



# ATOTI FOR LIQUIDITY

**Redefining enterprise wide real-time liquidity strategies**

Unlock the power of stress scenario analysis  
on your liquidity risk management framework

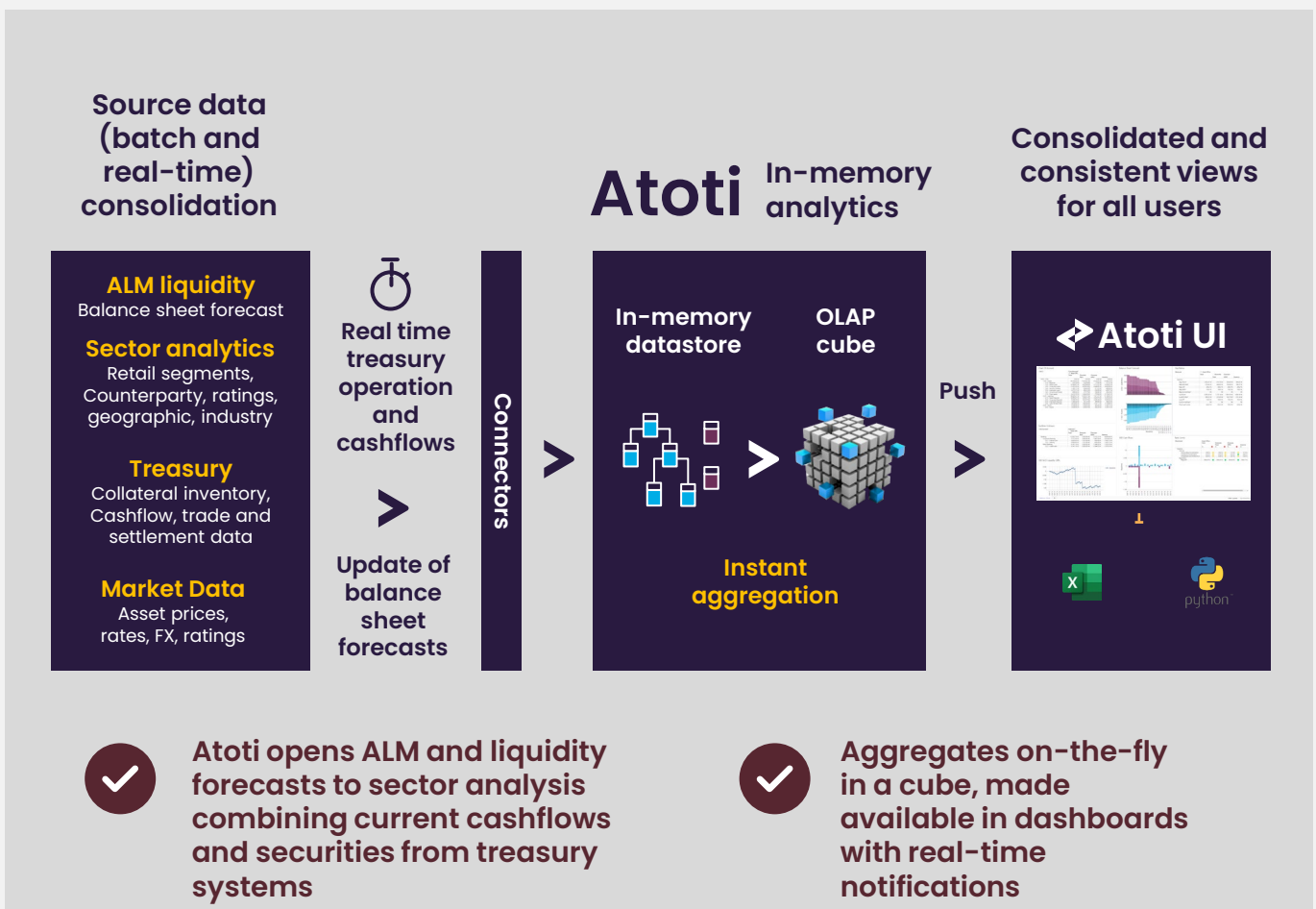
# A day in the life for liquidity risk

## Redefining enterprise-wide liquidity risk strategies

ActiveViam's flagship product, Atoti for Liquidity Risk, gives treasury and risk teams instant insight into funding positions, coverage ratios, cashflow mismatches, and liquidity buffer optimization.

