Digital Transformation in TSB Bank

Hamed Soleimani

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Introduction

Digital transformation (DT) is now a strategic priority, with the banking sector being one of the most impacted areas (Porfírio et al., 2024). DT can be understood as an ongoing process of strategic renewal, utilizing digital technologies to build new capabilities and modernize or replace existing business models (Warner et al., 2019).

In banking, DT focuses on modernizing legacy systems and integrating digital technologies. This integration aims to improve customer experience and operational efficiency, ultimately enhancing the financial services (Porfírio, 2024). The rise of FinTech, fueled by technological advancements, innovation, and changing customer preferences, has particularly driven this transformation in the financial market (McKinsey & Company, 2023). These changes have deeply impacted commercial banking, and TSB is no exception.

TSB (Trustee Savings Bank) is a British commercial and retail bank headquartered in Edinburgh, Scotland. Founded in 1810, it operated independently until 1995 when it merged with Lloyds Bank to form Lloyds TSB Group. In 2015, following a government bailout of Lloyds Banking Group (LBG), TSB became independent and acquired by the Spanish banking group Sabadell (Reference for Business, 2024).

Following its separation from LBG, TSB faced a critical challenge of relying on LBG's legacy IT infrastructure for business continuity. These systems made it difficult for TSB to implement new functionalities. To enhance customer experience, reduce costs, and increase efficiency, TSB decided to migrate to its own platform, the Proteo4UK system developed by SABIS (TSB, 2019a). However, TSB's migration attempt resulted in one of the most disastrous operational failures in the financial services industry.

TSB's DT offers valuable lessons for avoiding similar pitfalls. This report examines the IT migration challenges and explores strategies to ensure a successful transition in future endeavors.

Drivers of TSB's Digital Transformation Project

TSB's DT goals was driven by the desire to improve customer experience, reduce costs, and increase efficiency (TSB, 2019b). These goals directly aligned with their business canvas model (Osterwalder et al., 2010). An improved customer experience leads to a stronger customer relationship, one of the core elements of the canvas. Streamlining processes through automation and data analytics (Porfírio, 2024) could optimize their cost structure and improve efficiency in key activities, maximizing the value derived from resources like employees and technology.

However, a critical challenge was TSB's dependence on LBG's outdated IT infrastructure. This legacy system, was slow to adapt, time-consuming to maintain, and ultimately hindered TSB's ability to keep pace with the market (TSB, 2019b). Utilization of SWOT (Sarsby, 2016) could have been insightful. While desire to improve customer experience indicated a potential strength, the slow legacy system was a weakness. This weakness prevented TSB to harness potential benefits of DT such as improved customer interaction channels, an opportunity perfectly aligned with their desired outcomes (Porfírio, 2024). Additionally, the limited availability of skilled engineers familiar with these obsolete technologies posed a risk to future business continuity, another missed opportunity for strategic planning (TSB, 2019b).

Looking through PESTLE analysis (David, 2013) further showcases external pressures that an outdated legacy system could not handle effectively. Rise of FinTech, changing customer preferences and growing demand for new effective digital channels (McKinsey & Company, 2023), all necessitated a better adaptable IT infrastructure. While cost reduction might have been a primary driver, an efficient IT platform could also address environmental concerns by shift towards digital banking channels, potentially reducing paper usage and travel emissions (United Kingdom, 2008).

Based on the preliminary analysis of strategic frameworks, TSB opted for a hybrid approach that combined elements of cost leadership and differentiation (Porter, 1980). Modernizing their IT infrastructure offered a dual benefit: achieving cost savings through automation and increased efficiency (Porfírio, 2024), which aligns with a cost leadership strategy, while simultaneously creating the foundation for a more distinctive customer experience (TSB, 2019b). This

differentiation strategy could be achieved by providing a modern, user-friendly system that streamlines processes and delivers a superior online experience.

