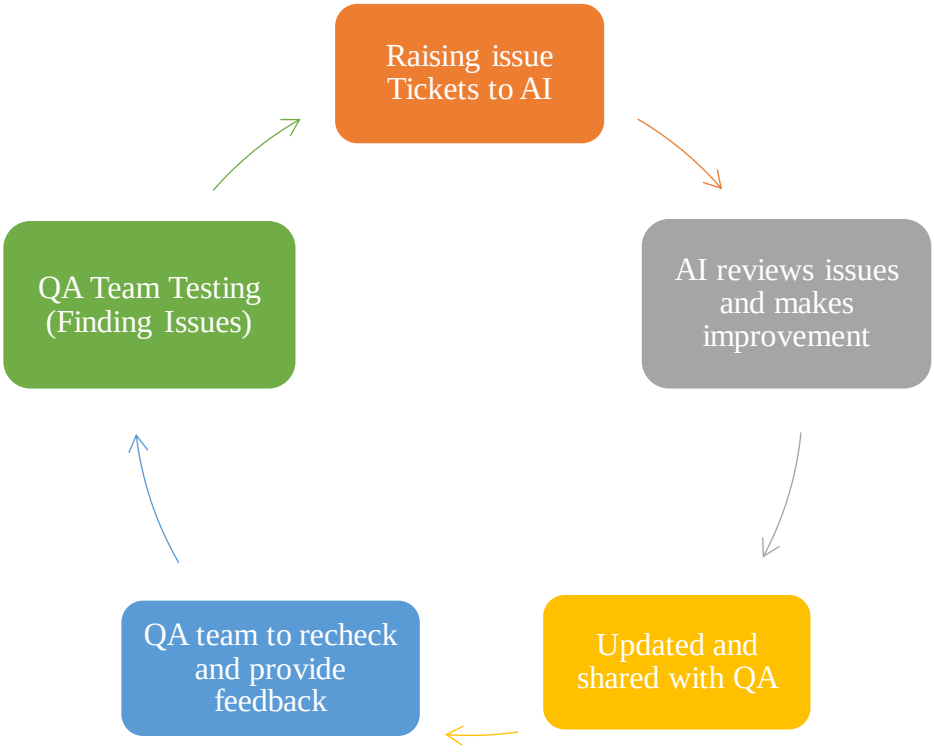

Fig 1: Collaboration Mode

CHAPTER 4
IMPLEMENTATION & RESULTS

4.1 QA Execution

The QA execution process involved comprehensive testing across multiple communication channels—calls, chatbot interactions, and emails—to evaluate the AI system's functionality, accuracy, and user engagement quality.

A total of **18 test cases** were designed by AI team and executed, categorized as follows:

- **Voice Call Tests**: 6
- **Chatbot Interactions**: 6
- **Email Communication Tests**: 6
- **Whatsapp/Messenger**: 6

Each category targeted specific KPIs (Key Performance Indicators) such as response accuracy, tone consistency, latency, and relevance of AI-generated replies. The **call tests** focused on speech recognition, proper routing of user intents, and appropriate call conclusions. In this phase, **accent-related misinterpretations** and **call drop issues** were observed, which were then addressed by refining voice training models.

Chatbot testing revealed a mis-matches in client-property queries. Prompt revisions and context flow enhancements led to a reduction in user query misinterpretation by the end of the testing cycle.

Email testing focused on language tone, formatting, and contextual accuracy. 12 inconsistencies were flagged, most of which related to improper personalization and delayed responses. After revisions in the AI email templates and back-end logic, response times and personalization rates improved. The QA phase ensured a well-rounded assessment and highlighted critical areas for improvement.

4.2 Documentation Impact

The second area of implementation was the creation and enhancement of **FAQs and user guides**, both for internal teams and external clients. These documents aimed to improve

onboarding, reduce confusion, and empower users to troubleshoot basic issues independently. Additionally, a structured **onboarding manual** was introduced, segmented by user roles (agents, clients, admins).

