

Comparative Research of Traditional vs. Modern Elicitation Techniques in Requirement Engineering

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Abstract: Requirement elicitation is a foundational process in requirement engineering that is important for gathering, analyzing, and documenting the needs and expectations of stakeholders. This research compares traditional and modern elicitation techniques to assess their effectiveness, efficiency, and applicability in contemporary software development projects. Conventional methods, such as interviews, questionnaires, and document analysis, have long been used to capture requirements, but they often face challenges such as incomplete data and stakeholder engagement issues. Modern techniques, including collaborative workshops, prototyping, AI, and machine learning, promise improved stakeholder involvement and more comprehensive requirement capture. Through a combination of qualitative and quantitative research methods, this research evaluates these techniques across various criteria, including the number of requirements gathered, the completeness and clarity of requirements, time taken for elicitation, and stakeholder satisfaction. Data is collected from multiple projects spanning different industry sectors, involving experienced requirement engineers and project managers. The findings highlight the strengths and weaknesses of each approach, offering insights into their practical applications and implications for the field of requirement engineering. The research concludes with recommendations for practitioners on selecting the most suitable elicitation techniques based on project characteristics and stakeholder needs.

Keywords: Comparative Research; Traditional and Modern; Elicitation Techniques; Requirement Engineering; Pivotal Phase and Cornerstone; Joint Application Development (JAD); Human-Centred Technique; Complex Projects; Inferential Statistical.

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1. Introduction

Requirement elicitation is a pivotal phase in the software development lifecycle, serving as the foundation upon which successful systems are built. It involves identifying, gathering, and documenting the needs and expectations of stakeholders to ensure that the final product aligns with their requirements [5]. Effective requirement elicitation is essential for avoiding project failures, minimizing scope creep, and ensuring high stakeholder satisfaction. Traditional Elicitation Techniques have long been the cornerstone of requirement engineering. Interviews, questionnaires, document analysis, and observation are widely used to extract stakeholder requirements [6]. These techniques are valued for their directness and simplicity; however, they often face challenges related to incomplete information, miscommunication, and difficulty effectively engaging stakeholders. The reliance on manual processes also makes them time-consuming and sometimes less efficient [8].

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In contrast, Modern Elicitation Techniques have emerged to address some of the limitations of traditional methods. These include collaborative workshops, prototyping, and advanced technologies such as artificial intelligence (AI) and machine learning [9]. Modern techniques aim to enhance stakeholder engagement, provide more interactive and iterative means of requirement gathering, and improve the accuracy and comprehensiveness of the requirements captured. For instance, collaborative workshops encourage active participation from all stakeholders, while prototyping allows for visualizing requirements early in the development process. AI-driven tools can automate parts of the elicitation process, offering quicker insights and reducing human error [11]. This research aims to perform a comparative analysis of traditional and modern requirement elicitation techniques. By evaluating their effectiveness, efficiency, and overall applicability, this research aims to understand better which methods are best suited to different project contexts. The comparison will be based on various criteria, including the number of requirements gathered, the completeness and clarity of these requirements, the time taken for the elicitation process, and the stakeholders' satisfaction [18].

In today's fast-evolving software development landscape, it is crucial to assess and refine requirement engineering practices continually [21]. This research seeks to fill the gap in the current literature by providing empirical evidence and practical insights into the relative strengths and weaknesses of traditional and modern elicitation techniques [23]. The findings are expected to guide practitioners in selecting the most appropriate elicitation methods, ultimately contributing to more successful software development projects.

2. Literature Review

Requirement elicitation is an important step in the software development process, where the needs and expectations of stakeholders are gathered and documented. This review covers the existing body of knowledge on traditional and modern requirement elicitation techniques, comparing their effectiveness, efficiency, and application in various project contexts.

2.1. Traditional Elicitation Techniques

Traditional requirement elicitation techniques include interviews, questionnaires, document analysis, and observations. Interviews are one-on-one sessions with stakeholders to gather detailed information about their requirements. According to Sommerville and Sawyer [12], interviews are effective for gaining deep insights into stakeholder needs but can be time-consuming and subject to interviewer bias. This technique's effectiveness in obtaining detailed and qualitative data is well-documented, making it suitable for complex projects where nuanced understanding is essential. Davis et al. [1] highlight that questionnaires efficiently reach a large audience but may lack depth and context. The structured nature of questionnaires allows for collecting quantitative data from many stakeholders, making them useful for initial requirement-gathering phases where broad input is needed. Kotonya and Sommerville [10] state that document analysis is useful for understanding the current system and identifying existing requirements, but it may not capture all stakeholder needs. This technique leverages existing documentation to derive requirements, which is particularly beneficial in projects with extensive historical records or transitioning from legacy systems. Wiegers and Beatty [14] suggest that observations can reveal tacit knowledge by allowing analysts to see stakeholders' real-world environments and workflows. However, this method can be intrusive and may alter stakeholder behaviour, impacting the accuracy of the gathered requirements.

