CAPILEVER

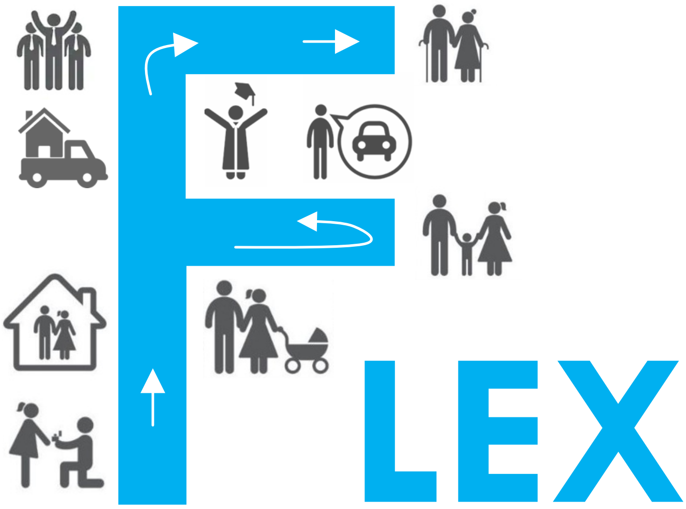
Financial
Life
Event
Xeduler

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.

Balance your income and expenses over moments in life when you need them most

Everybody knows the quote: "*When you're young you have time and energy but no money. When you get older you have money and energy but no time. And later when you finally have time and money, you no longer have energy*". In the philosophy of Capilever that banks should help their customers manage their financials and financial risk, we believe banks are ideally positioned to improve this situation.

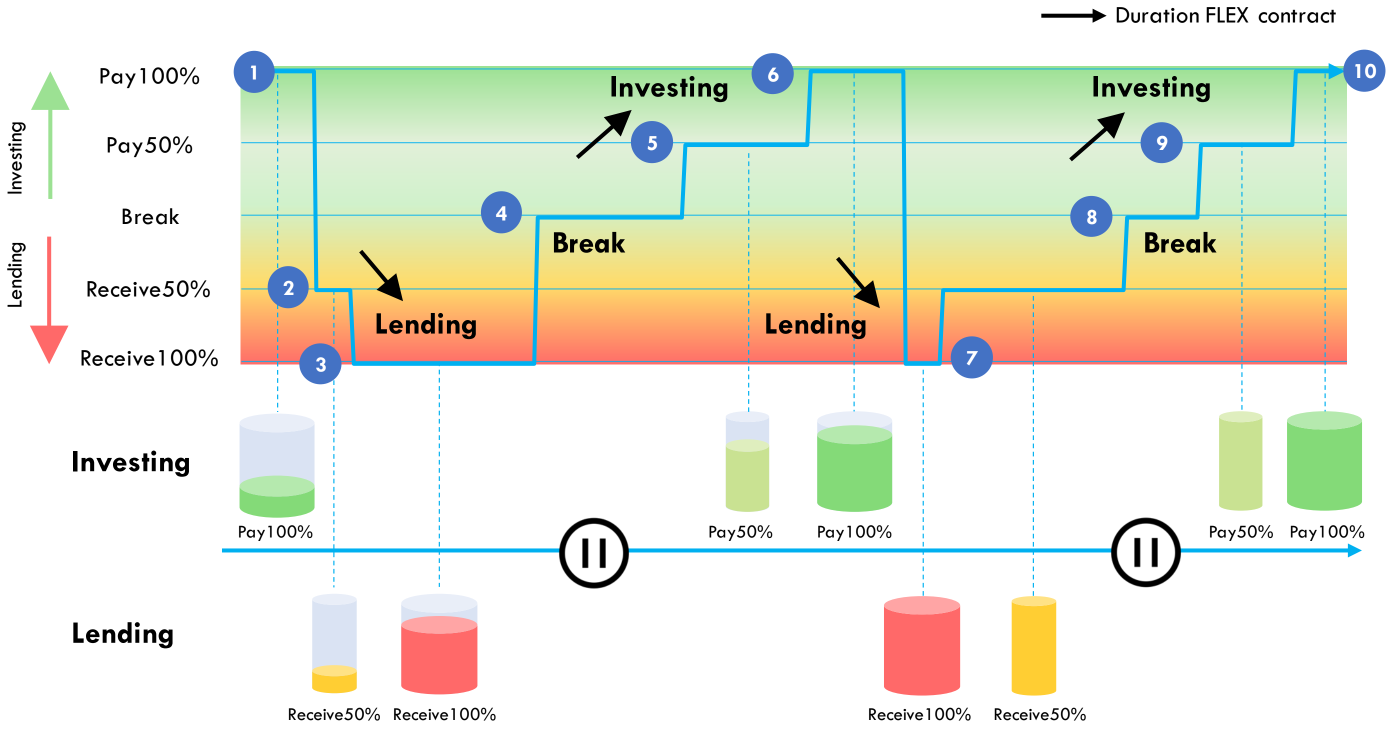
Capilever's **FLEX** product, being a **combination** of a **flexible long-term loan** and a **long-term investment product**, can help to improve this situation. Over the lifetime of the contract, the customer gets several slots during which he will either receive money or pay money. Customers can attribute the slots themselves, in order to best **match their life situation**.



Concretely when opening the contract, the customer chooses **the duration and a base amount, also known as the FLEX amount**. This FLEX amount is the amount on which the FLEX contract is based. This means that any payment by the client or pay-out to the client will be this FLEX amount, either 100% or 50%, compensated for inflation and for accrued interests (debit or credit depending on the balance of the FLEX contract). In the compensation for interests, the FLEX contract caps the increase or decrease of the amount, compensated for inflation, with a percentage configurable by the bank. This in order to keep the impact of inflation and interests on the payment slots within tolerated limits, by spreading excess inflation and interest amounts over the contract lifecylce (based on the knowledge that certain FLEX payment / repayment slots are still planned in the future).

As target value or benchmark for the FLEX amount, it is advised that the individual customer or household takes between 10% to 25% of their monthly income. This will be illustrated in more details in some of the examples later in this document.

FLEX principle



Life events [example]

1. Start of FLEX contract, client decides to invest first in this example
2. Birth of 1st child with new costs (day-care, etc.)
3. Birth of 2nd child + Dad decides to work 80%
4. Mum made a promotion, however it's still financially challenging so they take a "break"
5. Kids go to school, no more day-care costs
6. Dad starts working full-time again
7. Kids go to college
8. Kids have graduated and leave the house
9. Mortgage is paid back, more breathing room for paying back
10. FLEX contract is closed, in this case client repays outstanding capital during the last slots

During the lifecycle of the contract, the customer can decide between **5 action types:**

- Pay100%: Full payment of the (compensated) base amount
- Pay50%: Partial (= half) payment of the (compensated) base amount
- Receive100%: Full receival of the (compensated) base amount
- Receive50%: Partial (= half) receival of the (compensated) base amount
- Do nothing

During financially difficult periods the customer can choose for a Receive100%/50% of the FLEX amount, while in better periods the customer can choose for a Pay100%/50% of the FLEX amount.

