

# You might be missing a **trick** in processing large corporate payments

Payments Limits Management in a Real-Time World.

Explore how banks are beginning to use a transaction limits management system to check client balances and limits in real-time and give a pay/ no-pay/refer decision based on corporate cash and liquidity structures and shared limits.

# The Banker's Dilemma

Every single day, a typical corporate transaction bank processes high value corporate payments worth over \$500 billion. For larger customers, these would usually be across many accounts, currencies, entities and countries.

The accounts would be swinging between a debit balance and a credit balance throughout the day as payments come in and go out. Banks have the option of maintaining very high intra-day overdraft limits to allow the payments to go through or request the corporate to maintain high BOD balances or keep the transaction pending until funds become available.

	Banks	Corporates
Maintain excess limits for corporate accounts	<ul style="list-style-type: none"> <li>• High risk</li> </ul>	<ul style="list-style-type: none"> <li>• High client satisfaction</li> </ul>
Request corporate to maintain high BOD balance	<ul style="list-style-type: none"> <li>• Low risk</li> </ul>	<ul style="list-style-type: none"> <li>• Low client satisfaction</li> <li>• Poor cash flow management</li> <li>• Poor working capital management</li> <li>• Lower ROE</li> </ul>
Keep transaction pending till funds become available	<ul style="list-style-type: none"> <li>• Low risk</li> <li>• SLA breach of real-time payments</li> </ul>	<ul style="list-style-type: none"> <li>• Low client satisfaction</li> <li>• Impact on client's cash position</li> </ul>

**You don't have to choose any bad option!**



# As a bank you wouldn't want to:

- 1** Risk holding back a payment despite a customer having sufficient limits
- 2** Risk breaching a monitored limit
- 3** Incur the high operational cost of payments landing up in referral due to insufficient funds when they need not
- 4** Maintain very high intra day OD limits just to let those important corporate payments out the door



## Here is how the above four issues were avoided by a leading bank

For 33 large corporate clients, the bank had maintained a total limit of \$450 million across wires, ACH, LVTS etc. The bank reduced the limits to \$216 million **by introducing balance netting, limit sharing and client level limits via iGTB Transaction Limits Management**

The bank was still able to **process more than 99% of the payments while maintaining 52% lower limits** resulting in significantly lower risk capital and higher ROI for the bank.

As per an internal estimate, this would have **saved the bank up to \$200 million in risk provisioning** alone.



# How three other top-tier banks benefited from iGTB's Transaction Limits Management

1

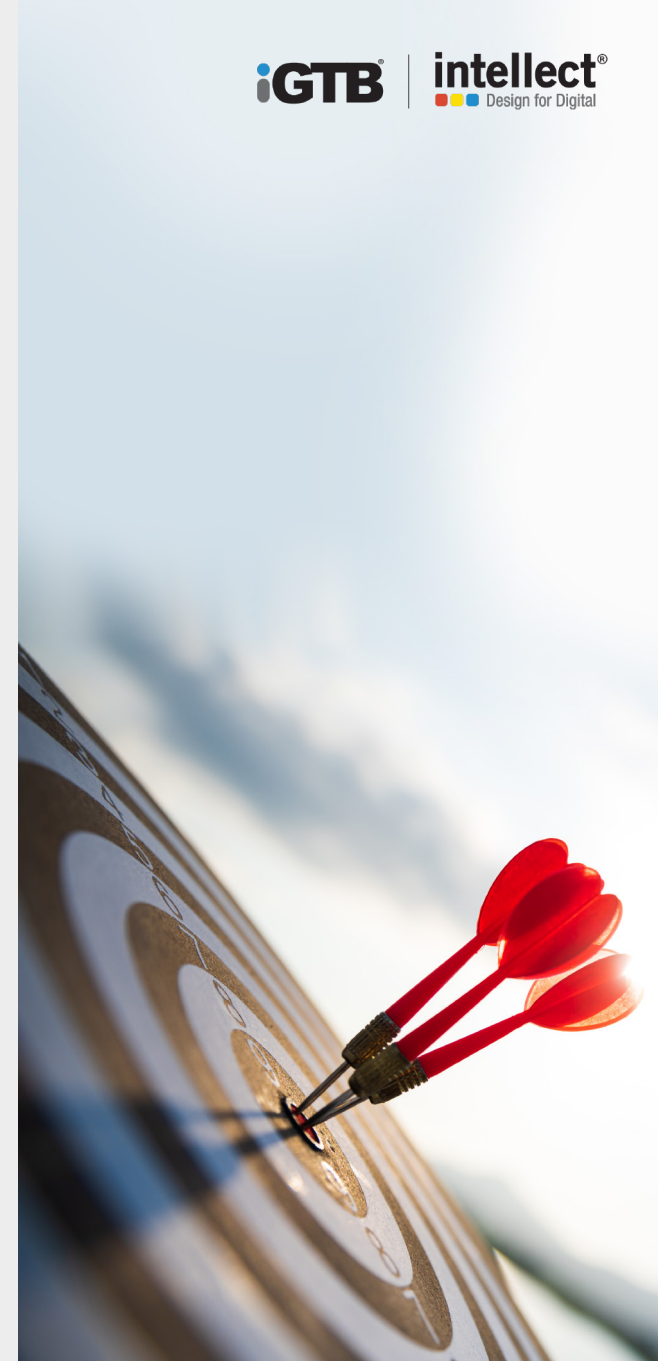
A large UK bank had a high percentage of payments landing in referral, an inconsistent method of checking client limits and complex limit checking rules that the payment engine could not cope with. After implementing a transaction limits management system, they were able to **reduce payments in limits referral queues to under 1%**.

