# INDUSTRY TOUR VISIT REPORT

## Integrated Land and Real Estate Digitalization and Fraud Prevention System

## GROUP 6


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## 1. Introduction

This report reflects our industrial tour to a software company (VIVASOFT LIMITED) where we interacted with the business analyst team. The purpose of the visit was to gain hands-on experience on how analysts work in real-life projects and how they manage requirements gathering, analysis, and documentation processes. This report outlines our learnings from the tour and summarizes the insights provided by the analyst team through a structured interview session.

## 2. Purpose

On 19th September, we visited VIVASOFT LIMITED, a software-based company that offers solutions across various sectors, including finance, healthcare, and technology. The visit aimed to provide us with insights into the real-world dynamics of a software company, with a particular focus on the critical role Business Analysts (BAs) play in project delivery. The main objective was to understand how a BA coordinates between different stakeholders and navigates the complexities of modern software projects. Overall, this visit offered an insightful perspective into the role of a Business Analyst in a modern software development environment.

## 3. Methodology

To gain a comprehensive understanding of the Business Analyst's (BA) role and work processes at VIVASOFT LIMITED, we conducted a structured survey during our visit. This involved asking the BA a series of targeted questions, designed to explore various aspects of his professional experience and workflow. We began by inquiring about his career path and the day-to-day challenges he faces, prompting him to share detailed accounts of his work in real-world projects. Our questions also focused on his methods for handling project requirements, how he navigates the coordination between stakeholders, and the tools and methodologies he relies on. Additionally, we explored his approach to managing client expectations, dealing with scope creep, and maintaining team dynamics. Each question aimed to provide insight into the BA's decision-making processes and his strategies for resolving conflicts. His responses, articulated through both practical examples and personal experiences, helped us gain valuable insights into the complexities of business analysis in a modern software company.

## 4. Question and Answer Session

**1. How to become a business analyst?**

**Answer:** A business analyst can come from both technical and non-technical backgrounds. A non-technical person needs to understand the business domain and gain some technical knowledge, while a technical person can transition into the role after gaining experience in development or related work. With the right skills and experience, either background can lead to becoming an analyst.

**2. How do analysts handle incomplete or incompetent requirements from stakeholders?**

**Answer:** After listening to the client's requirements, the analyst identifies gaps or missing details. They then ask additional questions to clarify those gaps and ensure that the requirements are fully understood before moving forward.

**3. What if the analyst and the stakeholders don't agree on a requirement?**

**Answer:** In such cases, the analyst must convince the stakeholders by explaining why a particular requirement is not ideal or suggesting better solutions. The goal is to align the client's expectations with the best possible approach for the project.

**4. How do analysts handle requirements they are unfamiliar with?**

**Answer:** When analysts encounter a business domain, they are unfamiliar with, they ask relevant questions to understand the requirements thoroughly. If they still need more information, they conduct further research or study to ensure they fully comprehend the subject.

**5. How do analysts manage multiple stakeholders with differing visions or requirements?**

**Answer:** When multiple stakeholders present conflicting requirements, the analyst facilitates a meeting with all parties involved to clarify the differences and reach a consensus.

**6. How many meetings are usually required to understand and document all requirements?**

**Answer:** The number of meetings can vary, but typically, it takes around 2-3 meetings to gather all the necessary information. Afterward, prototypes or wireframes are created to confirm the understanding before moving forward.

**7. Which project methodology do you use, and is it the same for all projects?**

**Answer:** The methodology depends on the project, but most projects in the company are managed using Agile methodologies. Agile provides flexibility and continuous feedback loops.

**8. Who else participates in client meetings besides the analyst?**

**Answer:** In addition to the business analyst, meetings often include a system architect or staff engineer to handle technical questions or provide input on the system's technical aspects.

**9. How do you distinguish between system, functional, and non-functional requirements?**

**Answer:** After collecting all the requirements from the client, the analyst translates business terms into technical terms and then categorizes the requirements into functional (what the system will do) and non-functional (quality attributes like performance or security).

**10. Is there a chance that the client will be unhappy with the final product?**

**Answer:** This rarely happens because the company uses an iterative Agile process. Clients are regularly shown progress, and changes are made according to their feedback, ensuring that the final product matches their expectations.

