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Project overview

Development of a pricing and risk management framework for real estate index derivatives

Client / sector	**Large European bank**
Project description	**Development and implementation of a pricing and risk management framework for the real estate index derivatives in Front Arena and internal risk management systems** • Validation and (further) development of mathematical models for pricing and risk management of real estate derivatives as a new product (support for new product processes) • Implementation of the mathematical models and trading and settlement processes in Front Arena and internal risk management systems
Service	• Analysis of the system landscape (Front Arena) and the existing mapping possibilities in the GUI and database model • Validation of financial mathematical models • Development and testing of the implementation of the models and pricing functionalities in spreadsheets • Development of the selected models in external DLLs and implementation in Front Arena and internal systems • Connection of the DLLs to Microsoft Excel • Test preparation and execution in cooperation with the trading desk
Technology	EXCEL-VBA, C/C++, Sungard Front-Arena, Python
Professional input	Product, pricing and risk management know-how, mathematical modelling
Scope	2 consultants, >9 months
Tags	pricing, valuation, risk management, trading, Front Arena