The amounts paid/received on a monthly basis are monitored and adjusted in such a way that at the end of the contract there will be zero balance, i.e. the customer does not need to pay / does not receive a remaining amount.

The customer also has the option to prematurely end the contract. In that case the value of the contract at that moment will be either received (if positive balance) or needs to be paid (if negative balance), with a penalty for the early termination of the contract.

Example of FLEX contract

In order to understand the behavior of a FLEX contract, it is best to explain it based on a concrete example.

Suppose a FLEX contract for 30 years (= 360 months) with a FLEX base amount of € 500.

This gives the following number of slots of each action type:

- Customer pays full amount (Pay100%) = Integer division of number of months by 5 = 72
- Customer pays half amount (Pay50%) = Integer division of number of months by 5 = 72
- Custom receives full amount (Receive100%) = Integer division of number of months by 5 = 72
- Customer receives half amount (Receive50%) = Integer division of number of months by 5 = 72
- Do nothing = Integer division of number of months by 5 + Remainder of integer division of number of months by 5 = 72 + 0 = 72

We consider here following parameters for the calculation:

- Debit interest rate (interest rate charged by the bank when FLEX contract has negative position) = 3,60%
- Credit interest rate (interest rate paid by the bank when FLEX contract has positive position) = 1,25%
- Inflation rate = 1,80%

To show the behavior of the contract, we consider 3 scenarios, i.e. 2 extreme scenarios and 1 standard scenario:

- **Extreme scenario 1**: Customer invests first everything and then is paid out
- **Extreme scenario 2**: Customer receives first everything and then pays back
- **Standard scenario**: A typical scenario where choice of action type matches the life situation of the customer

Compensation for indexation and accrued interests

The FLEX contract calculates on a monthly basis the compensated amount the customer receives or has to pay. This is the amount as requested by the customer (Pay/Receive 100%/50% or Do nothing), compensated for inflation and accumulated interests on the FLEX contract position. The compensation aims to adjust the amount for inflation (so that the buying power remains the same over the life-cycle of the contract), but also to ensure that at the end date of the contract the position is equal to €0, without the customer having to receive/pay large amounts at the end of the contract.

Note that this compensation is also capped as follows (using configurable settings):

- When customer must pay money (action type = Pay100% or Pay50%):
  - Maximum 35% increase compared to inflation compensated base amount (the negative scenario of increasing the customer's payment should be capped to protect the customer for having to pay too large amounts)
  - Maximum 75% decrease compared to inflation compensated base amount (the positive scenario of decreasing the customer's payment should be capped to ensure that in a later stage the customer will not have to pay too much or receive too little)
- When customer receives money (action type = Receive100% or Receive50%):
  - Maximum 75% decrease compared to inflation compensated base amount (the negative scenario of decreasing the customer's received amount should be capped, as customer will be counting on this money for his expenses)
  - Maximum 150% increase compared to inflation compensated base amount (the positive scenario of increasing the customer's received amount should be capped to ensure that in a later stage the customer will not have to pay too much or receive too little)
- When customer does not switch action type, there is a maximum deviation of 15% compared to the amount of last month

This gives following results:

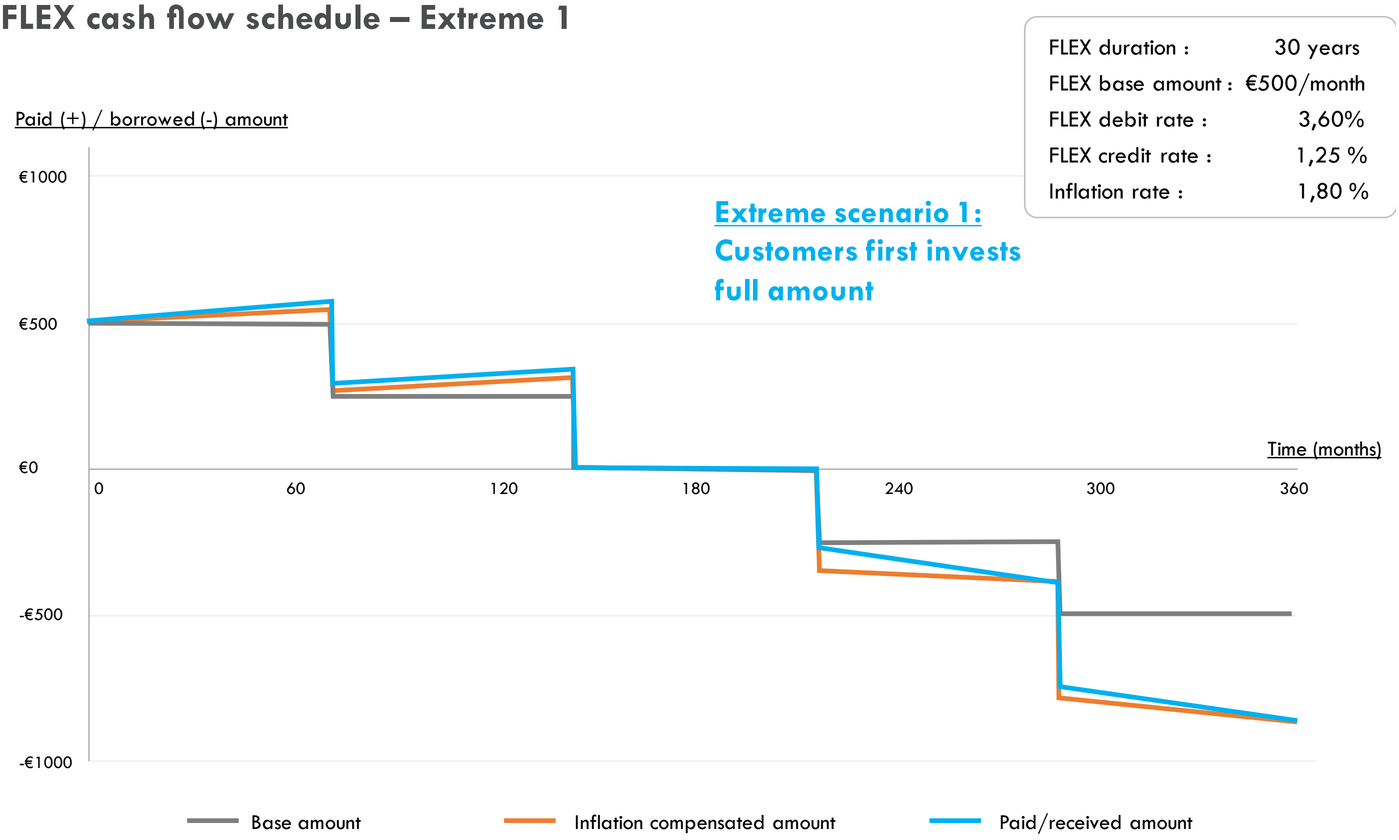
- **Extreme 1 scenario**: customer gains € 17.666 of credit interests
- **Extreme 2 scenario**: customer pays € 54.679 of debit interests
- **Standard scenario**: customer (net) pays € 14.341 of debit interests

This shows that the interest amount paid by the user, depends on the allocation (timing) of the different action types, the bank's debit and credit interest rates, the FLEX base amount and the contract duration.