**11. How do you handle a large project that must be delivered in a shorter timeline?**

**Answer:** In such cases, the analyst prioritizes core features using the MVP (Minimum Viable Product) approach. The first iteration delivers the most important features, and subsequent updates include additional features.

**12. Is the SRS the final document, or are there other documents before development?**

**Answer:** In most cases, the SRS (Software Requirements Specification) is detailed enough to be used for development, thus saving time on creating additional documents. However, this depends on the project complexity.

**13. Do clients ever specify the method, model, or technology to use?**

**Answer:** For new projects, the analyst may suggest the most effective method or technology. However, for existing products, the team typically follows the methods and technologies already in use.

**14. What happens if a new stakeholder with different requirements replaces the original stakeholder?**

**Answer:** If the new requirements are manageable, the analyst adjusts the project. However, if the changes are extensive and a new product would be more cost-effective, the analyst may propose building a fresh system.

**15. Do analysts suggest similar features from other projects to save time and cost?**

**Answer:** Yes, if similar features have been developed in other projects, the analyst suggests reusing them to save time and reduce costs.

**16. What is the career progression for a business analyst?**

**Answer:** A business analyst can advance to a lead business analyst position and eventually move into supervisory or management roles, overseeing larger projects and teams.

**17. How do you differentiate user requirements from functional requirements?**

**Answer:** User requirements focus on features directly related to the user's interaction with the system, while functional requirements specify the system’s behavior and capabilities that support those user interactions.

**18. What tools do you use for wireframing in your projects?**

**Answer:** They typically use Figma and Balsamiq for wireframing. But for efficiency they use Figma rather than Balsamiq because it saves time and provides some extra features.

## 5. Overall Summary of Learnings

### *A. Role and Pathway to Becoming a Business Analyst*

One of the key takeaways from the interview was the varied paths one can take to become a business analyst (BA). Analysts can come from both technical and non-technical backgrounds. A non-technical person can move into the role by acquiring business knowledge and gaining a basic understanding of technology. On the other hand, those with a technical background often transition into the role after gaining experience in development, testing, or other related fields. The BA role demands skills in both business understanding and technical knowledge, emphasizing that anyone with the right skill set can pursue this career.

This flexibility in background shows that the role of an analyst is multifaceted. The emphasis is on understanding the business objectives and communicating effectively with both technical and non-technical stakeholders to bridge gaps in knowledge. Analysts need to continuously upskill to adapt to the changing landscape of technology and business needs.

### *B. Requirement Gathering and Managing Stakeholder Expectations*

A core responsibility of an analyst is to gather requirements from clients and stakeholders. During the interview, the analysts explained that the initial phase involves identifying gaps in the information provided by stakeholders. Through questioning and analysis, the BA ensures that the requirements are complete and feasible for the development team to work on. A significant part of this process involves handling incomplete or unclear requirements by clarifying them through discussions and meetings.

When stakeholders and analysts do not agree on specific requirements, it is the BA's job to explain and convince the stakeholders of better or more feasible solutions. This is especially important when the requested features might cause conflicts or when a more efficient approach exists. The analyst's role here is to mediate and ensure the project moves forward with the best possible outcomes for all parties involved.

### *C. Handling Multiple Stakeholders and Conflicting Visions*

The analysts shared their experience in dealing with multiple stakeholders, especially when they have differing visions or requirements. In such cases, a collaborative meeting is arranged where all parties can discuss their requirements openly. The BA acts as a facilitator to ensure that conflicting requirements are addressed and resolved. This method allows for greater transparency and alignment between different stakeholders, leading to a more cohesive and unified set of requirements.

This section also highlights the interpersonal skills required to manage different personalities and opinions, ensuring that the project doesn't derail due to conflicting visions. Analysts must be able to handle these conflicts diplomatically while keeping the project goals in focus.

### *D. Documentation and Requirement Categorization*

One of the essential aspects of the BA's job is documenting the requirements in a structured manner. After gathering the verbal requirements from stakeholders, analysts convert business needs into technical specifications. These are then divided into different categories such as

system requirements, functional requirements, and non-functional requirements (e.g., performance, security, usability). This classification helps the development team understand the scope and structure of the project.

