



Lombard Lending Risk Monitoring solution

**Supporting banking clients in monitoring
concentration risk and key risk processes**

Appian

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kpmg.ch

Introduction

The Lombard Lending Risk Monitoring solution was built using a low code platform technology, which enhances case management and dashboard/reporting capabilities.

It supports the Lombard lending process from beginning to end:

- Data feeds from the client's banking platform (e.g. Avaloq) as well as from third-party data providers such as Bloomberg and Reuters.
- Development of automatic reporting on concentration risk in the Lombard loan portfolio, including data analytics and key risk indicators (KRIs).
- Quick visualization of key concentration risk exposures thanks to a dynamic dashboard.
- Workflow management of those key risk events that may arise during the Lombard loan lifecycle. such as margin calls.
- Stakeholder orchestration

Solution: a new way to manage key risks

The KPMG solution was designed with Lombard lending risk management best practices in mind and can be configured according to each client's internal policies and risk appetite framework.

The solution has two types of portals:

■ Risk Management Portal ("CRO perspective"):

a dashboard displaying concentration risk analytics and assigned tasks is available for the 2nd line of defense (2LoD) officers, such as credit risk officers. The dashboard makes monitoring of the collateral as well as managing the margin call process easy by coordinating the tasks of all stakeholders involved. The solution also keeps track of other aspects, such as:

- Lombard Facilities: this tab includes all the contractual details of the Lombard loan portfolio, including ID, market value of the pledged collateral, collateral value, max LTV, loan exposure, margin available and product type.
- Operational Overview: this tab provides a snapshot of the tasks (e.g. the number of assigned, overdue, and completed tasks) assigned to the stakeholders involved in monitoring the Lombard lending portfolio.
- Operational Analytics: this tab provides an overview of efficiency metrics calculated along the workflow process. In particular, a task performance by user breakdown is available by selecting the specific process models along the Lombard loan lifecycle.

The Risk Management Portal allows each 2LoD officer (e.g. credit and operational risk, legal counsel) to access the dashboard and see the respective operational tasks assigned to them at any time along the Lombard loan lifecycle.

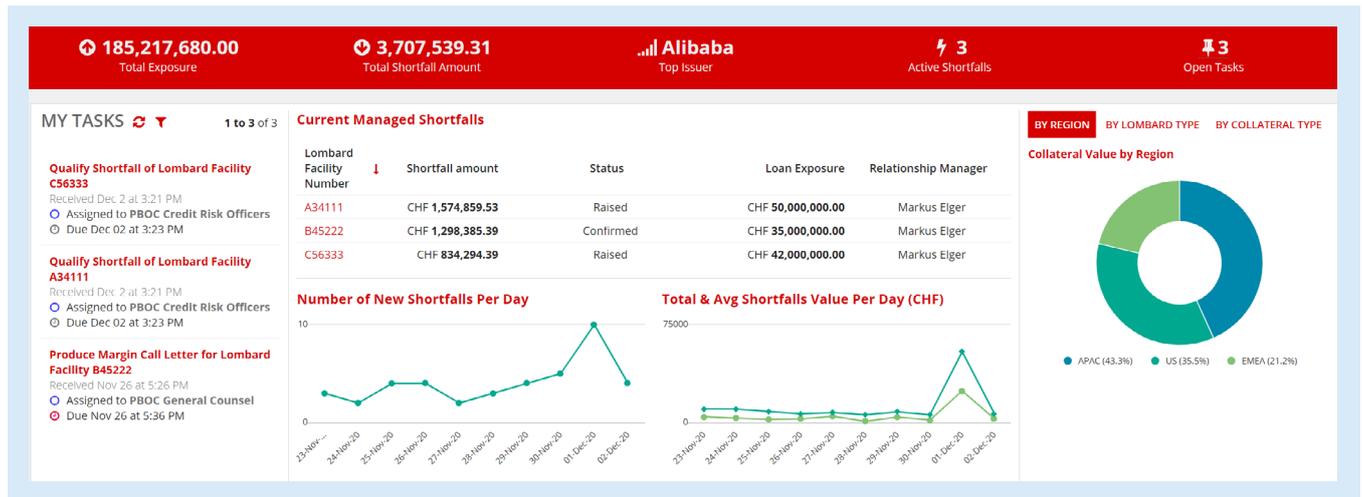
■ **Relationship Manager Portal ("RM"):** a dashboard specifically displaying Lombard loan transactions for the RM's client portfolio as well as the lending facility lifecycle, incl. key events, such as the margin calls.

All data and names reported in this brochure are purely for illustrative purposes and are not a factual representation of reality.

Margin call process

Detection of shortfalls

The 2LoD officer (e.g. credit risk officer) monitors the entire Lombard loan portfolio with the help of the dashboard below where concentration risk KRIs are shown in dynamic charts. Thanks to a task tab, the risk officer can track the Lombard risk management activities in real time.



Concentration risk at collateral portfolio level is shown in the upper red ribbon, while the breakdown per issuer, sector, country and client is displayed in the line graph and pie chart.



