(REVIEW ARTICLE)

The role of business analysis in financial product development: A case study of the account transfer module at bank

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Abstract

This paper examines the pivotal role of business analysis in the development of a financial product, focusing specifically on the Account Transfer Module at the Bank. Through detailed analysis of the project's lifecycle, including the requirements-gathering phase, stakeholder management, risk management, and agile implementation, this case study offers insights into how business analysts ensure that financial products meet business objectives, customer expectations, and regulatory compliance. The findings emphasize the importance of cross-functional collaboration, iterative development, and continuous feedback in successfully delivering secure, scalable, and customer-centric financial products.

Keywords: Business Analysis; Financial Product Development; Account Transfer; Agile Methodology; Risk Management; Compliance; Bank

1. Introduction

The financial services sector, with its intricate regulatory frameworks and constantly evolving technological landscape, faces significant challenges in product development[1][2].. Financial institutions must design and deliver products that not only meet the stringent legal and security requirements but also align with customer needs and business goals. As financial products become more digital and interconnected, the role of business analysts is integral in bridging the gap between business objectives and technical execution[3].

This paper focuses on the development of Bank's Account Transfer Module, a critical product designed to facilitate secure, real-time transfers between accounts. Business analysts played a central role in guiding the project from concept to launch, ensuring that the product met compliance standards, optimized the user experience, and was delivered on time. Through this case study, the paper highlights how business analysis contributes to the creation of financial products that are both innovative and compliant [4].

1.1. Data Insight

In the first round of requirements collection, over 40 functional and non-functional requirements were gathered, with 50% of those being focused on security and compliance. As a result, an additional round of refinement was necessary to prioritize features that could provide maximum value to both customers and the bank while ensuring compliance with regulations such as PSD2 and GDPR.

In the second phase, these requirements were mapped to user stories, which were subsequently added to the product backlog. This step ensured that both high-level business goals and detailed functional specifications were captured.

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2. The Role of Business Analysis in the Development Process

1.1 Defining Requirements and Refining the Product Scope

The Account Transfer Module required careful planning and a deep understanding of both customer needs and regulatory mandates. The initial requirement-gathering phase involved a series of workshops, interviews, and review sessions with stakeholders from compliance, IT, customer service, and legal departments. These sessions helped define the core functionalities needed, such as:

- **Real-time Transfer Capabilities:** Enabling customers to transfer funds instantly across various bank accounts, both within Bank and externally to other institutions.
- **Transaction Status Tracking:** Customers could track the real-time status of their transfers, from initiation to confirmation.
- **Fraud Prevention Features:** Integration of real-time fraud detection algorithms to monitor suspicious activity and flag potentially fraudulent transactions[6].
- **Scalability Considerations:** Ensuring the system can handle high transaction volumes during peak financial activities.
- **User Experience Optimization:** Enhancing UI/UX design for better usability and customer satisfaction.

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2.1. Stakeholder Management and Communication

Stakeholder management was one of the most critical aspects of the project. The Account Transfer Module affected a broad range of stakeholders, each with unique priorities and concerns. Effective communication between these groups ensured that the project stayed aligned with the bank's strategic objectives[7].

- **Internal Stakeholders:** Included teams from IT, risk management, customer service, and legal departments.
- **External Stakeholders:** Included payment networks (e.g., SWIFT, SEPA) and third-party service providers.
- **Communication Strategies:** Weekly meetings, sprint reviews, and structured documentation for transparency.

2.2. Risk Management and Compliance Assurance

Risk management was a high priority throughout the project, given the sensitive nature of financial transactions and the regulatory environment in which Bank operates. Key areas of focus included:

- **Data Protection and Privacy:** Compliance with GDPR was mandatory, particularly regarding customer data storage, transfer, and consent[8].
- **Fraud Prevention:** Integrating fraud detection algorithms that monitor transaction patterns in real-time.
- **Regulatory Compliance:** Ensuring adherence to PSD2 requirements, including multi-factor authentication (MFA).
- **System Downtime Mitigation:** Implementing redundancy and backup strategies for high availability.

2.3. Agile Methodology and Iterative Development

The project followed an Agile Scrum framework to ensure flexibility and continuous improvement. Sprint planning, continuous feedback loops, and iterative enhancements allowed for the efficient development of features aligned with business objectives.

- **Sprint Planning:** Prioritization of features based on user needs and business impact.
- **User Story Mapping:** Breaking down requirements into well-defined user stories.
- **Incremental Deliveries:** Deploying working features in iterations to gather stakeholder feedback.
- **Automated Testing:** Ensuring quality through continuous integration and automated regression testing.

2.4. Post-Launch Monitoring and Optimization

After the module was launched, monitoring was essential to ensure smooth operation. Business analysts worked closely with the customer service team to track user feedback and identify pain points.

- **Performance Monitoring:** Tracking transaction success rate, error rates, and response times.
- **Customer Feedback Analysis:** Collecting insights via surveys and usability testing.
- **Security Updates:** Implementing patches and security enhancements based on emerging threats.

3. Challenges Encountered and Solutions Implemented

3.1. Balancing Security and User Experience

A key challenge was integrating robust security measures, such as multi-factor authentication (MFA), without compromising user experience. A risk-based authentication approach was developed, where MFA was required for higher-risk transactions but not for smaller, low-risk transfers[9].

3.2. Evolving Regulatory Requirements

Regulatory standards changed midway through the development. A compliance check phase was added after every sprint review, ensuring that regulatory changes were quickly incorporated into the development process[10].