Below graphs show the evolution of payments for the 3 scenarios. Each graph shows 3 lines:

- **Base amount** (*grey line*): the base amount (€ 500) requested as per the action type
- **Inflation compensated amount** (*orange line*): the base amount line compensated for inflation
- **Amount** (*blue line*): the actual amount paid/received by the customer, compensated for both inflation and interests

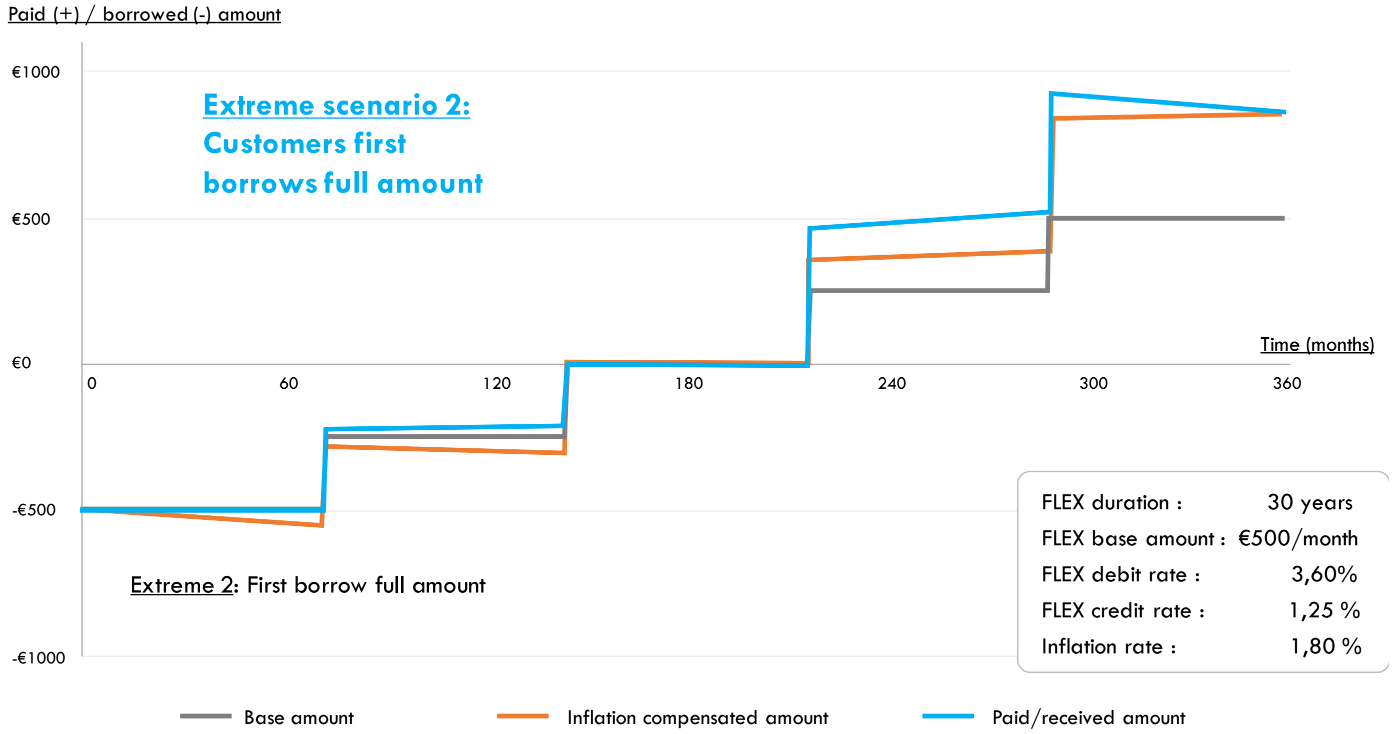
FLEX cash flow schedule – Extreme 1



Extreme scenario 1: Customers first invests full amount

FLEX duration :	30 years
FLEX base amount :	€500/month
FLEX debit rate :	3,60%
FLEX credit rate :	1,25 %
Inflation rate :	1,80 %

FLEX cash flow schedule – Extreme 2

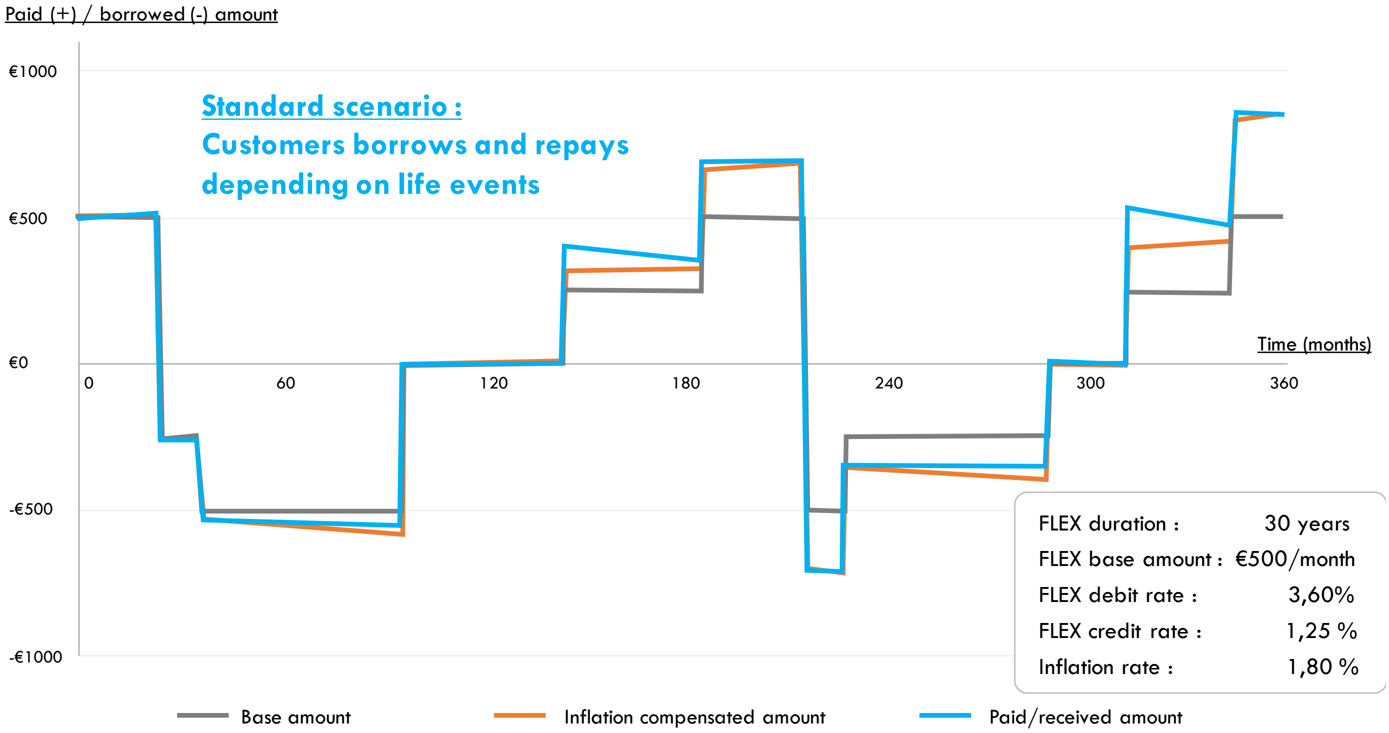


Extreme scenario 2: Customers first borrows full amount

Extreme 2: First borrow full amount

FLEX duration :	30 years
FLEX base amount :	€500/month
FLEX debit rate :	3,60%
FLEX credit rate :	1,25 %
Inflation rate :	1,80 %