TSB's Digital Transformation Project

As a response to challenges posed by LBG's legacy systems, TSB aimed to modernize itself by migrating all legacy systems to a new platform, Proteo4UK (Slaughter and May, 2019). Proteo4UK was envisioned to offer several benefits. A significant advantage was the platform's promise of faster development cycles for new features. Additionally, TSB anticipated cost savings compared to the LBG system, with estimates suggesting a reduction from £220 million to £100 million annually. Furthermore, the new platform aimed to provide TSB with greater flexibility in choosing future technology providers. DT was also crucial to TSB's business continuity and future growth. It held the potential to facilitate TSB's flexibility to expand to new markets, such as SME banking sector (Andreasyan, 2017).

The migration's scope encompassed critical systems like credit/debit card payments, mortgage systems, ATMs, the digital mobile app, and internal systems like HR and ERP systems (TSB, 2019b). A key objective was to consolidate duplicate technologies into a centralized system with a "single source of truth" for data management.

To minimize disruption, the migration strategy employed a phased approach (Andreasyan, 2017; TSB, 2019a). ATMs and card payment systems were transitioned first, followed by the core banking system in the main April 2018 event. This final migration of the core banking system utilized a 'big bang' approach, meaning all remaining systems were migrated at once (Afifi-Sabet, 2019).

Challenges Faced by TSB's DT Project

The DT project encountered several challenges along the way. Here are some key hurdles:

- Legacy Systems: inherent complexity of migrating from LBG's disparate legacy systems to a single modern platform, Proteo4UK (TSB, 2019a).
- Testing and Planning: the project encountered challenges during initial testing, leading to the establishment of Guiding Principles to strengthen the testing process. Despite that, the

revised testing approach might have been driven by time constraints rather than a well-defined plan, potentially compromising its effectiveness (Beyond Blue, 2022).

- Communication Silos: Managing a complex supply chain consisting of 85 subcontractors (Slaughter and May, 2019).
- Security Concerns: Challenges regarding data migration process like introducing vulnerabilities, leading to fraudulent activities or data disclosure (Beyond Blue, 2022).

Challenge	Description
Legacy Systems	Complexity of migrating from LBG's old systems to Proteo4UK.
Testing and Planning	Problems during testing; rushed approach due to time constraints.
Communication Silos	Difficulties managing a complex supply chain with 85 subcontractors.
Security Concerns	Data migration vulnerabilities that led to security and fraud issues.

Table 1: summary of the key challenges

The IT Migration Failure

Following the IT migration, a cascade of technical issues caused severe service disruptions for a significant portion of TSB's customer base (TSB, 2019a). Inconsistent data center configurations led to widespread problems accessing online channels. Success rates for internet banking log-on plummeted to only 10%, and mobile app logins ranged between 15% and 35%. Payment failures were even more prevalent, with rates reaching 59% for internet banking and 48% for the mobile app (Beyond Blue, 2022). Nearly 1.9 million mobile and internet banking customers were effectively locked out of their accounts (Henricodolfing, 2019).

Customers flocked to alternative channels like phone banking and physical branches, but these were overwhelmed due to limited capacity (TSB, 2019a). Telephone banking capacity, initially at 25%, was swamped by a quadrupled demand, resulting in average wait times of 90 minutes and a 70% call abandonment rate. Branches also faced equipment failures, impacting voucher readers, teller cash recyclers, deposit machines, and chip and pin functionality. Printing services were also unavailable (Beyond Blue, 2022). During the first week of the crisis, an estimated 20-30% of customers were unable to make online payments (Beyond Blue, 2022).

Despite launching the first official recovery program in May, the technical issues persisted. Interactive Voice Response (IVR) malfunctions caused up to 70% of callers to drop out of phone banking queues, leaving them unable to access services. Digital channels continued to experience problems, with customers reporting delays in credit and debit card charges, incorrect account data, glimpses into other customers' accounts, payment issues (especially for businesses), duplicate payments, and ongoing access difficulties. These vulnerabilities unfortunately contributed to a rise in fraudulent activity, with the number of customers suffering financial losses reaching 1,300 by the end of May (Beyond Blue, 2022).

While mobile app problems were largely resolved by June, and phone banking abandonment rates returned to normal by mid-June, it took TSB until December to fully recover and return to pre-migration business operations (Beyond Blue, 2022).