The analysts mentioned that they often rely on Software Requirements Specification (SRS) documents as a detailed reference for the development team. The SRS acts as a central guide for both functional and non-functional aspects of the software, helping to minimize misunderstandings during development. In some cases, an SRS might even replace a more technical document, like a PRD (Product Requirements Document), to save time when the specifications are detailed enough.

### *E. Agile Methodology and Iterative Development*

The company mainly follows an Agile methodology for their projects, which emphasizes iterative development and continuous feedback. This ensures that the client is kept in the loop throughout the development process, reducing the chances of a misaligned final product. By breaking down the project into smaller, manageable iterations, clients can see progress at every stage, and any necessary changes can be incorporated before moving forward.

This approach also mitigates the risk of client dissatisfaction at the end of the project. Since Agile involves regular demonstrations and check-ins with the client, they can see their requirements coming to life and provide feedback accordingly. The BAs highlighted that with Agile, the product rarely misses the client's expectations because adjustments are made throughout the process based on feedback.

### *F. Prioritization of Requirements Using MVP Approach*

When handling large projects with tight deadlines, the BAs prioritize core functionalities using the Minimum Viable Product (MVP) approach. By identifying the most critical features and delivering them in the first iteration, the team ensures that the project can meet the client's timeline. Secondary features are added in subsequent iterations based on priority. This approach helps manage client expectations and ensures that the most important parts of the product are delivered within the given time constraints.

The use of the MVP model allows for flexibility in terms of deadlines while maintaining a focus on delivering the product's core value first. This is a crucial strategy when working with time-sensitive projects.

### *G. Challenges in Requirement Changes and Existing Products*

Another challenge discussed was the handling of changing requirements, especially in ongoing projects where new stakeholders may have different visions. In such cases, the BAs analyze whether it's more efficient to modify the existing product or build a new one from scratch. If the new requirements drastically change the system's scope, the team may suggest creating a new product rather than investing too much time in modifying the existing one.

This insight shows the importance of balancing effort, cost, and time in managing ongoing projects. Analysts need to think strategically about the best way to approach changes, ensuring minimal disruption while delivering a high-quality product.

### *H. Reusability of Features*

The team shared that sometimes they encounter client requests that are similar to features developed in previous projects. In such cases, they suggest reusing these features to save time and reduce development costs. This is a practical approach that benefits both the client and the company, ensuring efficiency and consistency across projects.

Reusability highlights the importance of maintaining a library of previously developed features and knowing when to reuse existing solutions rather than reinvent the wheel.

### *I. Future Prospects of a Business Analyst*

The analysts provided valuable advice on career progression. They explained that after gaining experience as a business analyst, one could progress into roles such as lead business analyst and, eventually, supervisory and management positions. This career path offers a wide range of opportunities for those looking to grow into leadership roles within a company. The role of a business analyst is both dynamic and evolving, and there is substantial room for professional growth.

This reinforces the idea that the BA role is not static, and there are numerous pathways for advancement, both within the analytical domain and into management.

## 6. Motivation and Career Advice

The interview provided valuable insights into the career path of a business analyst. Analysts come from diverse backgrounds, both technical and non-technical, but success in the role depends on continuous learning, effective communication, and the ability to adapt to new challenges. Our career progression is promising, with opportunities to move into leadership and management positions. This motivated us to consider the role of a business analyst as a potential career path.

## 7. Conclusion

The industrial tour and interview with the business analysts were highly informative and provided us with practical insights into the software development process. We learned about the importance of requirement gathering, stakeholder management, and how analysts ensure the project stays on track. This experience has enhanced our understanding of how theoretical concepts in Software Requirement Engineering are applied in the real world, and it has given us a clearer view of the career possibilities in this field.

24th September, 2024

To Whom It May Concern,

This letter is to confirm that on 19.09.2024, four students from the American International University-Bangladesh (AIUB) visited our company, Vivasoft Limited, as part of an educational industry visit. During their visit, they engaged in discussions with our Business Analyst team, where they asked a variety of insightful questions related to software analysis, business requirements, and industry practices.

I provided them with detailed answers, and the students were satisfied with the responses. Their visit was both professional and productive, and they showed great interest in learning about real-world applications of their studies.

Please feel free to contact me for any further information.

Sincerely,

Vivasoft Limited
Date 24.09.2024
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