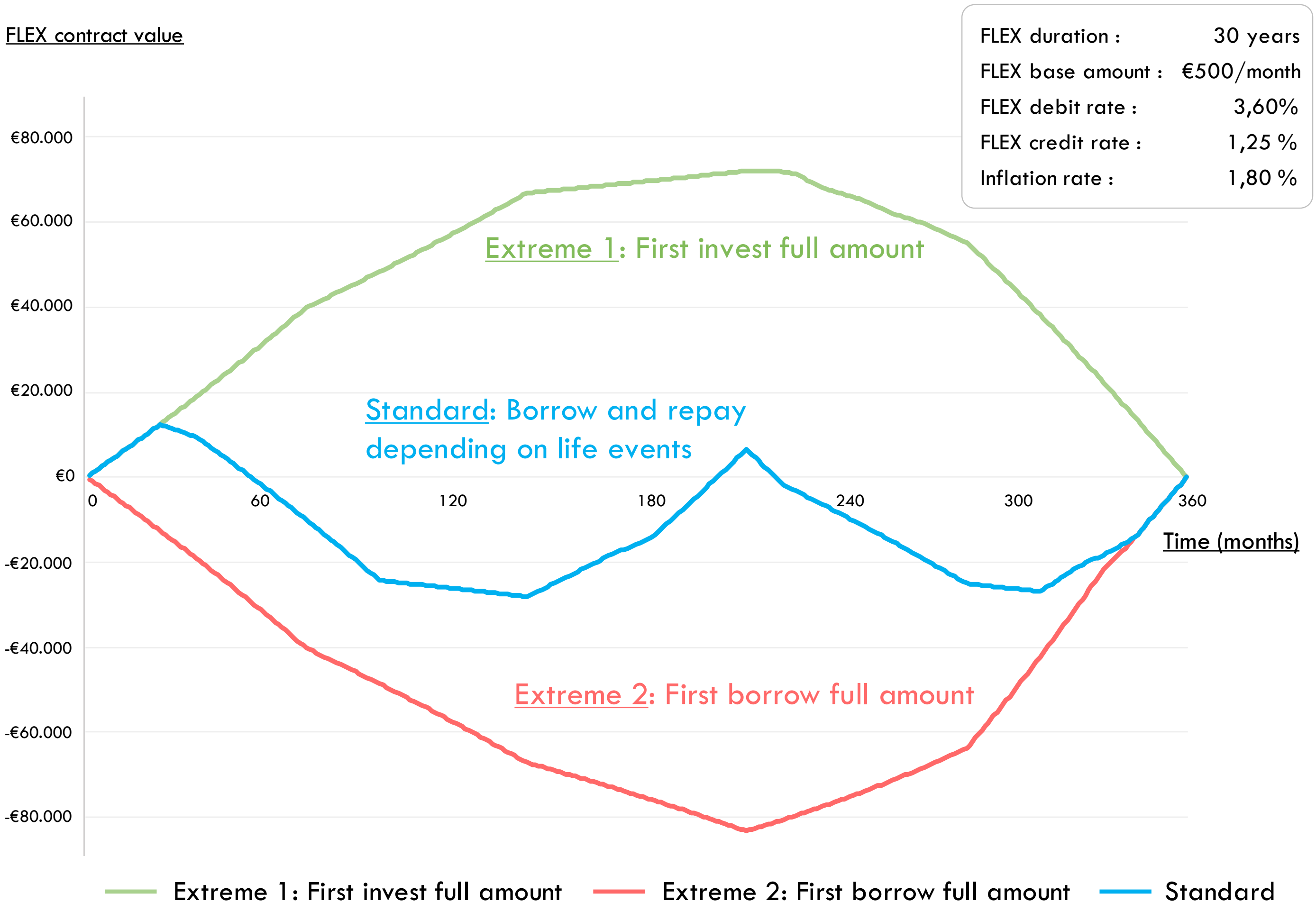
FLEX cash flow schedule – Standard



Standard scenario : Customers borrows and repays depending on life events

FLEX duration :	30 years
FLEX base amount :	€500/month
FLEX debit rate :	3,60%
FLEX credit rate :	1,25 %
Inflation rate :	1,80 %

The graph below shows the current position or net value of the FLEX contract during its lifetime. This is calculated by the net sum of all "Pay" and "Receive" flows, with a monthly interest rate amount added to the net position at that moment. More details of this calculation are given further down in this document when explaining the FLEX calculation engine.



FLEX duration :	30 years
FLEX base amount :	€500/month
FLEX debit rate :	3,60%
FLEX credit rate :	1,25 %
Inflation rate :	1,80 %

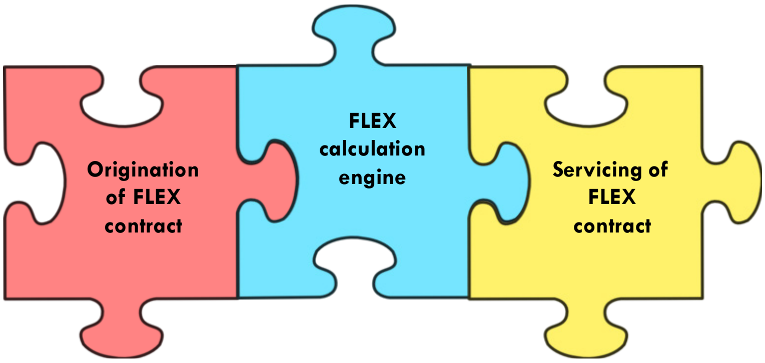
Extreme 1: First invest full amount

Standard: Borrow and repay depending on life events

Extreme 2: First borrow full amount

Capilever FLEX software solution

Capilever's FLEX software solution provides a **fully automated, end-to-end, white-labelled pre-packaged** solution to setup the above described FLEX product within a bank.