Impact and Aftermath

TSB's botched IT migration triggered a cascading series of financial penalties, customer defection, and reputational damage. Regulatory authorities levied a hefty £48.65 million fine for operational risk management failures (Mishcon, 2023). Public trust plummeted – staggering 80,000 customers (BBC, 2022), abandoned them for competitors. On top of losing customers, TSB faced a surge in complaints, with over 4.3% of customers (Beyond Blue, 2022) expressing their dissatisfaction. TSB attempted to appease them with £32 million in compensation, but the true cost gradually increased to £300 million (Mishcon, 2023). Additionally, the fallout extended beyond the bank itself. The former CIO, Carlos Abarca, faced a regulatory fine of £81,620 for improper management of the process and lack of oversight (Bruckhaus Deringer, 2023).

Initially, CEO Paul Pester downplayed the severity of the issues. insisting they were intermittent and that everything was operational. However, the following day, he issued an apology and acknowledged the problem. Five days into the crisis, Pester announced the bank was taking control of the situation from its parent company and sought external assistance by hiring a team from IBM to aid in the recovery process (Henricodolfing, 2019). This lack of transparency hurt both customers and staff. With the bank in crisis, employee morale plummeted. They felt left in the dark about the project and received no apology for the situation (BBC, 2018). Facing mounting

pressure and a dysfunctional bank, Pester finally stepped down with a large payout of at least £1.68 million (Monaghan, 2018).

Faced with customer loss to competitors like Monzo and Starling, TSB fought to reclaim its position as a challenger bank. They launched customer incentives like waiving April's overdraft cancellation fees and increasing interest rates on current accounts to stem the tide (Henricodolfing, 2019). They also tried to improve their image by sponsoring events and working with media outlets to show a more "human" side (Henricodolfing, 2019). This, along with better customer satisfaction, helped TSB turn a profit again in 2019 (Vizard, 2019; Megaw, 2020).

Analysis of TSB's IT Meltdown

This analysis delves into the critical issues that contributed to the breakdown, examining them through the lens of both the bank's business canvas and its leadership's style and decision-making.

The selection of the Proteo4UK, raises questions (Bansal, 2020). While potentially cost-effective, the platform was designed for migrating smaller Spanish banks, not a complex system like TSB's (Stevens-Hall, 2020; Mishcon de Reya, 2023). A thorough assessment of the platform's suitability for TSB's specific needs would have ensured the chosen technology aligns with the Business Canvas. This alignment is critical for delivering the intended value proposition to customer segments and ensuring efficient operations across key activities and resources.

Criteria	Proteo4UK (Spanish Banks)	TSB's Requirements
Scale of Operations	Small/Medium banks	Large bank, complex systems
System Complexity	Moderate	High (many legacy systems)
Customization Flexibility	Limited	High

Table 2: A comparison table comparing the Proteo4UK platform against TSB's requirements

TSB's "big bang" approach, migrating everything in a single weekend (Afifi-Sabet, 2019), clashed with core aspects of their business canvas value propositions. Disrupted customer access via online and mobile banking channels (TSB, 2019a) directly impacted customer segments.

Furthermore, the complex supply chain with 85 subcontractors (Slaughter and May, 2019) created control and risk management challenges (Bailey, 2022). This fragmented structure weakened key resources and hindered TSB's ability to ensure operational resilience (Flinders, 2022). Additionally, neglecting thorough functional testing before non-functional testing (Stevens, 2020) compromised key activities and ultimately disrupted customer relationships built on reliable service.

The leadership's decision-making significantly contributed to the IT meltdown. The Board, CEO, and external advisors failed to adequately scrutinize the high-risk "big bang" approach and its potential mitigation strategies (Afifi-Sabet, 2019; Stevens, 2020). Prioritizing a pre-determined deadline over a realistic project timeline led to over-commitment, neglecting crucial system development stages and risk assessments (Stevens, 2020). This short-term focus on deadlines instead of considering long-term consequences suggest an alignment with 'Transactional Leadership' style (Northouse, 2015). This approach might have helped the urgency to meet the deadlines but at the expense of proper risk mitigation (Slaughter and May, 2019). Furthermore, the lack of transparency and communication indicates a more 'Authoritarian Leadership' style (Northouse, 2015). Top-down decision making and keeping employees in the dark. Therefore, they were unable to effectively support customers during the crisis (BBC, 2018). Finally, the inflexibility in effective response to the crisis suggests a potential bureaucratic approach.