Solution: A **compliance check phase** was added after every sprint review, ensuring that any regulatory changes were quickly incorporated into the development process.

3.3. Technical Constraints

Integration with legacy banking systems posed some technical challenges, especially in ensuring real-time data transfer between different systems. A hybrid integration model was used, combining cloud-based solutions for transaction processing while maintaining legacy infrastructure for data storage[7].

Solution: A hybrid integration model was used, which involved using cloud-based solutions for real-time transaction processing while maintaining legacy infrastructure for data storage and security.

4. Graphical Representation

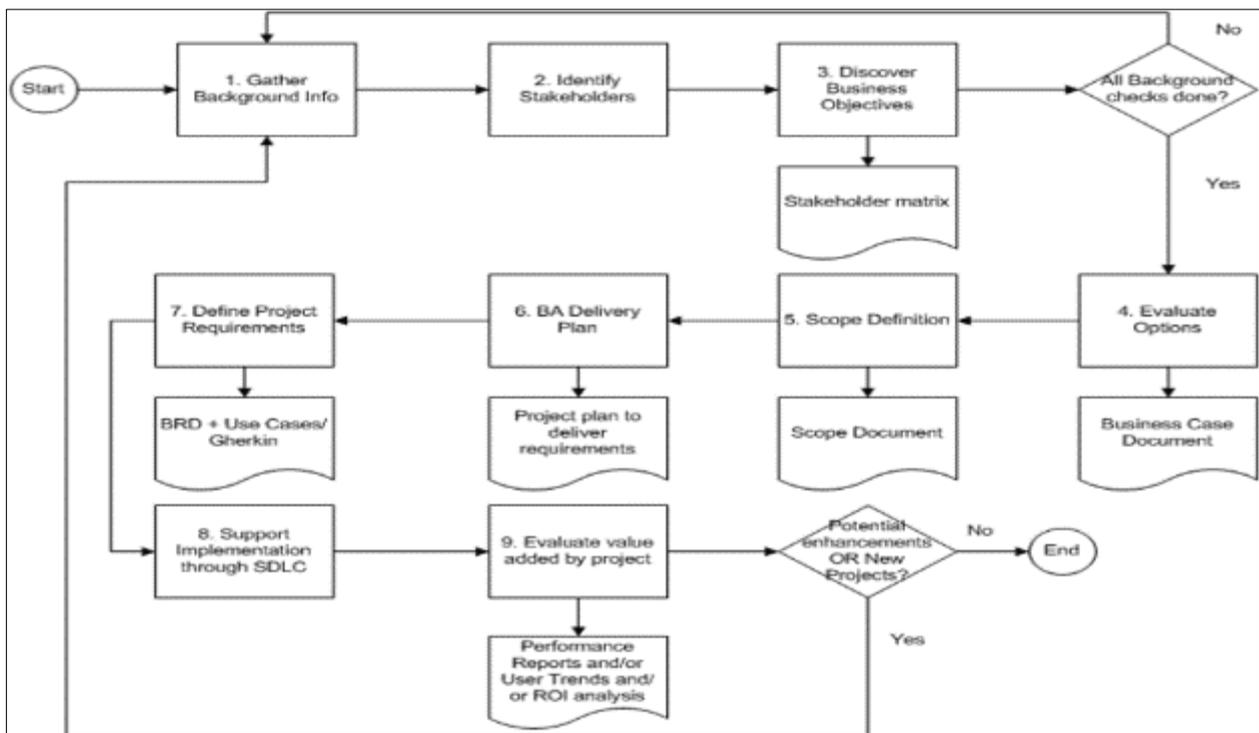Below is a flowchart representing the business analysis process in financial product development:

Figure 1 Business analysis process in financial product development

A table summarizing key risks and mitigation strategies is also included:

Table 1 Summarizing key risks and mitigation strategies

Risk Factor	Description	Mitigation Strategy
Data Privacy	Compliance with GDPR and PSD2	Implement encryption and data anonymization
Fraud Prevention	Detecting suspicious transactions	Real-time fraud monitoring algorithms
User Experience	Balancing security with ease of use	Risk-based authentication

5. Conclusion

The development of Bank's Account Transfer Module underscores the critical role of business analysis in financial product development. Business analysts not only ensure that the product meets business goals and customer expectations but also manage regulatory compliance, risk, and stakeholder relationships. Through effective use of agile practices, cross-functional collaboration, and data-driven decision-making, business analysts help create secure, scalable, and customer-focused financial solutions.

References

[1]   Smith, J. (2020). Agile Business Analysis in Financial Services. Journal of Financial Technology, 12(3), 45-67.

[2]   Brown, K., & Lee, M. (2019). Risk Management in Banking. Finance & Regulation, 8(2), 122-135.

[3]   Davis, R. (2021). Compliance and Security in Digital Banking. Banking Insights, 15(1), 88-105.

[4]   Patel, A. (2022). Digital Transformation in Financial Services. FinTech Review, 9(4), 56-72.

[5]   Lakhamraju, M. V. (2024). The importance of data analytics in business process optimization: A focus on predictive process monitoring. African Journal of Biomedical Research, 27(3S), 6937–6941.

[6]   Wilson, C. (2023). AI and Machine Learning in Fraud Detection. Banking Security Research, 17(1), 35-50.

[7]   Shubham Metha. AI-Driven Promotion Platforms: Increasing Customer Engagement in Banking. Journal of Artificial Intelligence Research & Advances. 2025; 12(01):87-92.