It's time to know  
your risks for  
certain.

It provides a consolidated view across currencies, geographies, and business lines, enabling firms to manage liquidity proactively in normal and stressed conditions. It features a sophisticated hypothesis engine to model complex multi-layered behavioral risk scenarios on the fly.



## Know your start-of-day positions

Feed your firm's balance sheet and cashflows to Atoti from your existing ALM systems and cashflow engines. See liquidity risk positions and key ratios calculated on the fly according to rules that you define and aggregated according to your firm's legal entity structures.



Atoti is great for  
reconciliation,  
lineage and data  
quality checks.

You see a global consolidated view even if you have subsidiaries with different ALM systems and you can compare your start-of-day liquidity positions and ratios against yesterday's.

## Treasury positions, funding and flows

By giving you instant insights on day-to-day and month-to-date trends, Atoti enables you to check that your cash and high-quality liquid assets (HQLA) positions, funding, inflows, outflows, all associated regulatory and internal risk ratios, are as expected. Use it to mark any unexpected movements for investigation later.



**Don't worry.**  
Atoti evaluates and recalibrates with markets in real time while you concentrate on your job.

## Consolidated view of the risk and positions

Day to Day / Month to Date Variations And Monitoring											
DtD & MtD Limits											
Monitored	Head ... Total		Domestic Total		Overseas London				NewYork		
	Δ	!	Δ	!	Δ	!	Δ	!	Δ	!	Δ
Baseline											
DtD											
Internal											
Capital	-0.30 %		-0.14 %		-0.33 %				-0.46 %		
Liq.Funding.Concentration	0.00 %		0.00 %		0.00 %				0.00 %		
Liq.HQLA.Concentration	0.11 %		0.11 %		0.07 %				0.15 %		
Liq.current.use*	-0.00 %		0.00 %		-0.00 %				-0.00 %		
Unrealized.Loss.At.Risk.On.K	-0.20 %		-0.20 %		-0.21 %				-0.18 %		
Regulatory											
Reg.HQLA*	-4.22 %	-2.0 %	-4.24 %	-2.0 %	-4.21 %	-2.0 %			-4.21 %	-2.0 %	
Reg.HQLA.L1*	-4.22 %	-2.0 %	-4.24 %	-2.0 %	-4.21 %	-2.0 %			-4.21 %	-2.0 %	
Reg.HQLA.L2a*	0.73 %		0.96 %		0.69 %				0.52 %		
Reg.HQLA.L2b*	0.69 %		0.68 %		0.75 %				0.67 %		
Reg.LCR*	-9.09 %	-5.0 %	-9.13 %	-5.0 %	-9.05 %	-5.0 %			-9.06 %	-5.0 %	
Reg.NCO.30d*	0.00 %		0.00 %		0.00 %				0.00 %		
Reg.Survival.Days*	0.00 %		0.00 %		0.00 %				0.00 %		
MtD											
Internal											
Capital	-2.86 %		-2.86 %		-2.85 %				-2.88 %		
Liq.Funding.Concentration	0.00 %		0.00 %		0.00 %				0.00 %		
Liq.HQLA.Concentration	0.09 %		0.09 %		0.06 %				0.07 %		
Liq.current.use*	0.01 %		0.01 %		0.01 %				0.01 %		
Unrealized.Loss.At.Risk.On.K	0.33 %		0.33 %		0.30 %				0.34 %		
Regulatory											
Reg.HQLA*	-5.58 %	-5.0 %	-5.64 %	-5.0 %	-5.52 %	-5.0 %			-5.56 %	-5.0 %	
Reg.HQLA.L1*	-5.58 %	-5.0 %	-5.64 %	-5.0 %	-5.52 %	-5.0 %			-5.56 %	-5.0 %	
Reg.HQLA.L2a*	-2.38 %		-2.36 %		-2.38 %				-2.41 %		
Reg.HQLA.L2b*	-0.57 %		-0.58 %		-0.50 %				-0.60 %		
Reg.LCR*	10.48 %		10.27 %		10.37 %				10.79 %		
Reg.NCO.30d*	-10.38 %		-10.34 %		-10.28 %				-10.50 %		
Reg.Survival.Days*	0.00 %		0.00 %		0.00 %				0.00 %		