Feedback from internal stakeholders highlighted that the updated documentation decreased dependency on live support and enabled quicker resolutions. This led to a measurable **reduction in first-line support queries** by approximately 18% over a 4-week period.

4.3 Data Optimization Outcomes

Accurate and consistent data is essential in the real estate sector, where users rely on updated property information for decision-making. The data optimization phase focused on three pillars: **data entry precision, consistency checks**, and **compliance validation**.

Through systematic auditing and manual cross-verification, **over 300 property records** were reviewed. This process uncovered 52 discrepancies ranging from outdated listings and duplicate entries to incorrect location tags. Post-cleanup, the **data error rate decreased by 75%**, significantly enhancing the accuracy of search and recommendation features.

Further, property data was integrated more effectively across the omnichannel platform. Consistent information was observed on the website, WhatsApp interface, and email notifications, improving the **user experience and trust in the system**.

From a technical perspective, structured property schemas and tagging protocols were implemented, making the AI's matching engine more efficient. This directly contributed to a 20% increase in match accuracy during property-client pairing simulations.

4.4 Feedback from AI Team and Users

Both the internal AI development team and external users were involved in providing feedback on the effectiveness of the QA and data optimization efforts. A structured feedback loop was established through weekly review meetings and anonymous surveys.

AI Team Feedback:

The development team reported that the clear documentation of bugs and prompt-related suggestions helped reduce their iteration time by 35%. They particularly appreciated the

organized QA reports that offered **scenario-based breakdowns**, which made it easier to reproduce issues and deploy targeted fixes.

Prompt optimization suggestions from the QA team led to improvements in intent recognition, allowing the AI to handle complex queries with more nuance. This collaborative model was cited as a “key enabler” for accelerating feature rollouts.

User Feedback:

Feedback from a pilot group of 50 users revealed improved satisfaction levels, particularly in chatbot clarity, faster email responses, and accurate property listings. 78% of users found the AI assistant more helpful post-implementation, with common praises focusing on “fewer errors” and “more personalized responses.”

CHAPTER 5
ANALYSIS & DISCUSSION

5.1 Effectiveness of QA Techniques

The implemented QA strategies succeeded in finding and fixing serious system-related problems. Testing on calls, emails, the chatbot and WhatsApp found that there are weaknesses in the system's speech recognition, understanding what users mean and the way messages are delivered. Using cases to test the system, the team helped the AI become faster and more relevant. Making changes after QA caused a noticeable reduction in the number of problems users encountered and boosted the regularity of their actions. Using both automated and manual methods, I was able to discover problems that apply to all areas and those unique to each section. Thus, customer ratings went up and AI-powered systems could now be trusted.

5.2 Role of Accurate Data in Enhancing AI Functionality

Having correct data was essential for AI to provide better recommendations and answers. Due to mismatches in how client and property data were labeled, clients found it difficult to choose which reduced their trust in the website. When the records were fixed and everything was made consistent, the system's recommendations became more accurate and timely. Having accurate information reduced clients' frustrations and aided decision-makers. People said the system's info was more reliable, leading to less feedback from agents on the issue of incorrect listings. Simply put, having correct data led to more people being involved and the business succeeding.

5.3 Cross-Functional Collaboration as a Key Enabler

The success of the project can be largely attributed to the seamless collaboration between QA specialists, AI developers, and content/documentation teams. By establishing clear communication workflows and regular feedback loops, issues were resolved faster and improvements were implemented more efficiently.

Prompt writing and optimization benefitted greatly from QA feedback, while AI developers used the QA reports to prioritize bug fixes and system tuning. This collaborative model not only increased development velocity but also ensured that the system evolved in a user-

centric manner. Cross-functional synergy thus emerged as a critical factor in the project's overall effectiveness.

