



**Zero down time....**

**Running the world's largest treasury operations for a decade**

**Funding Desk-Treasury Transformation: *design drives deep differentiation***



## **REGULATORY URGENCY DRIVES THE MOST SIGNIFICANT TREASURY OVERHAUL**

CITI's treasury management processes had evolved over time and the complexity of software used to manage them also increased proportionately. The bank was using a legacy system for managing its Funding Desk and Risk Operations, which was over 22 years old. Bank of England observed bank's issues with the legacy system and passed a specific mandate for time bound system replacement.

Threats posed by the legacy system:

- Reputational Risk due to outdated processes/ potential system failures
- Inability to quickly meet new reporting demands of regulators
- Inability to respond to changing market/ client demands

## **LEGACY TECHNOLOGY AND CLEARLY VISIBLE PAIN POINTS ACROSS MULTI COUNTRY OPERATIONS**

The legacy system was over two decades old and it had seven different versions across 17 countries. CITI had treasury branches spread across EMEA, Japan, US, Canada and Australia which were relying on the legacy system and consolidation of positions and Risk at the centralized desk in London was a time consuming process, leading to missed profit taking opportunities in the market. Traders were also hampered by a decentralized trading environment which could not incorporate new products based on evolving consumer needs.

Major problems faced by the bank while managing treasury operations across multiple Geographies:

- Manual transfer positions across branches was potentially error-prone and time-consuming
- Lack of a centralized system impeded generation of consolidated regulatory reports
- Time consuming Manual Reconciliation of positions across branches
- An unreasonably high position consolidation time of 8 hours
- Dwindling support resources in this technology(VACS/ VMS) with knowledge of the legacy system
- Carrying out changes (even minor) was increasingly difficult.

## **THE SOLUTION APPROACH - A SIMPLE PROPOSITION: Complexity Reduction**

Financial Institutions always face a dilemma of build versus buy, when replacing existing systems. Buying and fine-tuning an established product is both cost and time-intensive. A more practical approach is to go with a base yet strong existing Solution and enhance the same in a phased manner by leveraging the vendor's expertise, while retaining the bank's core Business and Risk Models. The bank had a strong preference for the solution enhancement approach in a partnership model.

The bank evaluated 3 solutions –

One solution could handle complex Treasury requirements but required a very high degree of time consuming configurations - The vendor was rejected due to vendors Systems Development Life Cycle (SDLC) implementation methodology which was perceived as inflexible by the bank.

The second was an in-house system E-Dealer was rejected as it was not a Cash flow based system (unable to support interim cash flow projections of products with schedules/ coupons etc since it was a (position based system) and did not support very DNA of the Funding Desk operations. The time schedule for adapting the product to the requirements was not in line with the regulators' time line.

Intellect's Feature Driven Life Cycle (FDLC) methodology with its strong basic solution, its design, architecture and ability to enhance the product as per bank's needs was an ideal proposition. Using a phase wise approach and the FDLC methodology, Intellect could collaboratively work with the bank to develop the required features within the stipulated time-period. This prompted the bank to choose Intellect OneTREASURY over the other two solutions.



Key Drivers for the Bank	In-house Systems	3rd Party Products	Component Based solution
Quick Implementation Time	✗	✓	✓
Non- Disruptive Implementation	✗	✓	✓
No added baggage	✓	✗	✓
Common Architecture Sharing	✓	✗	✓
Strong User-Defined Functionality	✗	✓	✓
Cost Effectiveness	✗	✗	✓
Flexibility of Process	✗	✗	✓

### A GOOD START - LISBON

Intellect carried out implementation at the Lisbon Branch. 26 of the 56 identified functionalities were delivered during this phase.

Major outcomes at this phase were:

1. Parallel development of more complex features, integration and testing reduced Feature delivery time & effort
2. Understanding dealer requirements accurately due to iterative feedback and development reduced extensive rework on Solution components in advanced phase of implementation
3. Leveraging reusable components to plug observed functionality gaps saved time

### EUROPE, NEW YORK, TOKYO ROLL OUTS.

Post the success of the Lisbon pilot implementation, Intellect OneTREASURY was rolled out in a phased manner in the following geographies – Europe, Japan and US. Europe rollout was complex due to the presence of 2 legal entities.

