

CASE STUDY Implementation of an interface between EQUATION and CALCULUS (Online Banking Solution)



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Introduction

Constant innovation and process improvement has become imperative to accommodate the growing demands of the banking domain. Recognising the need for enhanced connectivity and streamlined data exchange between Finastra EQUATION CBS and Calculus - Digital Banking Suite, a leading bank in the UK sought to implement a subsystem-based interface. This strategic decision was aimed at facilitating the seamless transmission of crucial information, fostering efficient operations and an enriched customer experience. ZetaRP, with its expertise in tailored solutions for Finastra Equation CBS, emerged as the natural choice to orchestrate this interface, ensuring optimal integration and functionality.

This case study delves into the motivations behind implementing this interface, focussing on the transformative impact it had on the bank's digital capabilities and customer interactions.

Challenges Faced

The esteemed UK-based bank is renowned for its exceptional customer service and has built a strong reputation, serving a diverse clientele across various socio-economic strata. Established as a key player in the financial sector, the bank recognised the pressing need to enhance its digital banking capabilities when it operated two separate systems, EQUATION and CALCULUS, independently. This situation necessitated an additional interface between CALCULUS and EQUATION to transmit data seamlessly, enabling real-time updates and providing a unified platform to enhance operational efficiency and elevate customer service.

Operating in this manner presented challenges in integrating systems smoothly, which affected realtime updates and created inefficiencies in customer service. Additionally, customers faced difficulties accessing a unified platform for their banking needs. This prompted the bank to pursue an integrated approach, aiming to foster seamless data transmission and optimise operational processes to ultimately enhance customer satisfaction.



The solution proposed by ZetaRP

ZetaRP proposed a comprehensive solution, creating three distinct subsystems on the AS400 server to address specific communication requirements. The bank recognised a pressing need to elevate its digital banking capabilities, prompting the strategic decision to implement an interface connecting EQUATION and CALCULUS. Without this essential link, the bank faced challenges in ensuring smooth communication and data transfer between these two critical systems, hindering operational efficiency.

The Customer/Account Information Subsystem was planned to conduct daily synchronisation of intricate details from various EQUATION tables. This subsystem collected and loaded data into an inhouse staging table, facilitating efficient data transfer to the CALCULUS SQL database through a Windows scheduler. This seamless process empowered CALCULUS with **accurate and timely information for customer and account enquiries, enhancing its functionalities.**

Simultaneously, the Transaction Details Subsystem operated at one-minute intervals, ensuring a continuous influx of transaction and balance information. Applying necessary validations and business logic, this subsystem maintained data accuracy and facilitated real-time transaction updates in CALCULUS. Leveraging an AS400 staging table, it **coordinated the efficient transition of processed data,** contributing to enhanced operational responsiveness.

The Payment Processing Subsystem operated at defined intervals, efficiently handling payment requests from CALCULUS. It conducted validations, processed payments in EQUATION, and updated the staging table with posting statuses. This ensured real-time visibility for users, fostering a seamless financial experience.

The integrated framework of the three subsystems effectively addressed the bank's needs, resulting in a reliable, efficient, and transparent exchange of information between EQUATION and CALCULUS.

This transformative step marked a significant advancement in the bank's digital journey, augmenting operational capabilities and delivering an elevated banking experience to its customers.



Steps involved in the transaction

The intricate data exchange between EQUATION and CALCULUS orchestrates the seamless transmission of vital information. The journey unfolds through four strategic steps, each contributing to the harmonious synergy of these banking platforms. This transformative process enhances operational efficiency, offering users a transparent and user-friendly banking experience.

Customer/Account Information Sync

In the initial phase of the implementation, a pivotal process was established for the daily synchronisation of intricate customer and account details. Drawing data from diverse EQUATION tables, this orchestrated effort ensured the availability of up-to-date information. This wealth of data found its temporary abode in an in-house staging table within the AS400 server. The strategic deployment of a Windows scheduler played a key role in the subsequent seamless transfer of this enriched data into the CALCULUS SQL database.

Real-Time Transaction Data Retrieval

This dynamic subsystem became the heartbeat of the bank's operational landscape, ensuring real-time updates on transaction and balance information. Applying meticulous validations and business logic, the subsystem ensured the authenticity of the retrieved data. The journey of this processed information was seamlessly orchestrated, transitioning into a staging table within the AS400 server. Guided by a Windows scheduler, this data found its final abode in the CALCULUS SQL database, empowering CALCULUS with real-time transaction insights.