The tool consists of **3 modules**:

- **Origination** of a new FLEX contract
- **Calculation engine** to calculate several FLEX amounts for the management of the contract
- **Servicing** an existing FLEX contract

__Origination of a new FLEX contract__

Customer opens FLEX contract with specific duration and FLEX amount

Credit scoring is performed

Customer simulates different FLEX plans

Customer selects plan and signs the FLEX contract

The origination of a new FLEX contract consists of a few steps:

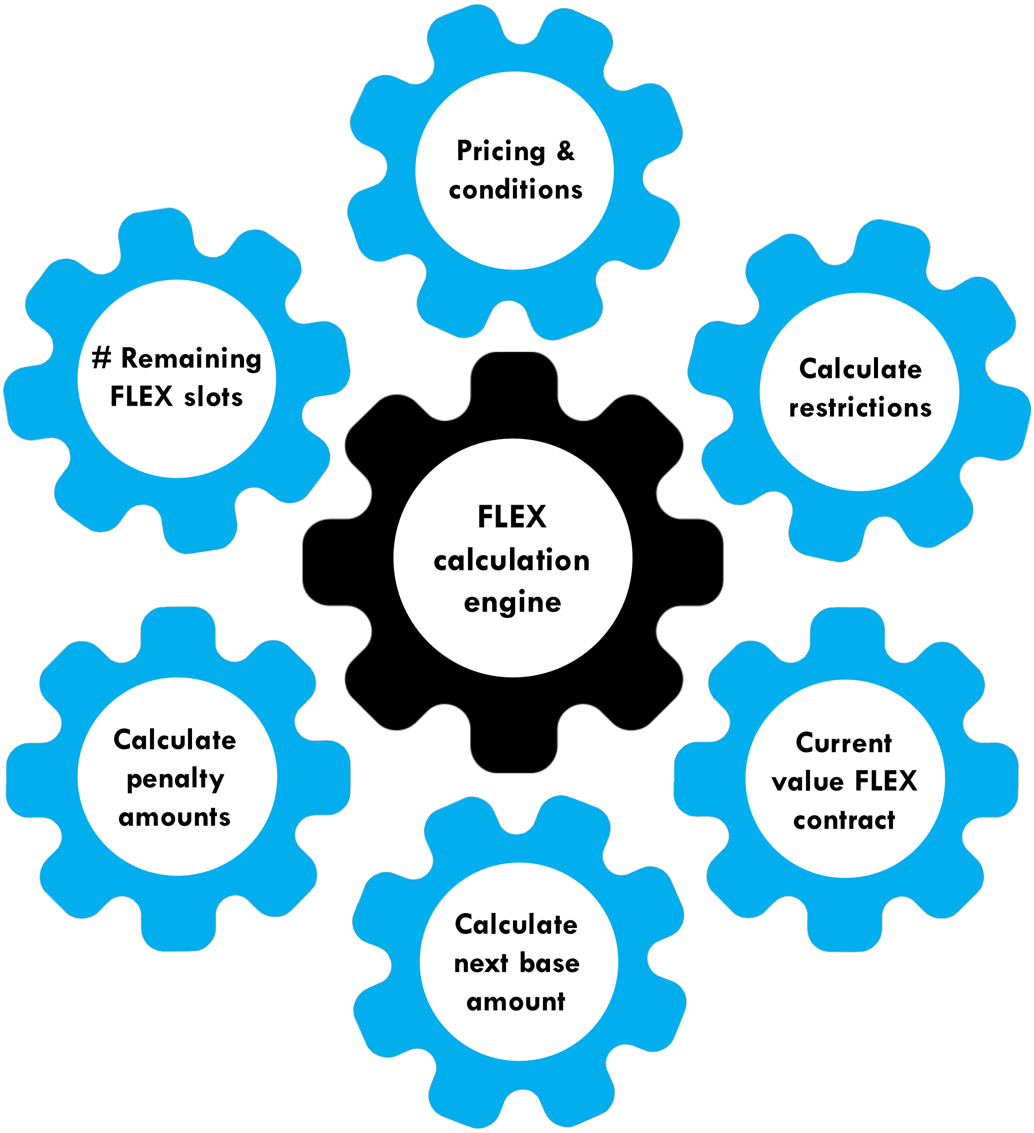
- Step 1: Customer opens a FLEX contract, which is defined by:
  - Duration
  - Base amount
  - Owners of the contract (only one borrower/investor or also co-borrower/co-investor)
  - Decide whether base amount needs to be compensated for inflation or not (default is to be compensated for inflation)
  - Bank can configure minima and maxima for duration & base amount. By default, the application has following default values:
    - Minimum duration = 10 year
    - Maximum duration = 35 years
    - Minimum base amount = 100 EUR
    - Maximum base amount = 1.000 EUR

- Step 2: A credit scoring is performed. For the credit scoring the application uses the existing scoring system of the bank. As parameters, we assume scoring of a consumer credit with following parameters:
  - Loan duration: FLEX contract duration, divided by 5
    - In above example: 6 years = 72 months
  - Loan amount:
    - X = total number of slots for action type = "Receive100%"
    - Loan amount = Base amount x 85% x X x 1,5
      - In above example: € 500 x 0,85 x 72 x 1,5 = € 45.900
      - The factor 1,5 is required to also consider the actions of type = "Receive 50%" (always equal to number of "Receive100%" action types)
      - The factor 85% is a configurable parameter. The bank can increase or decrease this factor depending on the risk aversity of the bank
      - Note that not the full exposure is considered (otherwise inflation increase of the received amount should also be considered). The bank can decide to compensate for this by increasing the configurable weight (currently set to 85%) to more than 100%

- Step 3: The FLEX tool simulates different FLEX plans, i.e.
  - FLEX tool shows the credit and debit interest rate, which are used for the simulation
    - Note that the credit and debit interest rates are determined by a pricing engine, considering the credit scoring of the customer and the conditions of the FLEX contract
  - User can input an average inflation rate. The system uses a default inflation rate, but user can adapt for the simulation
    - Note that during the FLEX contract, the actual inflation rate will be used
  - User can select a pre-defined scenario for the simulation:
    - Default scenario (typical course of life)
    - Extreme scenario 1 – within restrictions (saving first then receiving)
    - Extreme scenario 2 – within restrictions (receiving first then paying back)
  - User can also simulate a specific scenario, by filling in the different action types spread over the duration of the contract
  - User can return to step 1 to adapt certain characteristics of the contract

- Step 4: Acceptance of the conditions and signing of the contract
  - Customer accepts conditions of the FLEX contract
  - Customer inputs the account number from which money will be debited / to which money will be credited (automatic creation of direct debit instruction)
  - Customer digitally signs the opening of the FLEX contract

Calculation engine



The calculation engine calculates several parameters:

- Number of slots (i.e. months) for the 5 action types:
  - Pay100% = FLOOR (Duration in months / 5)
  - Pay50% = FLOOR (Duration in months / 5)
  - Do nothing = FLOOR (Duration in months / 5) + MOD (Duration / 5)
  - Receive100% = FLOOR (Duration in months / 5)
  - Receive50% = FLOOR (Duration in months / 5)

- Pricing engine for determining debit and credit interest rates
  - Rate determined based on current interest rate, scoring of customer and contract details (duration & amount)

- Calculation of restrictions:
  - At the start of the FLEX contract, and based on the credit scoring, a few restrictions can be added, i.e.
    - Calculate a maximum negative position authorized for the customer (resulting from too many money requests in a row, which are not preceded by sufficient money payments). If this maximum is reached, next action will automatically be adjusted to “Do nothing” or to “Pay100%” or “Pay50%”
    - Calculate maximum number of consecutive money requests
    - Calculate maximum ratio/delta between “Pay” action types and “Receive” action types. For example, the bank can configure that the customer may never have 2 times more “Receive” actions than “Pay” actions, from the moment that more than *x*% of the “Receive” actions have been used
    - Maximum consecutive number of “Receive” action types
    - Minimum number of “Pay” action types during first *X* months
    - Maximum FLEX contract duration
    - Maximum FLEX base amount
  - When a payment is missed during the contract, automatically all “Receive” action types are blocked until missed payment is resolved