The dashboard allows the credit risk officer to drill down into the specific Lombard loans that show a shortfall and review the key contractual parameters, for instance loan exposure, collateral value and maximum Loan-to-Value (LTV). At the same time, the entire collateral portfolio for the transaction in scope is displayed, including the LTV granted for each financial instrument in the portfolio.

The upper part of the interface below allows the credit risk officer to monitor the shortfall status. It is also possible to interact with all of the stakeholders involved in the monitoring process thanks to a multi-device internal correspondence chat. The chats are recorded in real time, thus allowing for an audit trail and adding content to the coordination between users automated by the workflow platform.

The audit log tab guarantees full transparency of the Lombard loan lifecycle by recording all the key events.

The screenshot displays the 'Shortfall Status' section with a progress bar indicating the current stage: 'Raised'. Below this, there are two main information panels: 'Lombard Facility Information' and 'Client Information'. The 'Lombard Facility Information' panel includes details such as Facility ID (A34111), Security Margin (CHF 25,396,108.36), Market Value (CHF 82,163,880.00), Loan Exposure (CHF 50,000,000.00), Collateral Value (CHF 56,767,771.64), Margin Available (CHF 6,767,771.63), and MAX LTV (average) (69%). The 'Client Information' panel includes First Name (Rees), Last Name (Lewcock), Date of Birth (Nov 25, 1988), Domicile Country (UY), Email (rlewcock0@g.co), Phone Mobile (+598 293 728 2014), RM (markus.elger@appian.com), and Wealth Category (UHNWI).

Below these panels is a 'Collateral Details' table with a search bar and a refresh button. The table has columns for Id, Asset Class, Quantity Balance, Collateral Exposure, Ltv Percent, Ltv Stressed Percent, Coll Expo Average Daily Price Vol, Liquid Vs Illiquid Collateral, Instrument Id, and Instrument Short Name. The table contains 6 rows of data:

Id	Asset Class	Quantity Balance	Collateral Exposure	Ltv Percent	Ltv Stressed Percent	Coll Expo Average Daily Price Vol	Liquid Vs Illiquid Collateral	Instrument Id	Instrument Short Name
1	Equity	2000	CHF 422,980.00	0.70	0.70	0.01	Liquid	1	Microsoft
2	Equity	50000	CHF 14,000,000.00	0.70	0.40	0.38	Liquid	2	Apple
3	Equity	20000	CHF 4,400,000.00	0.80	0.80	0.17	Liquid	3	Facebook
4	Equity	100000	CHF 10,327,000.00	0.65	0.40	1.43	Liquid	4	AstraZeneca
5	Equity	100000	CHF 23,606,000.00	0.70	0.40	1.31	Liquid	5	Alibaba
6	Equity	20000	CHF 27,000.00	0.70	0.70	0.08	Liquid	6	Eni

As soon as a shortfall has been flagged, the credit risk officer has to confirm the type of shortfall, namely:

- **Technical:** for any kind of reason related to the lag time of recording in the bank's IT system
- **Excess:** situations where there are temporary excesses of exposure over existing limits due to new transactions (not due to market movements)
- **Shortfall:** real shortfall related to market movements, which will lead to a change in the market value of the collateral pledged in the Lombard loan transaction.

The screenshot displays the 'Confirm Type of Shortfall' section. The 'Shortfall Status' progress bar is still at 'Raised'. Below the progress bar, there are three buttons: 'TECHNICAL', 'EXCESS', and 'REAL SHORTFALL'. The 'REAL SHORTFALL' button is highlighted in red, indicating it is the selected option.

Below these buttons, there are two main information panels: 'Lombard Facility Information' and 'Client Information'. The 'Lombard Facility Information' panel includes details such as Facility ID (C56333), Security Margin (CHF 21,991,530.00), Market Value (CHF 66,641,000.00), Loan Exposure (CHF 42,000,000.00), Collateral Value (CHF 44,649,470.00), Margin Available (CHF 2,649,470.00), and MAX LTV (average) (67%). The 'Client Information' panel includes First Name (Margaretha), Last Name (Roj), Date of Birth (Jul 26, 1954), Domicile Country (RU), Email (mroj2@theforest.net), Phone Mobile (+7 311 280 4200), RM (markus.elger@appian.com), and Wealth Category (HNWI).

RM communicates with the client

After the credit risk officer classifies the shortfall as real, the Relationship Manager is notified through the dashboard (i.e. email on mobile and desktop devices) to communicate with the client, and give the client 2 days to remediate the shortfall by selecting the following options:

- Reduce the loan exposure by depositing funds.
- Pledge additional approved collateral to increase the collateral value of the portfolio.
- Sell enough collateral in order to decrease the overall LTV level.

Inform your client MARGARETHA ROJ regarding the shortfall of the client's Lombard Facility no. 3 about the following:

A shortfall of Lombard Facility C56333 was detected. The client will receive a formal Margin Call Letter which will inform on the T&C's. The Client will have 2 days to work with you - the Client's Relationship Manager - to resolve the shortfall. Otherwise the Collateral will be liquidated.