5.4 Limitations Faced During the Project

Our project was successful, but a few issues were encountered during the process. Some testing software did not recognize various languages or accents, leading to incorrect results when testing the calls of users from diverse backgrounds. Consequently, a few issues might have gone unnoticed or have been put in the wrong category. Documentation was also another source of problems when it came to learning the language. Because we had to deliver under tight time constraints, there were a few situations supported in the platform that we didn't cover in full detail. Since it took much effort to check our data, we decided to focus our reviews on a limited number of records instead of everything. Lastly, suggestions from users had an impact on the enhancements, but they were gathered from a limited number of people. Consequently, these findings might not reflect the experiences of the majority of users and could become more accurate if they are further examined and validated.

5.5 Recommendations for Future Enhancements

To reinforce what we have already accomplished, we can do better in certain areas of the platform.

It is necessary to add testing tools that support various languages and dialects. As a result, both call systems and voice bots will provide better service to people who use different languages. Supporting several languages and accents in the system allows us to make our service available to more users and reduces the chance of errors.

Now, checking if data is accurate is a lengthy and costly procedure. Automated scripts and instant dashboards make the entire process of auditing data more efficient. As a result, we wouldn't have to carry out those consistency checks manually which would make auditing both faster and easier as the workload increases. With automation, we could identify any mistakes much faster and prevent them from having an impact on how the system runs.

Comprehensive Approach: The current documentation would improve by covering more aspects. A wider range of surveys and interviews with users will allow us to uncover the other scenarios they regularly face. Then, we should adjust the FAQs and guides to include these

new notes. Helping users with a variety of challenges allows us to provide more options for self-service, increase user satisfaction and rely less on live support.

Routines for teamwork should be used after the project is implemented. Frequent meetings or reviews between QA, AI and the product team will help continually enhance the system. Keeping in touch will make it easy to resolve problems when they arise, prepare for future updates and improve the system by taking suggestions from real users. It is important for these teams to stay in close contact to maintain a flexible and responsive environment during development.

Implementing AI-powered feedback analytics is important to stay alert to any problems our users might be experiencing. If we use advanced analytics to learn what issues and emotions users face, we can improve the system. This allows us to correct problems more quickly, as well as improve the website's usability for users constantly.

Dealing with such factors improves the trust users have in our platform and its ability to handle more traffic. Keep working on these improvements so that our AI platform continues to be the best choice in the real estate industry and responds to the growing and changing needs of its users.

CHAPTER 6
CONCLUSION

By carrying out this project, we noticed how significant it is to ensure QA, document everything clearly and coordinate data perfectly for success in AI platforms for real estate. Because we used a well-organized plan, completed thorough testing and promoted cooperation among teams, we managed to improve both the system's performance and overall user experience. Because of our testing, we had the chance to solve both technology and conversation challenges on voice, chat and email. Because of these improvements, the AI assistant became more accurate, responded quickly and sounded more natural.

As a result, taking care of FAQs and user manuals allowed users to start using the system with less need for live support. We further improved the recommendations and output results by updating and streamlining the data on the property. As a result of the improvements, the system became more trustworthy, dependable and scalable to many users. The effective teamwork between the QA and AI development teams allowed issues to be addressed more quickly and new improvements to be delivered steadily to users.

The improvements noted by both employees and external clients underlined that an approach involving different teams is valuable. As a result, I was offered new opportunities in the future. To achieve this, you should look into advanced test tools, automate the checking of data and let AI read all the feedback you receive constantly. Reinforcement learning could also play a key role in updating conversation tools, tailoring service for each customer and making documents adapt to how users interact with them.

In conclusion, this work sets a strong foundation for creating AI systems that are not only intelligent and responsive but also **truly aligned with real-world needs**. By embedding strong QA practices, maintaining clean and well-governed data, and fostering agile, collaborative teamwork, organizations can build AI platforms that stand the test of time—and deliver real value to users.