- Calculation of value of the FLEX contract
  - This algorithm calculates on request the value of the FLEX contract. This is calculated by the net sum of all “Pay” and “Receive” flows, with a monthly interest amount added to the net position at the end of the month

- Calculation of next base amount: the algorithm calculates on a monthly basis the amount to be paid/received depending on the selected action type. This is done in following steps:
  - Step 1: Determine base amount based on action type, i.e.
    - Receive100%: (+1) x Base amount
    - Receive50%: (0,5) x Base amount
    - Do nothing: 0 EUR
    - Pay100%: (-1) x Base amount
    - Pay50%: (-0,5) x Base amount
  - Step 2: Adjust base amount for inflation
  - Step 3: Compensate for accumulated interests / inflation, aiming to bring final FLEX contract position to 0 (in a gradual way). This compensation is calculated based on:
    - Difference between actual value of the FLEX contract and value based on FLEX base amounts (without compensation for inflation and interest)
    - Ability of remaining action types to compensate for inflation
  - Step 4: Capping of compensation using configurable cap values. The caps avoid that amounts would deviate too strongly from the action type that the customer is requesting
  - Step 5: Second capping of compensation, by checking the difference compared to previous amount paid / received (only when previous action type was the same action type). This capping prevents too large fluctuations between different months
  - Step 6: Calculate amount by adding capped (with 2 capping rules) compensation amount to the base amount adjusted for inflation

- Calculation of penalty in case of early termination
  - When customer wants to early terminate the FLEX contract, he will receive/pay (respectively when value is positive or negative) the outstanding value of the FLEX contract, decreased/increased with a penalty
  - The penalty is equal to the interest of 3 months (debit or credit) on the outstanding FLEX contract amount. The number of months as penalty is configurable in the application. For example:
    - FLEX contract has value of € -20.000 and debit interest rate = 2,80%. In this case the penalty = € 140, so customer will have to pay €20.140 to close the contract
    - FLEX contract has value of € 20.000 and credit interest rate = 1,20%. In this case the penalty = € 60, so customer will receive € 19.940 when closing the contract

Servicing an existing FLEX contract

Servicing of the FLEX contract

- ✓ Define next action type
- ✓ Early closure of FLEX contract
- ✓ Change feeding account
- ✓ Change contract holders
- ✓ Adapt FLEX duration
- ✓ Incident management

Define next action type

Once a FLEX contract is opened, the contract needs to be serviced. The main action for a contract is defining the next action type. This is handled by a specific screen, in which:

- Customer can adapt which action type (Pay100%/50%, do nothing or Receive100%/50%) they want. Customer has 2 options:
  - Input the specific action type for the upcoming month or even for the rest of the contract duration
  - Set a specific action type, which will automatically be repeated each month, until customer changes
- The FLEX tool shows:
  - How many slots of each action type remain
  - If there are any action restrictions, then this specific action type will be blocked
  - How many receival action types remain until a restriction will be activated
  - For the next month, the calculated amount (based on selected action type)
- Customer can always request a simulation of the FLEX contract for the remaining period
  - System suggests a default filling (with action types) for remaining contract duration, but user can adapt the filling to get a custom simulation for his (predicted) situation
- Customer is alerted:
  - If he has not defined an action for the upcoming month. If no action is defined in time, an action will automatically be selected based on following priority rules (only use next priority, if no remaining slots available of higher priority):
    - Prio 1: Do nothing
    - Prio 2: Receive50%
    - Prio 3: Receive100%
    - Prio 4: Pay50%
    - Prio 5: Pay100%
  - If customer has set an action type to repeat, but restriction is activated or there are no slots left for this action type. If user does not define another action type in time, an action will automatically be selected based on following priority rules (only use next priority, if no remaining slots available of higher priority):
    - If current action type = Receive100%/50%:
      - Prio 1: Other type of receive
      - Prio 2: Do nothing
      - Prio 3: Pay50%
      - Prio 4: Pay100%
    - If current action type = Do Nothing:
      - Prio 1: Receive50%
      - Prio 2: Receive100%
      - Prio 3: Pay50%
      - Prio 4: Pay100%
    - If current action type = Pay100%/50%:
      - Prio 1: Other type of pay
      - Prio 2: Do nothing
      - Prio 3: Receive50%
      - Prio 4: Receive100%

Early closure of FLEX contract

- Customer can request to close the FLEX contract before the contractual end date. At that moment customer will pay/receive the outstanding position of the FLEX contract, with a penalty (see above “Calculation Engine”)
- Note that this mechanism is also used in case of succession, except that at that moment there is no penalty involved. Before succession is finalized, the contract is blocked, meaning that there are no actions executed anymore

Change feeding account & change involved parties

The user can:

- Select another feeding account for the automatic debiting and crediting of the requested FLEX actions. The user can select any current account with same holder composition as the FLEX contract.
- Adapt the composition of involved parties linked to the FLEX contract. This can happen in case of wedding, divorce or other personal reason. When the composition is changed, a new scoring is executed. There are a few scenarios:
  - Scoring has improved compared to before: this can mean that any applicable restrictions on the contract can be removed
  - Similar scoring: no change to the contract
  - Scoring has worsened: depending on the degree this can result in:
    - No change to the contract
    - (Additional) restrictions added to the FLEX contract
    - Forced early closure of the contract