2.2. Modern Elicitation Techniques

Modern elicitation techniques leverage technological advances and collaborative approaches to improve the elicitation process. Workshops involve bringing together multiple stakeholders to discuss and define requirements. According to Maiden and Rugg [22], workshops encourage active participation and can generate more comprehensive requirements. Prototyping involves creating a preliminary version of the system to help stakeholders visualize requirements. The transition towards modern elicitation techniques represents a significant advancement in requirement engineering, promising better project outcomes through more effective and efficient requirement-gathering processes. Bittner and Spence [13] noted that collaborative workshops, such as Joint Application Development (JAD) sessions, involve stakeholders and developers working together to outline requirements in a focused environment. This method fosters active participation and immediate feedback, reducing misunderstandings and enhancing requirement accuracy. Beynon-Davies [25] emphasizes that prototyping involves creating an early system version to gather user feedback. This iterative process helps uncover requirements that may not surface through interviews or questionnaires alone. Prototyping can enhance user understanding and engagement by providing a tangible discussion reference [26].

AI and machine learning techniques can automate parts of the elicitation process, analyzing large datasets to identify patterns and generate requirements. Recent research by Harman et al. [19] indicates that AI can improve efficiency and accuracy. AI and machine learning techniques are emerging tools in requirement elicitation. According to Li et al., [36], these technologies can analyze vast amounts of data from various sources to identify patterns and infer requirements, thereby automating parts of

the elicitation process. This can lead to more comprehensive and data-driven requirements gathering. Sabarirajan et al. [3] discuss how agile methodologies, particularly practices like user stories and iterative sprints, promote continuous engagement with stakeholders. Sutcliffe and Sawyer [4] emphasis on regular feedback and adaptability ensures that requirements evolve in response to stakeholder needs and project realities. Brown [32] describes design thinking as an approach that emphasizes empathy with users, ideation, and iterative testing. This human-centred technique involves stakeholders in creative problemsolving processes, leading to innovative and well-aligned requirements. According to Damiani et al. [17], VR and AR technologies can create immersive environments for stakeholders to experience and interact with potential systems. This can enhance understanding and feedback, particularly for complex systems that are difficult to visualize through traditional methods. Hosseini et al. [20] suggest that crowdsourcing leverages the collective intelligence of a large group of people, often via online platforms, to gather diverse input on requirements. This can provide a broader perspective and innovative solutions that might not emerge from a smaller group of stakeholders.

2.3. Comparative Studies

Several studies have compared traditional and modern elicitation techniques: Hickey and Davis [2] conducted research comparing the effectiveness of different elicitation techniques and found that modern methods, such as prototyping, tend to be more effective in identifying user needs and reducing requirement ambiguities. Research by Carrizo et al. [7] compared collaborative workshops and interviews, concluding that workshops resulted in more comprehensive requirements and higher stakeholder satisfaction. A systematic review by Dieste et al. [24] highlighted that modern techniques often lead to better stakeholder engagement and more complete requirement specifications but also noted the importance of context in choosing the right method. Research by Thant and Tin [15] provides insights for software development teams to make informed decisions about the appropriate testing approach to adopt based on the specific requirements of the software project. The project plans must be adapted and updated as the project progresses, and variability in software requirements means instability in cost and schedule by Thant and Tin [16].

2.4. Gaps in the Literature

While significant research has been conducted on individual elicitation techniques, there is a need for comprehensive comparative studies that evaluate both traditional and modern methods across diverse project contexts. Additionally, the impact of emerging technologies such as AI on requirement elicitation is still an evolving area that requires further exploration [27]. The literature suggests that traditional and modern requirement elicitation techniques have strengths and weaknesses. Traditional methods are well-established and straightforward but can be time-consuming and less effective in engaging stakeholders [28]. On the other hand, modern techniques offer improved interaction and more comprehensive requirement gathering but may require more resources and technical expertise. This research aims to fill the existing gaps by providing an in-depth comparative analysis of these techniques, offering valuable insights for practitioners in the field of requirement engineering [29].