Payment Request Processing

Payment Processing Subsystem, operating with precision at a defined intervals played a pivotal role in the orchestration of payment dynamics within the bank. Its scheduled processing involved the meticulous reading and validation of payment requests originating from CALCULUS. Beyond processing, it extended its influence to updating the staging table with the appropriate posting status for each completed payment request. Under the coordination of a dedicated scheduler, this invaluable information seamlessly flowed into the CALCULUS database. The subsystem's meticulous approach ensured users received real-time updates on payment statuses via CALCULUS front-end screens.



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Front-End Presentation

The interface's user-centric design came to the forefront with a dedicated focus on real-time presentation. The front-end screens of CALCULUS became the canvas for displaying payment statuses, offering users immediate visibility into their financial transactions. This transparent and user-friendly approach further solidified the collaborative dance between CALCULUS and EQUATION, providing users with a frictionless and transparent financial experience.

Seamless Data Integration

Harmonising the intricate dance between EQUATION and CALCULUS, the interface ensured a cohesive and interconnected financial ecosystem. The seamless integration of datasets became the hallmark of operational efficiency. The accurate and timely availability of data for customer inquiries within CALCULUS positioned the bank as a frontrunner in delivering an agile and responsive banking system.

Continuous System Monitoring

To ensure the longevity and effectiveness of the interface, a robust system monitoring mechanism was instituted. Regular checks and assessments were implemented to guarantee the smooth operation of subsystems. This continuous monitoring facilitated immediate intervention and adjustments in the event of any discrepancies or issues. The commitment to ongoing evaluation highlighted the adaptability and resilience of the implemented subsystem-based interface.



Benefits and Outcomes

The strategic implementation of a subsystem-based interface between EQUATION and CALCULUS yielded a spectrum of benefits and transformative outcomes for the esteemed UK-based bank:

Operational Efficiency Enhancement



Enhanced operational optimisation along with streamlining processes across the board, it brought a substantial reduction in turnaround time for a range of banking operations, fostering enhanced customer satisfaction through increased operational agility.

Cost Reduction and Resource Optimisation



The introduced subsystems significantly contributed to cost reduction by optimising resources effectively. Streamlining processes further improved overall efficiency, exemplifying the bank's dedication to prudent resource management.

Enhanced Security Measures



Improved security measures were implemented, reinforcing the integrity of transmitted data, and ensuring heightened protection, thereby fostering trust and confidence among customers. This proactive approach not only meets regulatory standards but also instils confidence in customers, solidifying the institution's reputation for prioritising security in the digital banking landscape.

Technological Innovation and Adaptability



The adaptation brought tremendous advancements, enabling the bank to navigate the evolving landscape of digital banking seamlessly and ensuring a competitive edge. By staying abreast of technological trends, the institution not only meets current customer expectations but also positions itself as an innovator in the dynamic financial market.



Seamless Cross-Platform Integration



Giving an elevated financial experience through seamless integration with various platforms, enhances accessibility and efficiency of the bank, positioning it as a versatile player amidst the growing business competition.

Increased Customer Engagement



Empowering users with flexible access to account details and transaction capabilities has fostered improved customer interaction, resulting in a substantial increase in transaction volumes.

Data Analytics for Business Intelligence



Leveraging the power of data analytics, the bank harnesses transaction and customer data to unlock valuable business insights. This data-driven approach empowers informed decision-making and strategic planning, fostering a forward-thinking financial environment.

Reduction in Physical Branch Reliance



By enabling a shift towards online banking, the institution experiences a reduction in reliance on physical branches. This not only optimizes physical resources and space but also aligns with the evolving preferences of digital-savvy customers.



Conclusion

The successful collaboration with the bank is a standing testimony to how strategic solutions bring transformative changes, taking the bank's prowess to newer dimensions. Seamlessly connecting the EQUATION and CALCULUS systems through carefully crafted subsystem interfaces, has brought tremendous results, elevating the operations has made a remarkable change in bringing customer satisfaction, marking a notable change in how the bank engages with its clientele.

The concrete results, such as improved digital banking options, fewer branch visits, and increased transaction volumes ultimately contribute to a more seamless and customer-centric experience.

Bring these extraordinary changes to your business through our esteemed partnership. With our years of experience, acumen, and foresight, we invest our experience, tools, and techniques to enhance your business output. Our team will collaborate with you to understand your requirements and create tailored solutions that propel your business toward greater efficiency, innovation, and success.



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