CAPILEVER

Liquid Asset Based Lending

Capilever is a **software company** that helps financial institutions prepare for the next wave of Open Banking with focus on Credits and Investments. Our team of technology and banking finance experts has joined forces to deliver world-class investment-and-lending software for the financial services industry.

Liquid Asset Based Loans

Imagine you have a short-term **cash need** [e.g. university fees for your kids] but you do have some long-term securities in your investment portfolio. Instead of selling these assets, wouldn't it be great if your bank allows you to temporarily block these assets and get a cheap short-term loan facility to bridge the gap? At Capilever we believe that l**ending responsibly against your investments is an underexploited market opportunity.** If delivered well with the right level of automation and self-service capabilities, it creates great value for both banks and their customers.
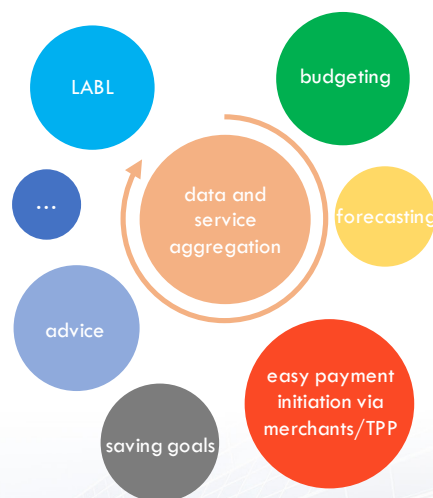
Lending against liquid marketable assets like securities and bonds, has been around for quite some time. Nowadays, we find **liquid asset-based lending (LABL)** or Lombard loans mostly in the private banking segment. High net worth individuals can borrow against some of their assets. In the corporate space this type of lending facility is also frequently available, offering flexible credit lines and working capital for large corporates.

Finally, a great opportunity is available in the **retail and SME banking space.**

At Capilever we strive to enrich the lending and investment offerings of banks in their digital channels. Daily banking apps and PFM/BFM solutions are evolving fast! Banks are gradually adding new services for budgeting, forecasting, advice, etc. Integrating the ability for bank customers to quickly finance their liquidity needs, using their long-term investments, is a perfect extra service to be incorporated in your daily banking offering.

Investments   **LABL credit**

LABL

budgeting

...

forecasting

data and service aggregation

advice

easy payment initiation via merchants/TPP

saving goals

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SMARTLY ACTIVATE YOUR ASSETS

Capilever LABL software solution

Capilever's **"Liquid Asset Based Lending" product (= LABL)** provides a **fully automated**, **end-to-end**, **white-labelled pre-packaged** solution for liquid asset-based lending. This solution allows bank customers to get a credit by blocking some of their investment products within the banks, like securities, bonds, term deposits, etc. Thanks to an online, user-friendly STP business flow, this credit becomes a self-service offer, allowing to reduce operational costs to a minimum and increase the customer base.

The LABL product provides an end-to-end solution to the origination and servicing of LABL credits:

Origination

- Opening an LABL Framework Agreement, acting as a loan portfolio in which different LABL credits (with same holders as the Framework Agreement) reside
- Requesting a new LABL credit (installment loan or revolving credit)
- Selecting the assets to act as collateral for the loan
- Signing the credit & manage the pay-out

Servicing

- Manage the details of an LABL Framework Agreement (e.g. configure notification outputs, configure which automated actions can be taken…)
- Overview of all loans in the LABL Framework Agreement
- Servicing actions on existing LABL loan, such as early repayment, changing duration, adapting revolving credit line amount, close a credit line or moving a loan to another Framework Agreement (so to other holders)
- Overview of all collaterizable assets, with ability to add/remove collaterals to the collateral portfolio (if collateral value is enough for the outstanding credit amount)
- Alerting of an insufficient collateral value (with proposed actions to correct)
- Alerting of a missed repayment for an installment loan
- Manage succession
- Automatic actions when no manual action taken after alert for an insufficient collateral value or missed repayment for an installment loan

System administration

- Define parameters for origination of LABL credits (e.g. minimum and maximum loan amount, minimum and maximum duration for installment loans…)
- Define parameters for servicing of LABL credits (e.g. number of days between an alert and an automatic action)
- Configure the model to calculate the collateral value of an asset

At the heart of the LABL solution is the algorithm to calculate the **collateral value of the collateral portfolio.** This value is calculated by multiplying the market value of each collateral position, with a collateral weighting percentage (i.e. with weighting = 100% - haircut value).

The market value of a position is standardized, so the differentiation of Capilever's solution comes from an optimal calculation of the haircut value. The haircut value should correspond with the future value-at-risk (for a period equal to the average loan duration and a probability/confidence of X%, typically 99%) of the position.