2

A US bank with a global footprint had over 60 instances of a core banking platform and multiple liquidity platforms. The bank was unable to perform a real-time balance and credit limit check for outgoing payments consistently across regions. After implementing a real-time balance checking system they were able to **achieve 99% automated payment decisioning** considering balances, credit lines, cutoffs, risk rating and customer classification.

3

A British retail and commercial bank was able to consolidate all payments limits and balance check into a single transaction limits management platform resulting in seamless payments processing and lower risk.





“ I was once speaking to a Transaction Banking Head at a large bank, who said, ‘listen Tapan, I really don’t want to reject high value payments of these large corporates. My client relationship and credit team was maintaining very high overdrafts at each account level, and this came at a huge cost to our bank since we had to provision under Basel III for these facilities and it impacted our bottom line. ”

# From the CEO's Desk

84 years ago, Toyota pioneered real-time inventory management in passenger car production. The result - improved cash flows, working capital, and profitability. More importantly, they overcame many disruptions better than others.

Why is iGTB, a leader in the cash management and payments space, talking about Toyota ?

For starters, the evolving payments landscape with shift towards faster payment processing, varying customer demands, changing technologies, rapid innovation brought about by startups and stringent regulatory reforms are forcing banks to re-look at the way they operate in the payments domain.

Payments systems around the globe still lack real time cross border payments, the option of instant credits into corporate accounts (due to batch based DDA systems), real-time cross currency intra- day sweeps, and real time balance and transaction reporting.

This forces corporate treasurers to maintain high balances (inventory) at BOD. Thus, while the manufacturing supply chain and the logistics supply chain have been operating in real-time mode for many years, the financial supply chain is still operating on a T+n basis.

For the corporate, this comes at a huge cost.

All this is driving a lot of “re-look” at existing payment architectures to comply with new regulations and client needs.

One such area that is of interest to banks and corporate clients alike is that of transaction limits management. iGTB, a market leader in client liquidity management, has already pioneered the concept of real-time / intra-day / event-based sweeps and is now integrating its Liquidity Management system and Payment Hub with a new cloud native real-time Transaction Limits Management system.

I do not think that any payment engine in the world is able to authorize a payment against the net position of a client across hundreds of accounts in a complex liquidity structure, taking into account daylight exposure limits, overdraft limits at account, account group, customer group, customer and many more levels in real time. iGTB Transaction Limits Management can do just that – saving the bank in Basel III risk provisioning, improving client satisfaction, streamlining payment operations and reducing risk.

Read this [whitepaper](#), to explore the finer intricacies of a transaction limits management system and learn how banks have benefitted from using this unique software.