Dashboard showing start-of-day positions along with day-to-day variations

Beyond the start-of-day aggregated view; Atoti enables data to react to events that impact your cashflows and positions intraday, such as transactions from the treasury systems, as well as payment systems and account transfers in the banking book.

Atoti recomputes all impacted metrics on the fly and immediately pushes those updates through all the scenarios that you are tracking. The results are updated instantly on your dashboards.

Are any  
unexpected  
shortfalls revealed  
that need  
mitigation?



## Align with Treasury

As you look forward to the day ahead Atoti enables you to see the expected flows in and out of the firm. You can make sure that all cash positions and ratios will remain within acceptable tolerances.

Unexpected events can be analyzed thanks to the multidimensional analytics that are computed on the fly as you slice and dice and filter your way through the dataset. Supported by an unlimited number of configurable data hierarchies accessible in Atoti, teams can work together to analyze exposure by (for example) business unit, legal entity, geography, currency, product type. The analytics can be viewed by any combination of those attributes and more.

## Review stress scenarios

Are today's unexpected events reflected in the scenario modeling? The hypothesis engine enables users to review, adjust and re-run the scenarios instantly.

Users can test assumptions across funding sources, market conditions, and product behavior, see the impact on resilience and optimize strategies. Consistent, versioned data, governed workflows, and interactive, collaborative dashboards, reduce operational risk and increase transparency.