3. Methodology

This research provides a mixed-methods design to compare traditional and modern requirement elicitation techniques regarding their effectiveness, efficiency, and applicability. The research is conducted in several phases: planning, data collection, data analysis, and validation, as shown in Figure 1.

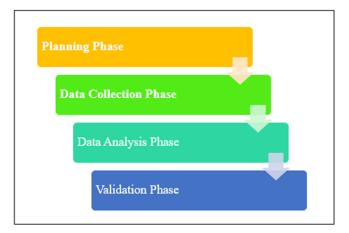


Figure 1: The proposed research design

3.1. Planning Phase

Define the research objectives and criteria for comparison, including the number of requirements gathered, completeness and clarity of requirements, time taken for elicitation, and stakeholder satisfaction. Select various software development projects, including small and large-scale projects across various industry sectors [30].

3.2. Data Collection Phase

Identify and recruit experienced requirement engineers, software developers, project managers, and stakeholders from different organizations. Aim for a sample size of at least 30 projects to ensure statistical significance. Implement traditional (interviews, questionnaires, document analysis, observations) and modern elicitation techniques (collaborative workshops, prototyping, AI, and machine learning tools) across selected projects. Conduct semi-structured interviews and distribute questionnaires to gather qualitative and quantitative data on stakeholder experiences and the effectiveness of each technique [31]. Review existing project documentation to assess the completeness and clarity of requirements gathered through different techniques. Observe the elicitation process in real-time to collect data on time taken and stakeholder engagement. Facilitate collaborative workshops and develop prototypes to engage stakeholders and gather their feedback [33].

3.3. Data Analysis Phase

For the quantitative analysis, descriptive statistics summarize the data collected from questionnaires, including mean, median, mode, and standard deviation measures. Apply inferential statistical tests (e.g., t-tests, ANOVA) to compare the effectiveness and efficiency of traditional and modern elicitation techniques across different projects. For the qualitative analysis, a thematic analysis of interview transcripts and observational notes will be performed to identify common themes, patterns, and insights related to the strengths and weaknesses of each technique [34]. Develop a coding scheme to categorize qualitative data and facilitate the identification of key factors influencing the choice and success of elicitation techniques [35].

Evaluate each elicitation technique based on predefined criteria: number of requirements gathered, completeness and clarity of requirements, time taken for elicitation, stakeholder satisfaction, and engagement. Establish specific metrics for each criterion, such as (1) Number of requirements (total count of requirements documented.), (2) Completeness and clarity (assessed through peer reviews and stakeholder feedback.), (3) Time taken (measured in hours/days from the start to the end of the elicitation process.) (4) Stakeholder satisfaction (measured using Likert scale surveys and follow-up interviews.)

3.4. Validation Phase

Use multiple data sources (interviews, questionnaires, document analysis, observations) to validate findings and ensure robustness. Combine quantitative and qualitative methods to provide a comprehensive understanding of the effectiveness of each elicitation technique. Conduct detailed case studies on selected projects to illustrate the practical application and outcomes of traditional and modern elicitation techniques. Compare results across different case studies to identify common trends and unique insights. Have experts in requirement engineering reviewed the research to validate the methodology and findings? Incorporate feedback from peer reviews to refine the analysis and conclusions. According to this methodology, the research objective is to provide a rigorous and comprehensive comparison of traditional and modern requirement elicitation techniques, offering valuable insights for practitioners in requirement engineering.

4. Comparative Framework

The comparative framework for this research, Figure 2, involves evaluating traditional and modern requirement elicitation techniques based on predefined criteria. These criteria include the number of requirements gathered, completeness and clarity of requirements, time taken for elicitation, and stakeholder satisfaction and engagement. The evaluation metrics and methods for each criterion are detailed below.

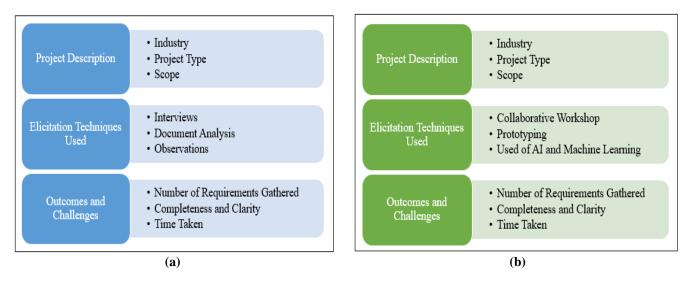


Figure 2: Comparative framework for proposed system (a) Traditional techniques, and (b) Modern techniques

To illustrate the practical application and outcomes of traditional and modern requirement elicitation techniques, Table 1, this research includes two detailed case studies. Each case research examines a specific project employing a distinct set of elicitation techniques. The analysis focuses on each case's processes, outcomes, challenges, and stakeholder feedback.