I am sure that many of you are in the middle of a payments transformation or are contemplating one. The time is hence right for you to look at software such as this. Please feel free to explore our sandbox or engage with our experts for a proof of concept. I hope you enjoy reading this whitepaper and look forward to hear from you.

Manish Maakan,  
CEO Intellect Global Transaction Banking



Banks need to re-look at their payments architecture to cater to changing client needs, evolving regulations and pressure from FinTechs

# The Changing Game

Market trends impacting payments limits management

1

Global real-time payments market will increase at a rate of **+29% CAGR** between 2020 and 2025 with ~70 countries already supporting instant payment rails

2

Adoption of instant real-time payment rails by corporates is on the rise as limits are increasing. UK Faster payments limits are **£250,000** and in Netherlands the SCT Inst has no limit as long as there is sufficient balance, while the EPC limits is also high at EUR 100,000

3

Overnight and daylight overdrafts are classified as operational services and under **Basel III** such overdrafts require **increased regulatory capital**. Corporate customers will have to better manage their cash flows or risk having outbound payments delayed until funds are available

4

Payments Initiation Service Providers (PISP's) leveraging **open banking** to initiate payments is driving traffic. Open Banking is live in 60 markets, with over 800 third party providers registered in UK/EU and estimates of over **1 billion API calls in a month**

5

New industry initiatives such as adoption of **ISO 20022** is driving banks to re-look their payments architecture and the payments limits management processes



WHY



NOW?

- Real-time payment systems are technically and operationally more demanding than traditional batch payments and require more resilient network infrastructure to handle the flow and monitoring of transactions
- These trends put pressure on a banks payments infrastructure to cope with a very high volume of payments (and potentially high value) on a 24x7x365 basis and check balances, limits, AML, sanctions etc. all in real-time

# The Stakes

## The corporate need

Corporates treasurers have always wished for real-time pooling of funds across an account hierarchy and allowing a subsidiary to utilize funds in a parent account or from another subsidiary which may have surplus funds. They need to be able to use their sanctioned limits to the fullest, require faster payments (same day payments) and certainty of payments especially for critical payments like salary, tax and vendor payments.

## The impact on banks

However, with most banks having disparate systems, multiple DDA platforms, payment engines and system of records, banks need to replicate the available balance check logic across multiple systems. The result - banks do not have a consistent and auditable view of fund availability while releasing a payment and they are unable to offer group / product level limit benefits to their corporate clients.

**Banks are also exposed to various kinds of risk in this process.**

“ Banks would not want to maintain high daylight exposure limits at each and every account level if they could do netting of balances across accounts ”



With just-in-time manufacturing, corporates also want just-in-time payments and want to utilize balances across their entire liquidity structures



# Too many risks

Risk of...	Leading to...
excessive limits offered to corporates	➔ rise in credit risk and 'temporary' limit increases becoming permanent and higher Basel III provisioning cost
missing a payment cut off	➔ reputational loss
approving high value payment without adequate limit checks	➔ high credit risk
not releasing a payment when customer has limits	➔ poor customer experience
running out of liquidity with the clearing / settlement bank	➔ defaults or penalties and systemic risks
missing a clearing cut-off	➔ penalties and reputational loss
breaching a monitored limit	➔ adverse bank exposure
excessive payments in referral	➔ higher operational cost
taking credit decisions over email/telephone	➔ lack of audit trail



# Playing the Game

## How banks currently manage payment transaction limits

In the payments world, STP (straight-through-processing) rates are directly linked to customer satisfaction and retention. Unnecessary refusal, referral or delay of payments leads to poor customer experience. Consequently, a bank must constantly introspect whether they have the facilities available to increase automation, and to avoid costly and sub-optimal manual exception processes.

To ensure high STP rates, currently, banks set up very high intra-day overdraft limits for corporates so that no payment is rejected. They also use bespoke and multiple limit management systems, customized functionality in core banking systems and even sometimes use the limits management module within the liquidity management systems to ensure that service levels remain elevated.

However, the above is only a partial solution which cannot cater to the sophisticated needs of corporate clients. And as markets expand, payment limits increase and volumes increase, such systems are bound to fail.