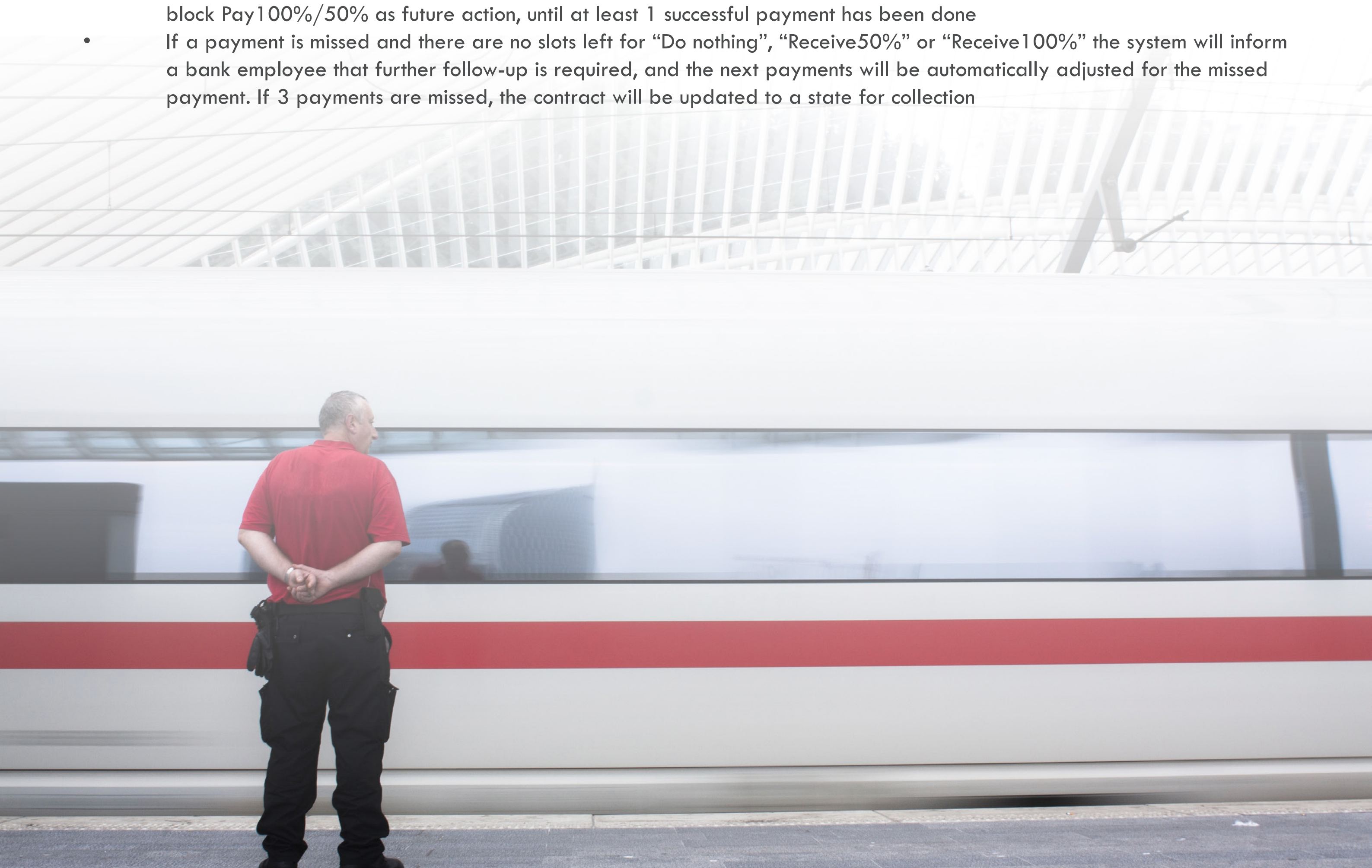
  In all scenarios, it will also be required to adapt the feeding account for the FLEX contract.

Adapt duration of the FLEX contract

- User can change the duration of the FLEX contract (within the minimum and maximum boundaries set by the bank):
  - When user decreases duration, system will select the action type for which most slots are used. The minimum duration should be the number of consumed slots of this action type, multiplied by 5. Suppose for example that customer has consumed already 32 “Receive100%”, 22 “Receive50%”, 17 “Do nothings” and 15 “Pay50%”. At that moment user can reduce duration up to 32 x 5 = 160 months (i.e. approximately 13 years)
  - When user increases the duration, system equally increases the number of available slots of each action type
- If user wants to (i) modify the base amount or (ii) reduce the contract duration below 5 times the most used action type (and hence not enough time for compensating with other FLEX slot types), then he is forced to early close the contract

Incident management

- When a payment (i.e. execution of a Pay100% or Pay50% action type) could not be executed, due the feeding account not having enough cash, an alert to the customer will be generated
- System will however automatically consider it as an action type = “Do nothing”. If there are no slots left for “Do nothing”, system will execute a Receive50% or Receive100%, if any slots are left for these action types. Furthermore, system will block Pay100%/50% as future action, until at least 1 successful payment has been done
- If a payment is missed and there are no slots left for “Do nothing”, “Receive50%” or “Receive100%” the system will inform a bank employee that further follow-up is required, and the next payments will be automatically adjusted for the missed payment. If 3 payments are missed, the contract will be updated to a state for collection



Benefits

The FLEX product of Capilever provides a flexible, yet structured way, for customers to balance their finances.

Customer benefits

- Customer can **balance** his income/expenses in a **very flexible way over a long period**
- **Improving financial literacy**: instead of customer having to think in term of financial products (investment and credit products), the bank is offering a service combining both, which puts the needs of the customer first. This allows customer, who are not that acquainted with financial products, to have a product tailor-made to their needs (customer centricity)
- Forces customer to **think long-term**: by showing in an easy way, the number of remaining slots for each action type, the customer gets a very simple and clear view on his future finances. The plan of allocating the action types each month, gives a sort of **financial framework** for the customer, which is easy to understand yet flexible, but not too flexible so that the customer's debt rate is not dramatically increased

Bank Benefits

- Extra revenues linked to the new product (debit interest rate significantly higher than credit interest rate)
- Strong customer retention, due to the long-term nature of the contract

Product Differentiation

The product combines a credit and investment product in 1 product, which makes it unique in its kind.

The credit part of the FLEX contract can be situated somewhere between an overdraft (revolving credit) and a consumer credit, i.e. installment loan without object. The product is less flexible than an overdraft (only 2 action types for receiving money and only once a month), but also less costly than an overdraft. On the other hand, it is more flexible, but also more expensive than a consumer credit with object or mortgage credit. In order to mitigate credit risk, the FLEX contract uses restrictions. For example by defining the minimum number of "Pay" actions required during certain periods (in order to check client solvency), the maximum negative balance, the maximum FLEX base amount, etc. More details on these FLEX restrictions are given in the "Calculation Engine" chapter above. The nature of the FLEX product is that at the start, the target customers (i.e. typically young people) (i) do not know their upcoming financial life events, and (ii) do not have available collaterals. Therefore the use of collaterals to mitigate risks would defeat the purpose of FLEX. However, we can imagine banks gradually requesting collaterals or margin calls, but this is currently out of scope of our FLEX product here. By applying the FLEX restrictions banks can manage the credit exposure risk, even better than is currently the case for consumer loans without object.

The investment part of the FLEX contract can be situated between a saving account and term deposit account. The FLEX product is less flexible than a saving account but provides a better interest rate. It is more flexible than a term account but has a worse interest rate.

From a pricing perspective this means that:

- The credit interest rate (for a positive FLEX contract value) is:
  - slightly higher than a saving account
  - a few base points lower than the corresponding term deposit for the duration of the FLEX contract

  For a 20-year FLEX contract, a typical gross interest rate of around 1,25% would be reasonable

- The debit interest rate (for a negative FLEX contract value) is:
  - lower than for an overdraft (currently around 10,5%)
  - lower than for a consumer credit without purpose (currently around 5,5-6%), due to the long-term nature
  - higher than a consumer credit with object or mortgage credit

  A typical pricing would be around 3,6%.

Product Roadmap

The product has a few extensions which could be considered, if product becomes successful within the bank, i.e.

