

## DISTRIBUTION OF STRUCTURED PRODUCTS BY PRIVATE BANKS

### ENHANCE CUSTOMER SERVICE AND BUILD A BUSINESS THAT SCALES

LexiFi has developed an integrated solution for the distribution of structured products designed for advisory teams in private banks who are dissatisfied with both ad-hoc spreadsheets and purely descriptive database applications.

Unlike general-purpose pricing software, LexiFi's solution addresses the specific needs of private banks that wish to offer timely and relevant investments, provide sound advice throughout the life of each product, and streamline operations.

#### Tackle the Diversity of Structured Products

Create an authoritative and up-to-date source of structured investment product data.

#### Product Structure

Support potentially infinite product variations based on any type and combination of underlyings.

The LexiFi solution is powered by an original formalism that uniformly describes all financial products. LexiFi's financial contract representation technology is the result of a long-term research and development effort that received both industry and academic awards.

#### Product Input

Accurately record the terms and conditions of structured products using the following features:

- **Term sheet-style input** – Define the economics of a product in pre-defined graphical trade input screens laid out like term sheets. Users do not need to learn a script language: the most complex input is a formula.
- **Interactive schedules** – Build fixing, cash flow, and option schedules interactively.
- **Calculated fields** – Accelerate input by deriving the value of certain fields from that of other fields.
- **Workflow** – Create, edit, and delete products in accordance with a defined workflow.

#### Product Database

Create a central database of structured products with detailed terms and conditions and organize data with dozens of pre-defined and user-defined attributes.

Users respond immediately to inquiries from relationship managers and clients thanks to interactive displays that give access to pertinent product, underlying, trade, position, and risk information.

The system's event processing capabilities ensure that product definitions are always up-to-date.



LexiFi's integrated application enables private banks to offer investment solutions adapted to each market environment, to provide sound advice throughout the life of each product, and to streamline operations for inherently diverse product offerings.

Offer opportune investment solutions based on rigorous product analyses.

### Deliver Timely and Relevant Investment Solutions

Identify opportune investment solutions with analytical tools that provide insight into the economics of proposed products, and control prices with proven pricing model implementations.

#### Analytics

Product specialists quantify the risks and rewards of both new and existing products with a collection of analytics:

- **Contract variations** – Calculate the impact on price of changes in economic contract parameters.
- **Solver** – Calculate contract parameters to match a user-entered price.
- **Market data sensitivity** – Calculate the impact on price of instantaneous changes in market data.
- **Monte Carlo simulation** – Explore the details of a Monte Carlo pricing result.
- **Greeks**.
- **Historical simulation** – Quantify the performance of a product as if it had been acquired in the past.
- **Forward-looking simulation** – Analyze the behavior and value of a product along future market scenarios.
- **Historical value at risk**.

#### Pricing

The LexiFi solution comprises proven implementations, developed by LexiFi, of both industry-standard and advanced pricing models relevant to structured investment products. Key features include:

- **Calibration** – Transform observable market data into relevant model inputs with robust calibration algorithms.
- **Credit spreads** – Discount cash flows with risky curves that reflect the credit risk of issuers.
- **Commercial margin** – Include a commercial margin, amortized over time, in calculated prices.
- **Market data adjustments** – Selectively adjust salient market data items to replicate counterparty prices.

Users may also leverage LexiFi's open pricing architecture to interface with in-house and third-party valuation libraries.

#### Market Data

The LexiFi solution accesses market data snapshots, historical time series, and derived data such as yield curves and volatility surfaces from a central location to ensure consistent valuations and analyses across products and portfolios.

LexiFi has developed interfaces to major market data providers and offers an integration API to import market data from other sources. Users may also import market data via Microsoft Excel documents and text files.

### Enhance After-Sale Service

Provide sound advice throughout the life of each product.

#### Ongoing Valuations

Compare counterparty prices and values calculated in-house with the LexiFi solution, and receive alerts when the difference exceeds a user-defined threshold.

#### Control of Performance

Control the performance of portfolios, products, and underlyings:

- **Monitoring of performance** – Visualize the price history of products and underlyings and calculate their respective performance over different periods.
- **Value change analysis** – Quantify the contribution of key factors to the change in value of a product between two dates.
- **Portfolio analytics** – Assess the value, performance, and risks of client portfolios and recommend transactions.