Boosting payment automation, digitalization and straight-through processing (STP), is critical for banks



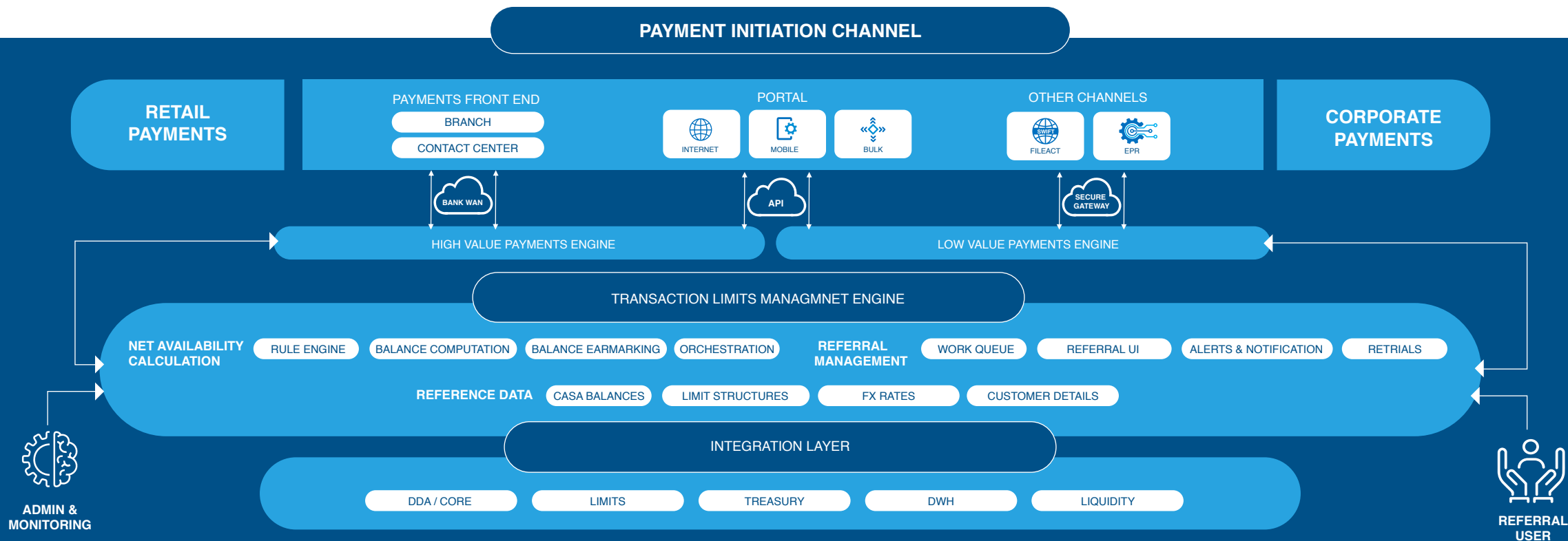
A stand-alone Transaction Limits Management system which aggregates and computes limits and balances instantaneously, is the need of the hour







# The Promised Land

## What banks really need to solve for real-time payments transaction limits




Given that banks have multiple payment engines and DDA (demand deposit account) platforms and the fact that corporates will have hundreds of accounts and will want to net off balances across accounts, having an environment with disparate systems generates added costs and risks. While upgrading system infrastructure, the objective of the bank should be to create a single hub that can consolidate all the payment flows from balance check to payment decisions to referral processing and limit structure setup.