Implementation highlights of this rollout are:

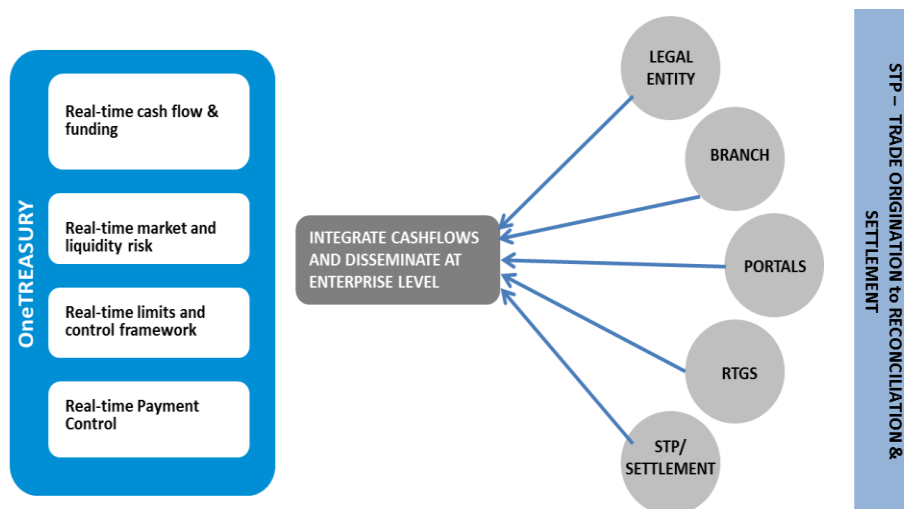
- The solution went live in 15 countries and 22 branches across Europe
- Products were rolled out systematically – simple vanilla products followed by more complex products
- Entire rollout was completed within 8 months
- UAT defect ratio was very low – 0.002 defects/FP
- Winner of the Bankers Technology Award in 2007 for the best front office project

In the next phase, the solution was rolled out in the Tokyo branch. An encryption algorithm was developed to encrypt data going out of the country since the solution was hosted in the same server as the Europe solution - at London (DR Site - Poland) with segregated Databases. Two unique products specific to Japanese economy were developed by the Intellect team - Discounted Deposits and Discounted Loans.

The final rollout happened in New York where another legacy system with complex US specific products and processing were replaced. The entire rollout process across the three geographies happened over a period of 5 years, in accordance with the timelines set by the bank.

### INTELLECT OneTREASURY: A PROVEN ENTERPRISE WIDE VIEW OF REAL TIME LIQUIDITY, RISK AND FUNDING TOTAL TREASURY TRANSFORMATION

- Intellect OneTREASURY went live in 20+ branches across Europe, Tokyo, North America and Canada
- Over 96% reduction in position consolidation time
- Real time -on line visibility of global positions and Risk improved the Funding Desk accuracy and efficiency
- Ability to add new products and integrate with bank's new internal global Risk and Reporting systems
- Improved Operational Efficiency, compliance with on-line limits monitoring and Profitability across branches



- Simplification of deal entry process and instantaneous transfer of positions across desks
- New system supported historical cash flow analysis and liquidity stress testing leading to more accurate forecasting

#### DRAMATIC BEFORE-AND-AFTER OUTCOMES

	Then	Now
Global position view	Did not exist	Integrated global position view off a single DB
Position transfers	8 Hour	15 minutes
No. of transactions supported	5000 / day	70000 / day
Trading analytics	Disparate systems	Trading Analytics online
Reliability	Reliable but slow	Reliable with Zero Downtime

#### POWERFULLY LEVERAGING RISK FOR BUSINESS ADVANTAGE

Intellect OneTREASURY provided the client with a real-time view of position & risk related information across branches. Real-time risk information enables CFOs to create strategies to leverage performance across the entire balance sheet.

Accurate, timely and intelligence-driven Risk Data enhances Decision Making:

- Crisis Situations can be foreseen by analyzing risk concentrations
- Improved assessment of portfolios for superior performance management
- Enables traders to proactively identify and report concern areas to top management



**RISK, TREASURY  
& MARKETS**



**OneTREASURY**



**OneLRM  
WITH Zf RISK  
VISUALIZER**



**OneMARKETS**