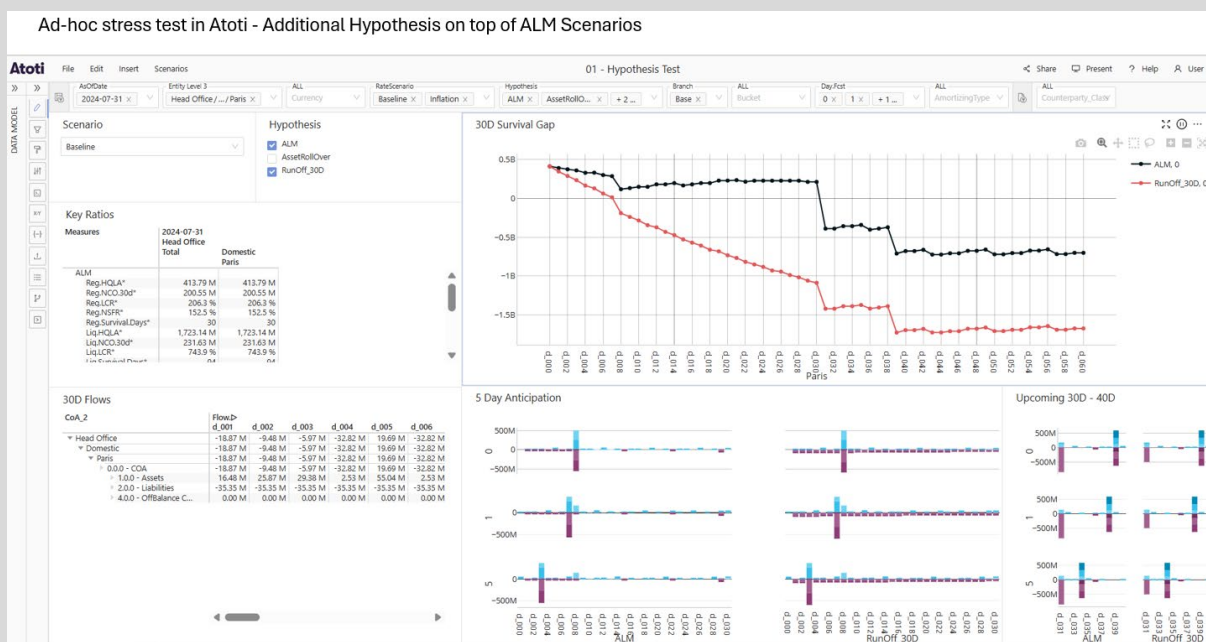


The close collaboration means faster, better decisions and aligns Treasury, Risk and Finance teams on a common platform.



Atoti transforms your work, enabling you to create new hypotheses on the fly and see the results instantly.

## What to do if an expected payment is late?



Create a new hypothesis on the fly and test it immediately - and do it many times everyday!

## Regulatory reporting analysis for strategic decision making

Liquidity teams used to rely heavily on spreadsheets to consolidate data, build stress scenarios, and track liquidity ratios. These manual processes are time-consuming, error-prone, and lack auditability. Atoti eliminates the dependency on spreadsheets by centralizing data, calculations, and reporting in a controlled environment.

With built-in audit trails, exception handling, and configurable rules, Atoti simplifies compliance reporting while increasing confidence in the data behind the numbers.

## Deep dive: support the business

Respond to internal requests for ad hoc liquidity analysis. With flexible dashboards you can respond to new initiatives making sure that business events such as a restructuring, an acquisition, or trading a new product, does not impact the firm's liquidity negatively.

## Deal with the unexpected: limit and breach monitoring

Meeting regulatory requirements like Basel III's LCR and NSFR can lead firms to hold excess liquidity buffers, tying up long term sources of funding unnecessarily. Limits can be set on any metric and Atoti monitors them continuously. It gives you early warning of problems as metrics approach thresholds and exceed limits.

Atoti provides instant calculation and explainability for regulatory ratios. This helps firms justify their positions, plan for contingencies, and optimize funding.