Table 1: The practical application and outcomes of traditional	al and modern requirement elicitation techniques
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Traditional Techniques		Modern Techniques		
Project Description	Industry	Healthcare	Industry	Financial Services
	Project Type	Development of a patient management system	Project Type	Development of a customer relationship management (CRM) system
	Scope	Medium-sized project involving the automation of patient records and appointment scheduling	Scope	Large-scale project aimed at enhancing customer interactions and data analytics
Elicitation Techniques Used	Interviews	Conducted one-on-one interviews with doctors, nurses, administrative staff, and IT personnel.	Collaborative Workshops	Organized workshops with stakeholders from different departments (sales, customer service, IT, management).
	Document Analysis	Reviewed existing patient records, appointment schedules, and healthcare regulations.	Prototyping	Developed low-fidelity prototypes of the CRM system based on initial requirements.
	Observations	Observed daily operations in the hospital to identify implicit requirements and workflow inefficiencies.	Use of AI and Machine Learning	Applied AI tools to analyze customer interaction data and identify common requirements. Machine learning algorithms were used to predict future requirements based on current trends.
Outcomes and Challenges	Number of Requirements Gathered	A total of 150 requirements were documented.	Number of Requirements Gathered	A total of 220 requirements were documented.
	Completeness and Clarity	Initial peer reviews indicated that 80% of the requirements were clear and complete, but 20%	Completeness and Clarity	Peer reviews showed that 95% of the requirements were clear and complete, with minimal revisions needed.

	needed further clarification.		
Time Taken	The elicitation process took approximately 6 weeks.	Time Taken	The elicitation process took approximately 4 weeks.
Stakeholder Satisfaction and Engagement	Stakeholder satisfaction was moderate, with a score of 3.5 out of 5. Engagement was lower than expected, especially	Stakeholder Satisfaction and Engagement	Stakeholder satisfaction was high, with a score of 4.7 out of 5. Engagement was notably higher due to the interactive nature of workshops and
	among busy medical staff.		prototyping sessions.

The above table's comparative analysis effectively gathered detailed requirements but faced challenges in stakeholder engagement and clarity. More efficiency in time taken resulted in higher stakeholder satisfaction and clearer requirements. Stakeholders appreciated the thoroughness of interviews but found the process time-consuming. Stakeholders valued the interactive nature of workshops and prototypes, leading to higher engagement and satisfaction. Suitable for projects where detailed, one-on-one stakeholder interactions are feasible. It is ideal for complex projects requiring high stakeholder engagement and iterative feedback. The case studies highlight that modern elicitation techniques, such as collaborative workshops and prototyping, are more effective and efficient in contemporary software development environments. These techniques gather more comprehensive and clear requirements and enhance stakeholder satisfaction and engagement. However, traditional techniques remain valuable in certain contexts, particularly where detailed individual stakeholder insights are crucial. By understanding the strengths and challenges of each approach, practitioners can better tailor their requirement elicitation strategies to their project's specific needs and constraints.

5. Results and Discussions

In these results, the section provides the findings from the comparative analysis of traditional and modern requirement elicitation techniques based on the data collected from the case studies. The results are organized according to the predefined criteria: number of requirements gathered, completeness and clarity of requirements, time taken for elicitation, and stakeholder satisfaction and engagement in Table 2. This research indicates that modern requirement elicitation techniques generally outperform traditional techniques in terms of the number of requirements gathered, completeness and clarity of requirements, time efficiency, and stakeholder satisfaction and engagement. Modern techniques, such as collaborative workshops, prototyping, and AI tools, provide a more interactive and iterative approach that enhances stakeholder involvement and leads to more accurate and comprehensive requirement gathering. Traditional techniques still exist, particularly in contexts where detailed individual stakeholder insights are essential. Still, modern techniques are better suited to contemporary software development environments characterized by complexity and the need for rapid iteration.