#### Monitoring of Barriers

Products with embedded conditions, such as continuous barriers, require special monitoring capabilities. The LexiFi solution measures the proximity of the event, generates alerts, diagnoses when a condition is met, records detailed information on the circumstances surrounding the event, and details its consequences.

## Streamline Operations

Automate the processing of orders and trades, the creation of customer documents, and the life cycle management of structured investment products.

### Orders, Trades, and Positions

Record client orders and trades and calculate positions. Key features include:

- **Workflow** – Create, edit, and delete orders and trades in accordance with a defined workflow.
- **Combined product and trade input** – Use mixed product and trade input screens to create contract and trade records in one step.
- **Valuation and position** – Access valuation and position information from within trade input screens.
- **Order and trade attributes** – Store auxiliary data with orders and trades to create comprehensive records.
- **Query and search** – Use interactive displays to quickly find orders and trades and to present pertinent information.

### Customer Documents

Automatically create term sheets, management reports, and event notices in the format of your choice, including Microsoft Word, PDF, and XML.

The system is based on a document generation framework that guarantees the consistency among data elements and enables the creation of documents in multiple languages, the insertion of legal disclaimers based on potentially complex rules, the use of explicit or relative dates, and the inclusion of nicely formatted mathematical formulas.

**Instant access to product, underlying, trade, position, and risk information is a key service differentiator.**

### Product Maintenance

Detect and process life cycle events such as payments, fixings, option expiries, barrier crossings, and equity corporate actions. Product definitions adapt automatically in response to such events.

The system automates the adjustment of derivative contracts following a corporate action: it supports both the ratio method and the package method and enables users to inspect the successive values of economic contract parameters (e.g., underlyings, levels, parities) and past fixings.

### Product Audit

Access accurate product records, from inception to maturity, inspect past events, and audit cash flow calculations at all times.

## Integration and Extensions

Tailor your solution and enhance the coverage of in-house systems.

### Integration APIs

Control the data entering and exiting the system through application programming interfaces (APIs) used, for example, to synchronize the system's reference data with external systems, to import market data, to export product and trade data, and to enforce trade validation rules that fit in with existing workflows.

### Extension of the LexiFi Solution

Use built-in extension tools to independently add financial instruments, pricing models, product and portfolio analytics, and processing capabilities.

### Extension of in-house applications

Enhance the coverage of structured products in existing systems by accessing the LexiFi solution in server mode or by embedding LexiFi components in your in-house applications.

## Find Out More

For more information about LexiFi's solution for the distribution of structured products by private banks, please visit [www.lexifi.com/solution\\_private\\_banking](http://www.lexifi.com/solution_private_banking).

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## Summary

LexiFi's integrated solution for the distribution of structured products is designed for advisory teams in private banks who are dissatisfied with both ad-hoc spreadsheets and purely descriptive database applications.

Unlike general-purpose pricing software, LexiFi's solution addresses the specific needs of private banks that wish to offer timely and relevant investments, provide sound advice throughout the life of each product, and streamline operations.

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## Business Challenges

- Offer investment solutions adapted to each market environment.
- Provide sound advice throughout the life of each product.
- Streamline operations for inherently diverse product offerings.

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## Key Features

- **Structuring** – Quickly define new structures, without writing any code, and quantify precisely their risks and rewards.
- **Pricing** – Use state-of-the-art pricing models and relevant market data to value structured products.
- **Product database** – Create a central database of structured products.
- **Orders and positions** – Record client orders and monitor positions.
- **Customer documents** – Automatically create term sheets, management reports, and event notices in the format of your choice.
- **Secondary market control** – Compare counterparty prices and in-house valuations, and control the performance of portfolios, products, and underlyings.
- **Product maintenance** – Monitor barriers and process product life cycle events, including equity corporate actions.

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## Business Benefits

- **Deliver timely and relevant investment solutions** based on rigorous analyses.
- **Enhance after-sale service** and gain investor confidence. LexiFi improves the skills, comfort level, and advisory capacity of both product specialists and relationship managers by providing immediate access to relevant information throughout the life of each product.
- **Streamline operations**, free up human resources, and limit errors by automating time-consuming and error-prone pre- and post-trade processes.

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## For More Information

Visit us online at [www.lexifi.com/solution\\_private\\_banking](http://www.lexifi.com/solution_private_banking).

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