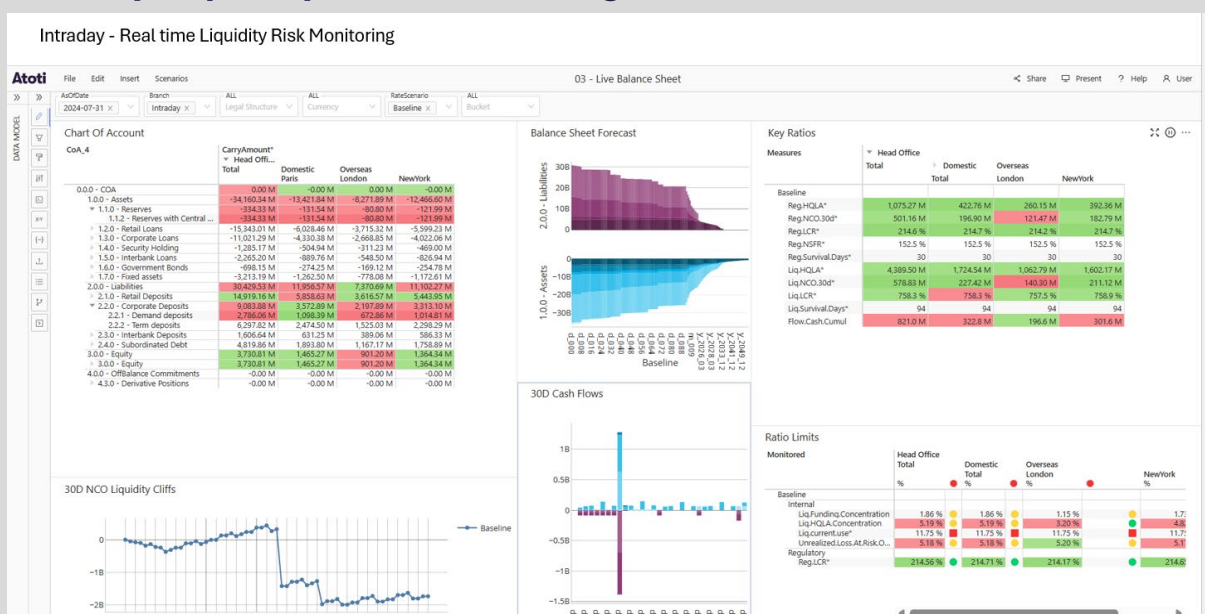


**Regulatory submissions become faster, more accurate, and easier to trace.**



**Traditional approaches are slow, manual, and reactive. Model specific events on the fly and see the results instantly.**

## Intraday Liquidity Risk Monitoring



Dashboards change in real-time, responding as intraday cashflows arrive and leave

Prepare for the unexpected such as late receivables causing limit breaches. Drill down, identify the cause, co-ordinate with Treasury to rebalance funding or adjust limits. Compare strategies side by side, understand key risk drivers, and make informed decisions on the fly to protect liquidity buffers and adjust funding strategies.

## Atoti helps you understand and sign-off end-of-day reports

Liquidity positions and reports need to be signed off-daily. Atoti enables anomalies to be identified, investigated, and corrected with adjustments. Everything is audited and checked and when it all looks good the results can be signed off.

The approval process and liquidity validation is configurable at every level to align with your firm's hierarchies and approval workflow.

## Eliminate spreadsheet risk

Excel has been used by many organizations with an immediate, tactical need to provide intraday risk exposure and end-of-day reconciliation metrics.

When it comes to cross-asset, enterprise-wide consolidation, spreadsheets reach their limit. They bring their own well-known challenges and difficulties, such as multiplicity of versions and customizations, data lineage and auditability issues, and lack of consolidated views.

Operational risk creates major reputational risk. Atoti's rigorous approach to data security, consistency and integrity makes the Atoti UI a superior solution.



**What once took hours or days can now be done in seconds.**



**Regulators are assured that the firm complies with policy and regulation.**



***"..the liquidity team is the only one that can answer any question on the fly. Other teams usually need a week"***

SEB Group

## Enterprise transparency and speed

Aggregate, allocate, analyze

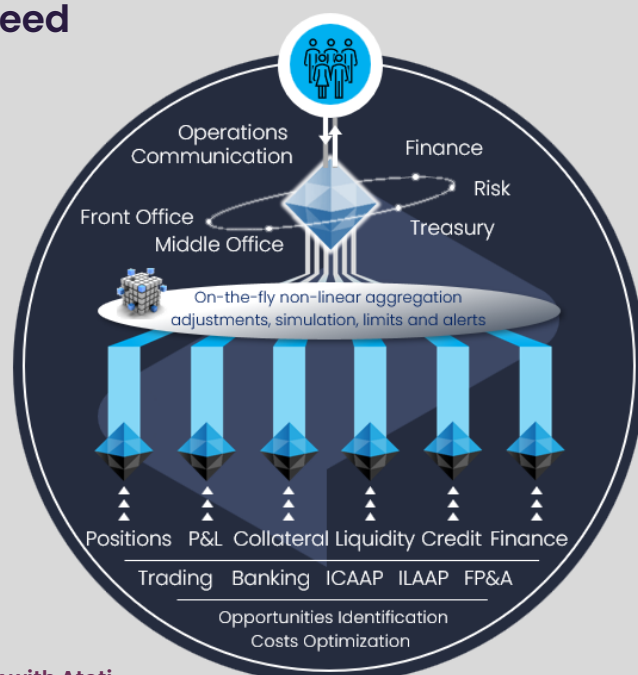
Alerts and day-to-day changes

Enhance communication

Make better decisions



**Treasurers, balance sheet managers and regulators trust the analytics from Atoti.**



Towards an enterprise-grade architecture for liquidity risk with Atoti

# What benefits does Atoti bring?



## Instant liquidity recalculation

- Lightning-fast computation of ratios and metrics.
- Configurable rebucketing of assets and liabilities according to regulatory requirements.