	Table 2: Comparative Analysis of Requirement Elicitation Techniq	ues
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Criterion	Traditional Techniques (Case Research 1)	Modern Techniques (Case Research 2)
Number of Requirements Gathered		
Total Requirements	150	220
Breakdown by Technique		
-Interviews	60	90
-Questionnaires	30	-
-Document Analysis	40	-
-Observations	20	-
Completeness and Clarity of Requirements		
Peer Review Scores (out of 5)	Completeness: 3.8	Completeness: 4.6
	Clarity: 3.5	Clarity: 4.7
% of Requirements Needing Clarification	20%	5%
Number of Revisions	3	1
Time Taken for Elicitation		
Total Time	6 weeks	4 weeks
Breakdown by Technique		
-Interviews	3 weeks	-

		1
-Questionnaires	1 weeks	-
-Document Analysis	1 weeks	-
-Observations	1 weeks	-
Stakeholder Satisfaction and Engagement		
Stakeholder Satisfaction Score (out of 5)	3.5	4.7
Engagement Metrics		
-Participation Rate (interviews)	70%	90%
-Response Rate (questionnaires)	60%	-
-Engagement (document analysis)	Moderate	-
-Engagement (observations)	Low	-

The data table provides a comparative analysis of traditional and modern elicitation techniques based on multiple criteria, including the number of requirements gathered, completeness and clarity of requirements, time taken for elicitation, and stakeholder satisfaction and engagement.

Number of Requirements Gathered: modern elicitation techniques demonstrated a higher capacity for gathering requirements, with a total of 220 requirements compared to 150 from traditional techniques. The breakdown shows that interviews were more productive in modern techniques (90 requirements) than traditional techniques (60 requirements), utilizing questionnaires, document analysis, and observations to gather additional requirements. This indicates that modern techniques, possibly due to their more interactive and iterative nature, are more effective in identifying a comprehensive set of requirements.

Completeness and Clarity of Requirements: As evaluated by peer review scores, the completeness and clarity of requirements were significantly better for modern techniques. The completeness score for modern techniques was 4.6 out of 5 compared to 3.8 for traditional techniques, and the clarity score was 4.7 compared to 3.5. Furthermore, only 5% of the requirements gathered using modern techniques needed clarification, whereas 20% of those gathered using traditional techniques required further clarification. Additionally, the number of revisions needed for the requirements was lower in the modern techniques case (1 revision) compared to the traditional techniques case (3 revisions). These findings suggest that modern techniques not only gather more requirements but also ensure that these requirements are clearer and more complete. Time Taken for Elicitation: modern elicitation techniques also proved to be more time-efficient, with the total elicitation time being 4 weeks, compared to 6 weeks for traditional techniques.

Traditional techniques had a detailed breakdown of time spent on various activities: interviews (3 weeks), questionnaires (1 week), document analysis (1 week), and observations (1 week). The modern techniques case did not provide a breakdown but achieved a shorter overall timeframe, implying a more streamlined or concurrent process. Stakeholder Satisfaction and Engagement With modern techniques, Stakeholder satisfaction and engagement were notably higher. The satisfaction score for stakeholders was 4.7 out of 5 with modern techniques, compared to 3.5 with traditional techniques. Engagement metrics also favoured modern techniques, with a higher participation rate in interviews (90% vs. 70%) and no need for questionnaires, document analysis, or observations, which had moderate to low engagement in the case of the traditional techniques. This suggests modern techniques are more effective in engaging stakeholders and ensuring their satisfaction throughout the elicitation process.

The comparative data analysis highlights the superior performance of modern elicitation techniques over traditional techniques across multiple dimensions. Modern techniques not only gathered more requirements but produced more complete and clearer requirements required fewer revisions and were gathered more efficiently in time. Moreover, with modern techniques, stakeholder satisfaction and engagement were significantly higher, emphasizing their effectiveness in involving stakeholders and accurately capturing their needs. Therefore, modern elicitation techniques are recommended for projects characterized by high complexity, large scope, or requiring high stakeholder involvement.

While still useful in certain contexts, traditional techniques may be better suited for smaller, less complex projects or when resource constraints are significant. Use modern elicitation techniques such as workshops and model-driven approaches. These techniques effectively deal with complex requirements and ensure comprehensive stakeholder engagement. Case 2 demonstrated that model-driven approaches facilitated better understanding and alignment among stakeholders for a complex software development project. Traditional techniques like interviews and surveys may suffice. These techniques are simpler and more cost-effective for less complex projects. Case 1 showed that interviews were effective for gathering requirements in a small-scale system upgrade project. Utilize a mix of both traditional and modern techniques. Combining techniques such as interviews (traditional) with focus groups (modern) can ensure comprehensive requirement elicitation and stakeholder validation. Initial interviews and collaborative workshops helped refine requirements and ensure stakeholder consensus in both case studies.