- Link the FLEX contract with an insurance product: This insurance product would charge a premium on monthly basis (premium determined by base amount, number of remaining slots where customer needs to pay money and the type of coverage), but customer would be exempted from any remaining payments in case of:
  - Job loss and/or
  - Serious illness of one of the contract owners and/or
  - Decease of one of the contract owners

- As the FLEX contract gives a flexible, but still structured framework for managing finances and can help young families in better balancing their finances, this product has also an interesting political and socio-economical appeal. It could therefore be envisaged that the product would be fiscally promoted by the local governments

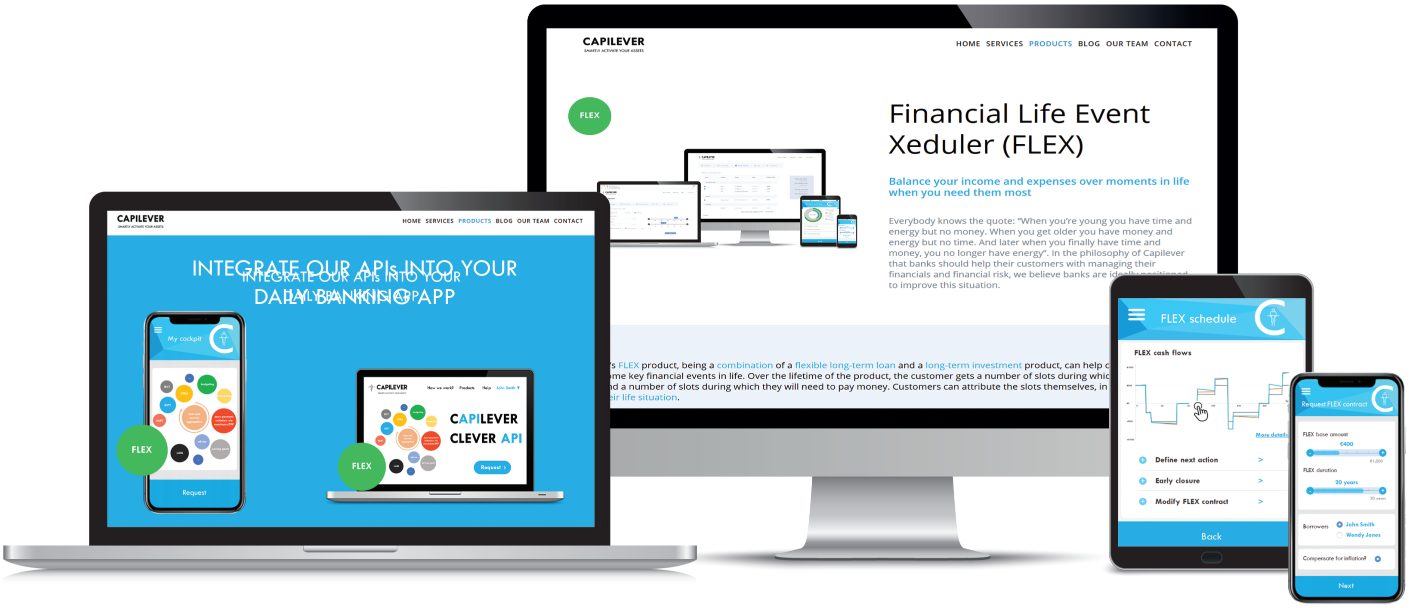
Solution overview

The FLEX tool 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 aforementioned functionalities
  - 3 flavors of this web front-end exist:
    - Customer user
    - Bank employee user
    - Administrator
  - Basic style-sheet customizations are possible for 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



CAPILEVER
SMARTLY ACTIVATE YOUR ASSETS
HOME SERVICES PRODUCTS BLOG OUR TEAM CONTACT
FLEX
INTEGRATE OUR APIs INTO YOUR DAILY BANKING APP
My cockpit
Request
CAPILEVER
CLEVER API
FLEX schedule
FLEX cash flows
More details
Back
Request FLEX contract
Next

Financial Life Event Xeduler (FLEX)

Balance your income and expenses over moments in life when you need them most

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d a number of slots during which they will need to pay money. Customers can attribute the slots themselves, in
ir life situation.

- Define next action >
- Early closure >
- Modify FLEX contract >

FLEX base amount: €400 (€1,000)

FLEX duration: 20 years (30 years)

Borrowers: ● John Smith ○ Wendy Jones

Compensate for inflation? ●

- **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 FLEX contract
    - Calculation engine
    - Servicing of FLEX contract

- **Database layer:**
  - A standard SQL database, with a pre-defined, yet customizable data model
  - A meta-dictionary allowing easy configurability and automatic documentation of the FLEX data model

- **Integration layer:**
  - The FLEX tool needs to be integrated in order to correctly function. Some of the required integrations are:
    - Storing credit contract and (term) investment account in core banking system
    - Send instructions to payment management system for debiting/crediting the FLEX contract
    - Transfer to collection system in case the FLEX contract is not timely reimbursed (i.e. payments not made)
    - Retrieve list of accounts to be used as debit/credit account
    - Retrieve the list of holder compositions for existing contracts in which the customer is already involved

  - The FLEX tool comes with several standard integrations:
    - CPRA tool from Capilever:
      - The existence of a FLEX contract with many remaining "Receive" action types can improve counterparty scoring for customer
    - NLPT tool from Capilever:
      - NLPT makes call to FLEX to retrieve value of the FLEX contract(s)

  - 2 types of APIs are used for integration:
    - APIs exposed by the FLEX tool:
      - Well-documented REST-based APIs to retrieve info (e.g. retrieve value of FLEX contract to show in Daily Banking app) from the FLEX system or make updates to it
    - APIs called by the FLEX tool:
      - The application layer is foreseen to call several pre-defined REST-based APIs (e.g. for (re)valuation of certain assets), which of course will not match with the bank's services
      - The integration layer will transform those standard FLEX APIs to the proprietary APIs of the bank
        - The integration layer will also foresee several mocks (against the pre-defined internal REST-based APIs) in order to setup and test the application without integration with the bank systems

Example use case

Nathalie and John are a young couple, both 25 years, who just decided to go live together in an apartment they are renting. Both have a good job, so currently they can save quite some money, but they know this will change in the future. Therefore, they open at their bank a FLEX contract for a period of 25 years for a base amount of 500 EUR. As Nathalie and John have a good financial score, no restrictions are set to the contract.

Nathalie and John follow a quite standard life pattern. After living together for 2 years, their first child is born, and they decide to buy a house. Quite soon they welcome a second child. This brings a quite difficult financial period, with the cost of day-care and their mortgage payments, but furthermore John decides to go work 4/5th, which results in less income. Luckily Nathalie and John opened a few years ago a FLEX contract, so they decide to set the action type to “Receive100%” for a few years (in the contract they have 60 months, during which they can receive the full base amount). A few years later, both children go to primary school, so John decides to work full-time again. This means that they have both less expenses and more income, so they adapt the action type back to “Pay50%”. In some months, when it’s a bit more financially difficult, they change action type to “Do nothing”. About 15 years later, their children go to college, which costs a significant amount of money, so they decide again to receive money from their FLEX plan. Once their kids are graduated, there is more breathing room again to pay back money to the bank.

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 white-labelled software solutions** for the financial services industry.

All products in Capilever's product offering are software solution sold to banks to assist their customers in **better managing their financial risks** (from liquidity risk management, market and interest rate risk, up to counterparty risk).

All products come with several **well-defined APIs,** which can be easily integrated within the bank, with strong focus on orchestration and **automation** of underlying **credit and securities processes.**

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