## On-the-fly definition and combination of risks

- Combine hypotheses across dataset to define complex behavioral analytic scenarios.
- Redefine and recombine hypotheses on the fly and see the results instantly side by side.



## Intra-day liquidity ratios

- Instantly track and update liquidity metrics without batch processing delays.
- Combine risk from multiple source systems to give a unified view of liquidity all day.
- Support multiple snapshots through the day.



## Dynamic drill-downs

- Instantly investigate and explain right down to the transactions at any level of aggregation and filtering.



## Optimized decision-making

- Real-time insights for better monitoring, understanding, and what-if scenarios for new business.
- Create and run stress scenarios on the fly. Great for hypothesis testing.
- Real-time monitor of risk indicators versus risk appetite.



## Rigorous approval and reporting

- Be confident that your liquidity position has been reconciled.
- Know that adjustments have been authorized according to policy.



## Eliminate shadow IT and spreadsheet risks

- Demonstrate that the risk is computed rigorously and that decisions are made against complete and correct data.
- Know that liquidity ratios are consistent across the firm.
- Improve productivity by providing self-service analytics.



## Futureproofs the firm

- Be ready for the unexpected.
- Be ready for new technology infrastructure, new markets, trading conditions and regulations.
- Be prepared for high data volumes and scale as the business grows.



## Do not work in the dark: make better decisions with Atoti.



# How does Atoti do it?



## In-memory OLAP cube engine

- Uses an in-memory database with full MVCC model, lockless transactions and bitemporal (time travel) features.
- Features lightening-fast aggregation, slicing, and drill-down across billions of records.
- Highly scalable, elastic and distributed architecture supports historic analytics on demand over hundreds of business days.



## Real-time data ingestion and incremental updates

- Ingests data from multiple sources in real time.
- Supports incremental updates without requiring full reloads.
- Can support intraday full reloads without interruption.



## Multidimensional data model

- Uses a flexible, multidimensional schema and semantic layer.
- Enables users to analyze and pivot data by any combination of attributes (e.g., legal entity, branch, currency, division, profit center, country and more).



## Dynamic aggregation and on-the-fly calculations

- Recalculate complex measures such as LCR.
- Metrics recomputed in real time using on-the-fly aggregations and built-in formula logic.



## Hybrid Cloud

- Atoti supports both on-premise and cloud data sources.
- Atoti also supports hybrid configurations where some data nodes are deployed on premise and some others on cloud technology.



## Embedded Governance, Audit and Limits Framework

- Built-in data lineage, access control, limit monitoring, and audit trails.
- Atoti ensures enterprise-grade data integrity and operational transparency.

## Key Facts from a Tier 1 deployment

Daily liquidity projection

200mn+ cashflows per day

Ingestion of intraday cashflows from treasury and payment systems

400+ time buckets from monthly to annual

25 years data projected forward

200+ dimensions of analysis

16Tb data set with concurrent read and write

24x7 global operation

30+ entities

200+ users



Hybrid operation is great for ad-hoc historical analytics.





## About ActiveViam

ActiveViam is a fast-growing financial data analytics solution provider. Built for and trusted by leading financial institutions, ActiveViam delivers active intelligence for complex financial analytics. It combines unrivaled technology, continuous innovation and exceptional people to unlock the power of real-time and granular data at scale. Designed as a high-performance semantic layer, ActiveViam's flagship product Atoti, allows clients to implement built-in front office and risk business solutions while accessing customizable technology.

ActiveViam is present in the world's leading financial marketplaces with presence in London, New York, Singapore, Sydney, Hong Kong, Paris and Frankfurt.

For more information please visit [activeviam.com](https://activeviam.com) or follow on [LinkedIn](#).

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