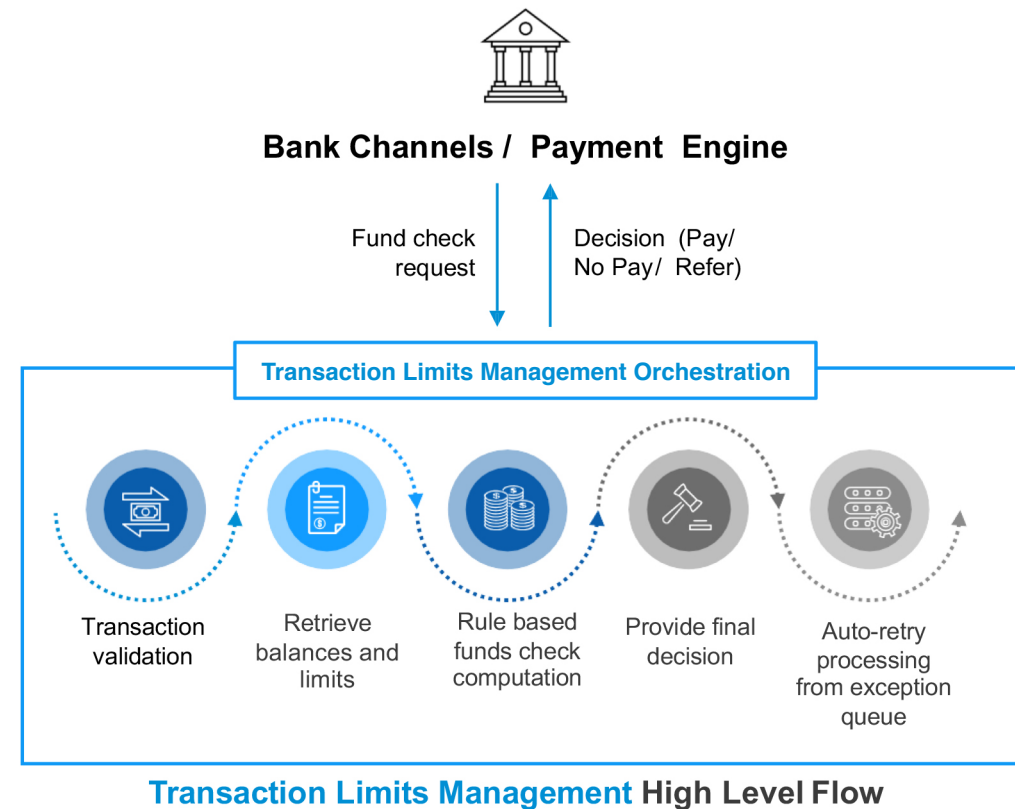


**A Transaction Limits Management system does just that. The system receives payment instruction from any channel / payment engine and:**

-  Checks if there are adequate balances
-  Checks if there are adequate limits
-  Checks the net position and gross position at the group level
-  Checks the immediacy of the payment (cut-off times etc.)

**and then:**

-  Refuses the payment, or,
-  Releases the payment and updates the exposure, or,
-  Places the payment in referral and constantly re-checks if funds have come into the account.



Here the Transaction Limits Management system acts as a central hub orchestrating the fund availability checks, real-time balance compensation, payment decisioning and referral processing

# Functions you must demand from a Transaction Limits Management System



Support for multiple limit types such as daylight limits, future dated settlement risk limits, net and gross over draft Limits



Support for multiple risk entity types – customer, customer group, legal entity, account group, account, multi option facility, counterparty etc.



Auto-retry based smart referral processing for payments before cutoff



Support for formula based multiple balance types - cleared funds, book balance, available balance etc.



A rule based decision engine which takes into account criteria such as method of payment, cutoff, client segment / risk rating, balances for payment decisioning



A referral dashboard with workflow, audit control and automated retry logic for payments landing in referral



Ability to place and remove earmarks



Computation of net and gross position / availability at various levels



A Transaction Limits Management system can handle multiple limit types such as daylight limits, future dated settlement risk limits, net and gross limits etc.

# Winning the game

Why should a bank opt for a transaction limits management system?

A system that satisfies the aforementioned functional aspects and is built on a modern cloud native API based architecture can:



Bring down design complexity



Improve maintainability



Increase auditability



Ensure timely release of payments



Reduce risk for the bank



Reduce response time for client queries

**This system will also be able to provide a central dashboard for payment operations to manage payments and to the relationship managers to know the fate of a payment.**



# Business Case for a Transaction Limits Management system

## Benefits of a transaction limits management system

A modern transaction limits management can provide tremendous benefits. In our experience, it can help a large bank save more than \$ 7 million. in operational and Basel III provisioning costs every year, not counting the benefits to the customer.