This value-at-risk is however difficult to calculate (requires lot of data and a complex calculation), very variable in time (i.e. depending on the data in the past on which it is based) and not always very accurate for future predictions. Furthermore, the VaR of a collateral position is not the same as a VaR of the collateral portfolio, as there are correlations in price fluctuations between different positions. Taking these correlations into account would make the model very user unfriendly, as adding / removing a collateral position, would modify the collateral value of other existing collateral positions, which is not desirable.

Instead the LABL software will estimate (via a scoring algorithm) the future value-at-risk of the assets based on asset type (equity, life insurance, saving account, bond, derivative…), asset subtype (e.g. corporate bond, convertible bond, …), bond rating (S&P, Moody's or Fitch rating), currency, stock exchange (major stock exchange, acceptable stock exchange, emerging market, other), average daily turnover / market capitalization / number of outstanding stocks, and volatility.

Benefits

An LABL credit provides several benefits both to the customer acquiring the credit, as for the bank selling the credit.

Customer benefits

An LABL credit provides several advantages to a customer, compared to traditional consumer credits:

- **A very flexible credit**
    - Choice between revolving credit line & installment credit
    - Flexible choice of amount (incl. fast increase / decrease of credit line)

- **No need to indicate what money will be used for**, i.e. a typical consumer credit will ask where money is used for, unless you ask for a credit without purpose, but interest rates for such a product are extremely high

- **Low & transparent pricing:** as all credits are backed by assets, which are extremely easy to liquidate by the bank, the pricing can be low. Furthermore, as customer needs to provide enough collateral for the loan, there is no need to differentiate the price on amount, purpose of the loan nor on the credit risk of the customer. Only the type of credit and duration of the credit are used for the pricing, giving it a very easy & transparent pricing

- The **existing assets used as collateral can still be actively managed**, i.e.
    - Assets acting as collateral continue to generate income (coupons & dividends) & capital increase
    - Assets can still be sold, if there are enough other assets so that collateral value remains enough.

- **Fully online** credit processing with **immediate availability of cash** (immediate pay-out after confirmation)

- **Pre-approved credits** (i.e. as fully backed by liquid assets)

Bank Benefits

Offering LABL credits provides also several advantages to the bank:

- **Extra credits being sold:**
  - Banks are currently offering asset-based loans only to private banking customers, due to the strong manual tailor-made nature of it
  - Automating this product can reduce time and costs for private banks and help open this product offering to a larger customer segment, thus considerably increasing the volume of credits sold (due to ease of credit and low prices)
  - The target customer segment, holding assets (that don't need to be liquidated in short-term), would normally (rarely) make use of credits, but instead sell off part of their investments or postpone their acquisition

- **Increase customer retention:** while the credit is outstanding, the customer is not only linked to the bank for the credit, but also for the blocked collaterals (investments). Though this may change in the future when Open Banking APIs become available for credits and investments

- Customers can **invest more spare money in more high-margin products.** Currently it is advised to keep up to 3 times your monthly spent in Liquid assets. Via a cheap, highly liquid and easy source of credit, this could be reduced, so that customers can put more money in higher return assets with lower liquidity

- **Reduced risk** for the bank thanks to highly liquid pledging. Credit scoring becomes independent of the individual client rating or due diligence, as mentioned above. With LABL all credits are automatically covered by highly liquid assets, directly taking care of the stricter capital buffer requirements imposed by regulations (Basel II, III)

- **Fully online** processing (i.e. **no manual interventions** required) and perfectly compatible with the innovation agenda of most banks, for example as part of their daily bank app or PFM/BFM solution

	Car loans	LABL loans	Consumer loans
Interest rate	~1%	~1.5%-2.5%	> 5%
Characteristics	Well-known competitive market	Innovative financing product	Higher interest rate loans
Target group	Not impacted by higher interest rate LABL loans → No cannibalization	Targeting new customer segment	Target segment typically does not hold liquid assets → No cannibalization

Furthermore, the LABL product will not cannibalize the revenues of the existing consumer credits, like installment loans and revolving credit lines (overdraft), as:

- Interest Rate of the LABL product will be higher than the interest rate for a consumer credit on a car
  - Large market share of consumer credits not at risk by the LABL product
  - Other types of consumer credits almost never taken by customers with liquid assets deposited at the bank

- Revolving Credit
  - LABL revolving credit can only be opened, when you have already overdraft on account. This overdraft is used first. The LABL revolving credit can only be used as a credit on top

Solution overview

The LABL software package is a **packaged software solution**, which can be **easily configured** via parameters and **customized** via software extensions.

The package is delivered by Capilever, deployed on-premise at the bank (or on a cloud account of the bank) and configured/customized either by Capilever consultants or by the bank itself. Capilever will deliver regular version upgrades, which can be deployed by the bank and for which backwards compatibility of the configurations/customizations is guaranteed. The software solution consists of 4 parts:

Front-end layer

- A white-labelled responsive web front-end, developed in React, which allows to perform all above described functionalities.