SHORTFALL

Lombard Facility Information				Client Information			
Lombard Facility	C56333	Security Margin	CHF 21,991,530.00	First Name	Margaretha	Last Name	Roj
Type Of Product	Lombard loan (concentrated)	Market Value	CHF 66,641,000.00	Date Of Birth	Jul 26, 1954	Domicile Country	RU
Loan Exposure	CHF 42,000,000.00	Margin Available	CHF 2,649,470.00	Email	mroj2@themeforest.net	RM	markus.elger@appian.com
Collateral Value	CHF 44,649,470.00	MAX LTV (average)	67%	Phone Mobile	+7 311 280 4200	Wealth Category	HNWI

Collateral Details

Search Collaterals SEARCH

ID	Asset Class	Quantity	Balance	Collateral Exposure	Ltv Percent	Ltv Stressed Percent	Coll Expo	Average Daily Price	Vol	Liquid Vs Illiquid Collateral	Instrument Id	Instrument Short Name
22	Equity	20000		CHF 397,200.00	0.70	0.00	0.07			Liquid	21	Ally Financial
23	Equity	20000		CHF 90,000.00	0.70	0.00	0.02			Liquid	22	Blackberry Limited

Production of the margin call letter

In the CRO portal, the General Counsel officer can automatically produce the margin call letter by adding legal provisions and amending the content of the letter.

Confirm your consent with the Margin Call Letter

Client Contact Information	Generated Margin Call Letter
<p>First Name Margaretha</p> <p>Last Name Roj</p> <p>Relationship Manager markus.elger@appian.com</p> <p>Wealth Category Code HNWI</p> <p>Street Line1 79 Anhalt Park</p> <p>Postal Code 78205</p> <p>City Name San Antonio</p> <p>Country Code US</p>	<p>12/2/2020</p> <p>Margaretha Roj 79 Anhalt Park 78205 San Antonio US</p> <p>Dear Margaretha,</p> <p>Please be advised that the equity of your Lombard facility C56333 is now below the margin requirement to hold your current open positions. Please be aware that if this is not resolved your positions will start to be liquidated in order to maintain the required level. As per our Client Agreement, you are responsible for managing and maintaining the margin levels in your account at all times, as we are not required to inform you that you have fallen below your margin level requirement.</p> <p>Warm regards,</p>

Individual Provisions

Add the following text to the existing template

UPDATE LETTER

Liquidation of collateral

If the margin call is not met within the specified time period, the dashboard allows the credit risk officer to instruct the trading floor to liquidate the collateral in order to either bring the loan exposure to an acceptable gearing level or to close the transaction. The dashboard is then cleared; hence, there are no further shortfalls that need to be managed.

Dashboard Summary:

- Total Exposure: 212,005,180.00
- Total Shortfall Amount: 0.00
- Top Issuer: Alibaba
- Active Shortfalls: 0
- Open Tasks: 0

MY TASKS: 1 of 0 (No items available)

Current Managed Shortfalls: Currently there are no shortfalls that need to be managed.

Number of New Shortfalls Per Day: [Line chart showing fluctuations over time]

Total & Avg Shortfalls Value Per Day (CHF): [Line chart showing fluctuations over time]

Collateral Value by Region: Donut chart showing distribution by region: VS (42.8%), AN (27.2%), EM (17.8%).

Further applications

The following applications are some further examples of the adoption of a low-code technology platform such as Appian by financial services firms:

- Client Onboarding: standardize and automate the end-to-end onboarding process across all areas involved
- CRO Dashboards: automation of data extraction and transformation, visualization of analytics, and automation of reports
- Automation of GDPR processes: automation of complex compliance processes and orchestrating the Subject Rights Requests, and Data Impact Privacy Assessment processes
- Product Oversight Governance: organize bank products in a central catalogue enabled with product life management so they remain compliant with new regulations
- KYC/CDD: orchestration of the CDD process with integration of front-to-end systems and external source checks
- 3rd Party Risk Assessment: due diligence and automation of data collection for 3rd parties

How can we help?

- KPMG has designed a **best practice comprehensive ERM Framework** comprising 7 key components. For each of the components we have detailed expectations of what is required and a **clear view of leading and lagging practice**.
- We go beyond regulatory compliance, bringing you **added business value** that allows you to **focus on real threats and opportunities** rather than spending your resources on running outdated and duplicative structures and systems.
- Our **in-depth understanding of risk management** and regulatory expectations, coupled with practical, hands-on advice means we can support you in designing an ERM Framework **tailored to your business operating model** – because this is not a “one size fits all” business.
- Working together to implement and **embed the framework sustainably in your daily business**, we will support you to close skill and capability gaps and upgrade technology enablers.

Our team

Highly experienced dedicated risk management professionals

- We have a team of professionals with extensive experience in risk management
- We know what good looks like, what works and what does not
- Leveraging from our deep industry experience means we can help you avoid pitfalls and challenges
- We understand your business model and tailor our approach accordingly



Access to industry expertise and benchmark information



Ready-to-go tools to identify impacts and solutions



In-depth experience to accelerate progress



Innovative ideas to bring new perspectives

Your contacts

If you have additional questions do not hesitate to contact your KPMG contact or reach out to our specialists:

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