These benefits are based on conservative estimates of the number of corporate customers, accounts, percentage of payments in referral, manual processing costs, Basel III standardised approach for credit risk etc. for a large bank.

**Why not work it out for yourself using our savings / ROI calculator?**



~\$4  
million

Yearly savings  
in operational cost

~\$3  
million

Yearly savings in  
Basel III provisioning cost



# Savings in operational cost<sup>1</sup>

## Assume that in a large bank,

The average no. of high value large corporate payments/day	360,000
%age of payments landing in referral for insufficient funds <sup>2</sup>	10%
Number of payments in referral per day	10% of 360,000 36,000
Average per transaction cost of manual clearance	\$0.50

## Without Transaction Limits Management system,

Daily cost of manual referral processing	$\$0.50 \times 36,000$ \$18,000
Annual cost of manual referral processing <sup>3</sup>	$\$18,000 \times 250$ \$4.5 million

## With Transaction Limits Management system,

The number of transactions that come into referral decreases significantly as the Transaction Limits

Management system allows limit sharing, netting and optimization. In our calculation, we assume that only 5% of the payments come into referral queue and of this, at least 75% of payments gets auto-cleared by the system.

Number of payments in referral per day	5% of 360,000 18,000
%age of payments getting auto-cleared by Transaction Limits Management system	75%
Number of transactions getting auto-cleared by Transaction Limits Management system	75% of 18,000 13,500
Number of transactions requiring manual attention after deploying Transaction Limits Management	$18,000 - 13,500$ 4,500
Daily cost of manual referral processing	$\$0.50 \times 4,500$ \$2,250
Annual cost of manual referral processing	$\$2,250 \times 250$ ~\$0.56 million
<b>Savings in operational cost with Transaction Limits Management system</b>	$(4.5 - 0.56)$ million <b>\$3.94 million</b>

<sup>1</sup> Benefits are indicative based on conservative estimates of corporate customers, accounts, % of payments in referral, manual processing costs, Basel III standardised approach for credit risk etc.

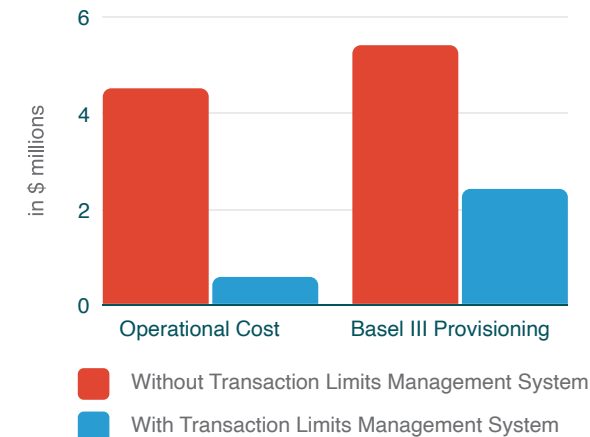
<sup>2</sup> Higher percentage of payments will land up in referral as limits are not shared / optimized / netted

<sup>3</sup> Assuming 250 working days in a year

# Savings in Basel III provisioning

Assume that in a large bank, without a Transaction Limits Management system,

Number of corporate customers of the bank	10,000	Total exposure for the bank	50,000 x \$30,000 x 30% <b>\$450 million</b>
Accounts per customer	5	Risk weight <sup>4</sup>	<b>20%</b>
Total number of corporate accounts	10,000 x 5 50,000	Risk weighted assets	20% x \$450 million <b>\$90 million</b>
EOD OD granted at each A/C level	<b>\$30,000</b>	Tier-1 capital ratio <sup>5</sup>	<b>6%</b>
% of accounts with OD	30%	Additional tier-1 capital required	6% x \$90 million <b>\$5.4 million</b>



Now, with a Transaction Limits Management system,

EOD OD granted at each A/C level <sup>6</sup>	<b>\$20,000</b>	Risk weighted assets	20% x \$200 million <b>\$40 million</b>
% of accounts with OD <sup>7</sup>	20%	Additional tier-1 capital required	6% x \$40 million <b>\$2.4 million</b>
Total exposure for the bank	50,000 x \$20,000 x 20% <b>\$200 million</b>	Savings in Basel III provisioning cost with Transaction Limits Management	\$(5.4-2.4) million <b>\$3 million</b>

Systems like Transaction Limits Management have a very strong business case and iGTB has seen tangible benefits in banks which are using the system. The system not only reduces risk and cost for the bank but also significantly improves the customer experience.