- 3 flavors of this web front-end exist:
  - Customer user
  - Bank employee user
  - Administrator

- Basic style-sheet customizations are possible on these screens, but when bank wants to fully integrate and style in the house-style it is recommended to build their own front-end. As front-end is decoupled from application layer, via well-documented REST-based APIs, these can also be used by the new custom-built front-end.
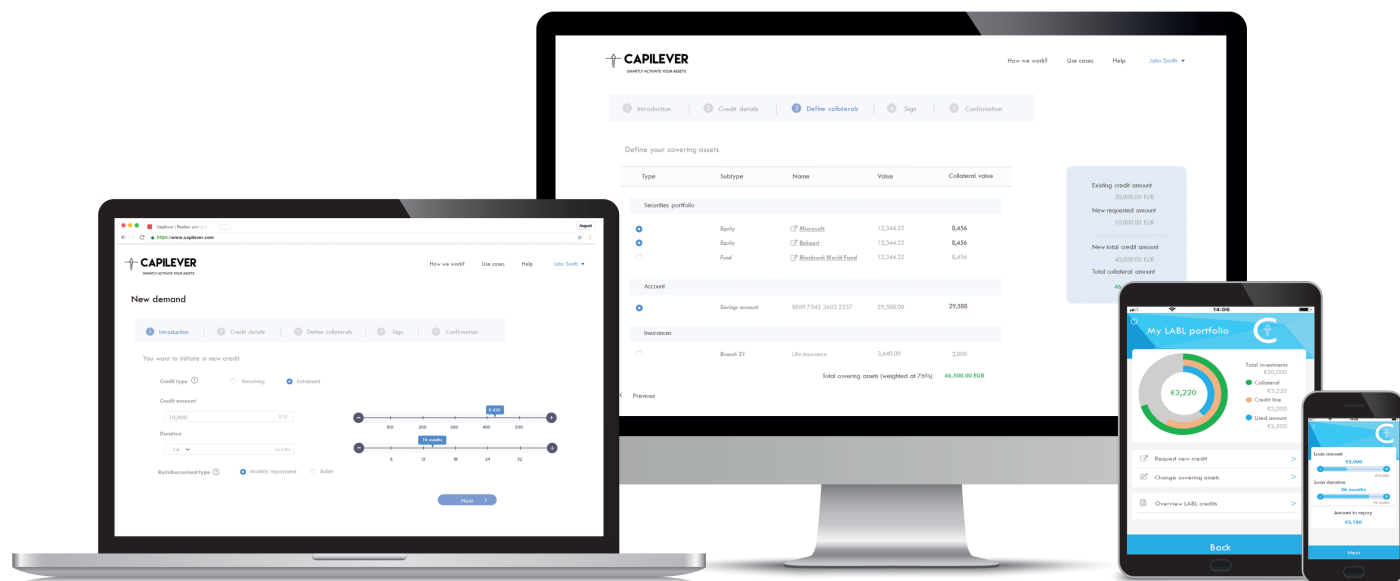
Application layer

- Contains all logic described in this document and provides necessary APIs to the front-end layer to provide necessary application logic

- The layer is built up of several modules:
    - Origination of Framework Agreement
    - Origination of Credit
    - Servicing of Credit
    - Parameterize the application
    - Collateral value (= haircut algorithm) calculation
    - Monitoring & Alerting
    - Automatic actions

Database layer

- A standard SQL database, with a pre-defined, yet customizable data model
- A meta-dictionary allows easy configurability and automatic documentation of the LABL data model.

Integration layer

- The LABL system requires intense integrations with the existing systems of the bank.
- 2 types of APIs:
    - Well-documented REST-based APIs to retrieve info from the LABL platform or make updates to it
    - APIs of the bank called by the LABL system. The application layer is foreseen to call several pre-defined REST-based APIs, which of course will not match with the bank's services. The integration layer will transform those standard LABL APIs to the proprietary APIs of the bank and foresees several mocks (against the pre-defined internal REST-based APIs) in order to setup and test the application without integration with any bank systems.

About us

Capilever is a software company that helps financial institutions prepare for the next wave of **Open Banking** with focus on **Credits** and **Investments**.

Our team of technology and banking finance experts has joined forces to deliver world-class **investment-and-lending software** for the financial services industry.

Our **current product offering** provides a fully automated, end-to-end solution for **liquid asset-based lending** (LABL). Your **daily banking app** or PFM/BFM tool needs flexible financing solutions? We help you bring liquid asset-based lending (LABL) to a **larger retail and SME audience.**

Our product comes with several **well-defined APIs,** which can be easily integrated within your bank, with strong focus on orchestration and **automation** of underlying **credit and securities processes.**

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CLEVER API