Leadership Style	Impact on Decision-Making	Consequences
Transactional Leadership	Focus on deadlines over long-term risk mitigation	Rushed decisions, compromised testing
Authoritarian Leadership	Top-down decision making, lack of transparency	Low employee engagement, customer dissatisfaction
Bureaucratic Approach	Inflexibility in crisis management	Delayed, rigid response to the crisis

Table 3: analysing the leadership styles and their respective impacts

Furthermore, robust risk management strategies are essential for large-scale IT projects. This includes thorough testing across functionalities and the development of contingency plans (Stevens, 2020). These measures not only minimize disruption but also enhance operational

resilience, a key factor in regulatory compliance (Flinders, 2022). Clear ownership and accountability from the beginning, ideally with SABIS (the supplier) taking full responsibility, could have provided leadership with the necessary authority and risk management tools to effectively prevent such a crisis (Slaughter and May, 2019).

Recommendations

While hindsight offers clear perspectives, these recommendations highlight how TSB could have mitigated the IT meltdown's impact:

The migration wasn't a simple switch (Bailey, 2022). Strategic approaches like a Balanced Scorecard could have informed a more customer-centric solution. Weighing options against a hasty exit from LBG's IT environment might have revealed a safer path for the carve-out.

Rigorous integration tests involving all critical parts of the supply chain and suppliers (Slaughter and May, 2019) would have reduced assumptions and identified potential gaps. It could have minimized disruption in case of incidents (Henricodolfing, 2019).

Embracing a phased approach instead of the risky "Big Bang" (Afifi-Sabet, 2019) combined with effective change management would have fostered a collaborative and transparent culture (Beyond Blue, 2022). This could have mitigated risks by motivating employees to participate in crucial decisions impacting customers. A well-defined change management strategy like Lewin's model (Cummings et al., 2016) could have fostered employee engagement by creating a sense of urgency (unfreeze), implementing change (change), and reinforcing the new way of working and handling the new system challenges (refreeze) could have improved communication and better adoption of the new system.

Adapting alternative leadership style could have been helpful to TSB's cause. Adoption of 'Servant Leadership' style (Northouse, 2015) could have benefited employees by prioritizing their well-being and preparing them to navigate the challenges of migration. Through Transformational leadership style (Northouse, 2015) TSB's vision for DT project could have been shared with employees to foster a culture of adaption. Finally, adapting situational leadership style based on the migration phase might have been necessary. Shifting from solely reducing risk likelihood to a

mindset that accepts incidents are inevitable could have improved TSB's response and recovery strategy (TSB, 2019a). This includes a more directive and proactive customer approach in the initial implementation stage whereas empowering in the later stages.

Leadership Style	Key Approach	Potential Impact on TSB
Servant Leadership	Prioritize employee well-being and support	Better prepared and motivated staff during migration
Transformational Leadership	Vision sharing and inspiring employees	Stronger alignment with DT goals
Situational Leadership	Adapt leadership style to project phase	Flexible response to migration challenges

Table 4: Comparison of positive leadership styles suitable for this project

Conclusion

TSB's 2018 IT migration failure offers a clear lesson in DT challenges. Their "big bang" approach negatively impacted customer needs, and a complex supply chain made it difficult to control. Leadership decisions prioritizing speed over thorough testing and risk management worsened the situation.

However, this costly failure offers valuable insights. By prioritizing strategic planning that aligns with the business canvas, employing a phased migration with robust testing, and establishing clear ownership throughout the process, banks can navigate DT more effectively. Building operational resilience and fostering a culture of collaboration are also crucial for success. Learning from TSB's mistakes can empower banks to embrace DT while safeguarding customer trust and achieving long-term goals.

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