<sup>4</sup> Risk weight for a AAA category corporate as per Basel III norm; <sup>5</sup> Basel III norms lays emphasis on increasing loss absorbing capacity of banks to be better prepared for financial crisis events by strengthening the capital ratios of the banks. Basel III norms require a minimum tier 1 capital ratio of 6% and total capital ratio of 8%. The Basel III accord also requires banks to maintain a capital buffer of 2.5% over and above the total capital requirement of 8%, to provide additional comfort; <sup>6</sup> Higher OD not required as Transaction Limit Management system provides limit netting and limit sharing; <sup>7</sup> Percentage of accounts with OD is lower as the Transaction Limits Management system auto-clears most of the payments through limits netting

# Conclusion


Corporate payments are at the focus of organizations worldwide. They bring in much needed operational liquidity and balances for banks. At the same time, the risk of missing a cut off, delaying a payment or erroneously releasing a payment without suitable limit checks can have catastrophic consequences.

iGTB has been able to implement the concept of a central Transaction Limits Management system for balance and interest compensation in several large banks of similar size, scale, and complexity.

By partnering with iGTB, these banks were able to have a stable, scalable and flexible payments decisioning environment that is fully compliant and capable of accommodating modern payment requirements. These banks were able to go live with least disruption and without spending big amounts of time and money.

They were able to cut costs, reduce risks and improve customer value along with a fast time to market. But most importantly, they were able to concentrate on what mattered the most - their core business and their customer.

We invite you to review your payment architecture and get in touch with iGTB for more information on the concept of a centralized limit management system.



A large UK bank handling over \$500 billion worth of payments per day and having corporates with more than 500 accounts per structure was able to reduce transactions in referral to under 0.1% using iGTB Transaction Limits Management

# About the Authors



**Tapan Agarwal,**  
Senior Vice President,  
Payments Product Management

Tapan is a banking technology and domain expert, who is now responsible for Payments Product Management at iGTB. He has over 2 decades of experience in banking technology, having worked at Oracle OFSS (i-flex), Wipro, Mindtree and Deutsche Software. He has worked in roles that range from development, design, consultancy to strategy and operational roles including managing large teams, top line targets and bottom-line responsibilities. He has implemented banking technology in multiple banks and consulted with CTOs and CIOs at banks on technology driven business and operational efficiency improvement.



**Tom Antony,**  
Senior Consultant,  
Payments Product Management

Tom is a Product Manager in Intellect Global Transaction Banking team with more than six years of experience in the Banking and Financial Services domain. He has previously worked with Axis Bank, IDBI Bank and Tata Consultancy Services in varied roles from development to product management. In his last stint at Axis Bank, Tom handled the Payment Gateway business for the bank.

# The World's Best Corporate Banks Bank on iGTB

iGTB is the world's first complete Global Transaction Banking platform from the house of Intellect. iGTB's software products help Corporate Banks prepare for a new era of customer-centric services. With a rich suite of transaction banking products, across Cash Management, Payments, Liquidity, Virtual Accounts, Trade Finance and Supply Chain Finance, iGTB is an authority on integrated transaction banking products that enable banks to meet their ambition to be the Principal Banker to their corporate customers. iGTB seamlessly integrates all the transaction banking needs of corporate customers, delighting them with the Contextual Banking eXperience (CBX), a white label digital transaction banking platform to manage corporates' cash and trade digital channels. For more information on iGTB, please visit [www.igtb.com](http://www.igtb.com)

iGTB has a global presence through its offices across 18 countries.

## Global Headquarters

Level 21, 25 Canada Square,  
London, E14 5LQ,  
United Kingdom.  
Phone: +44 (0)203 972 9486.

## Registered Office

Intellect Design Arena Limited,  
CIN No: L72900TN2011PLC080183  
244, Anna Salai  
Chennai – 600006, India.  
Phone: +91-44-39874000