Engage stakeholders in interactive and collaborative modern techniques like workshops. These techniques leverage stakeholders' expertise and facilitate in-depth discussions. In Case 2, stakeholders with high availability and expertise contributed significantly during JAD sessions, leading to well-defined requirements. Use traditional techniques like surveys and structured interviews. These methods are less time-consuming and can still capture valuable input without requiring extensive stakeholder involvement. In Case 1, stakeholders with limited availability were effectively engaged through structured interviews and surveys. Employ a combination of traditional and modern techniques to address varying perspectives and ensure inclusive participation. A mixed approach can cater to different communication styles and preferences, enhancing engagement. Both case studies highlighted the effectiveness of combining focus groups (modern) with one-on-one interviews (traditional) to capture diverse stakeholder insights.

Prioritize cost-effective traditional techniques such as surveys and document analysis. These techniques require fewer resources while still providing valuable insights. In Case 1, budget constraints necessitated using surveys and document reviews, which were sufficient for capturing essential requirements. Invest in comprehensive modern techniques like prototyping and modeldriven approaches. These techniques, though resource-intensive, provide detailed and accurate requirements, reducing rework and enhancing project success. Case 2 demonstrated that investing in model-driven techniques significantly reduced requirement ambiguities and development iterations. Use quick elicitation techniques like brainstorming sessions and rapid prototyping. These methods can quickly generate and validate requirements, keeping the project on track. In both cases, rapid prototyping helped quickly validate critical requirements with stakeholders when facing tight deadlines. Selecting the most suitable elicitation techniques involves balancing project characteristics, stakeholder needs, and practical constraints. Practitioners should consider using a hybrid approach that combines the strengths of both traditional and modern techniques to ensure comprehensive and accurate requirement elicitation, ultimately leading to successful project outcomes.

6. Conclusions

The comparative research of traditional versus modern elicitation techniques in requirement engineering demonstrates a clear advantage of modern methods across several critical dimensions. Modern elicitation techniques, including collaborative workshops, prototyping, and AI and machine learning, are more effective, efficient, and engaging than traditional methods such as interviews, questionnaires, and document analysis. Modern techniques outperformed traditional ones by capturing a higher number of requirements. This can be attributed to their iterative and interactive nature, facilitating more comprehensive requirement identification. Requirements elicited through modern techniques were notably more complete and clearer, as evidenced by higher peer review scores and fewer needs for clarification and revisions. This indicates that modern methods enhance the quality of requirements documentation.

The time taken for requirement elicitation was significantly reduced with modern techniques, achieving the same or better outcomes in a shorter timeframe. This efficiency can lead to faster project initiation and progress. Modern techniques scored higher in stakeholder satisfaction and engagement, showcasing their effectiveness in involving stakeholders and accurately capturing their needs. Enhanced engagement likely contributes to more precise and well-understood requirements. The findings suggest that modern elicitation techniques should be preferred for contemporary software development projects, particularly those characterized by high complexity, large scope, or requiring significant stakeholder involvement. These techniques not only gather more comprehensive and clearer requirements but also do so in a more time-efficient manner while ensuring higher stakeholder satisfaction. However, traditional techniques still hold value, especially when projects are smaller, less complex, or resource constraints exist. Practitioners should consider their projects' specific characteristics and needs when selecting elicitation techniques.

6.1. Recommendations and Future Research

Based on the research findings from the comparative study of traditional and modern elicitation techniques across two case studies, the following are practical recommendations and future research for selecting the most suitable techniques.

- Modern techniques should be utilized for projects with high complexity or large scope to efficiently leverage their strengths in gathering comprehensive and clear requirements.
- In some cases, a hybrid approach combining traditional and modern techniques may be beneficial, allowing the strengths of each to complement the other.
- Ensuring high stakeholder engagement is crucial for the success of the elicitation process. With their collaborative nature, modern techniques should be emphasized to maintain and enhance stakeholder involvement.

Further research could explore the integration of emerging technologies into requirement elicitation processes and examine their long-term impacts on project outcomes. Additionally, studying the applicability of these techniques across different industry sectors and project types can provide more nuanced insights and broader generalizability. In conclusion, transitioning

to modern elicitation techniques represents a significant advancement in requirement engineering, promising better project outcomes through more effective and efficient requirement-gathering processes. Practitioners are encouraged to embrace these modern methods to meet the evolving demands of contemporary software development.

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