



### Core Competencies

- Experienced consultant, business analyst and project lead with emphasis in financial markets
- IT & investment banking know-how along the system and process chain
- Trading and risk management systems ( expert for FRONT ARENA /PRIME )
- Interdisciplinary and cross-system implementation of business and regulatory requirements
- Classic and agile methods for project management, software development and testing

### Personal Facts

- Datenverarbeitungskaufmann, self-employed consultant since 1993
- Mother tongue German, English business fluent
- Team player with methodical and social competence
- Experienced with internationally distributed project teams
- Pragmatist with problem-solving mentality

### Technical Skills and Certifications

- |   |   |
|---|---|
| • Operating systems                       | Windows, Unix, MacOS  |
| • Programming languages                   | Python, C/C++, Java   |
| • Databases                               | SQL-Databases ( Microsoft, Sybase, Oracle )                                     |
| • FRONT ARENA Extension Framework ( AEF ) | ASQL, AEL, ACM, ADFL, further AEF technologies and API's                        |
| • Project Management                      | PMP, PRINCE2 Practitioner   |
| • Test Management                         | ISTQB Test Manager  |
| • Risk Management                         | M_o_R Practitioner  |
| • IT-Service Management                   | ITIL V3 Service Design, Transition, Operation                                   |
| • Agile Methods                           | Professional Scrum Master ( PSM ),<br>Professional Scrum Product Owner ( PSPO ) |

### Content of selected Projects

- **Projects around FRONT ARENA /PRIME**  
Since 1999, I am working as a consultant and project manager with the trading and risk management system FRONT ARENA / PRIME. The assignments range from the implementation of the system to the creation of new business segments or asset classes to the regular release upgrades to ensure the manufacturer support. I have in-depth business and system knowledge and an established network to the well-known specialists in the market and to the manufacturer FIS (formerly Sungard).
- **Implementing Quantifi CVA (Credit Valuation Adjustment)**  
System implementation of Quantifi CVA, a solution used for integrated exposure simulations of credit risks and refinancing costs for OTC derivatives.
- **Implementing interexa DMC (EMIR Risk Mitigation)**  
System implementation of interexa DMC, a solution to support the regulatory EMIR risk mitigation: regular portfolio coordination, timely confirmation, daily assessment and the settlement of disputes with OTC counterparties.
- **Enhancing and optimizing the ETF business in FRONT ARENA**  
Expansion of tradable financial products and asset classes, integration of new stock exchanges and trading platforms, and further development of the algo trading infrastructure for the market maker ETF.
- **Coordination of new product launches for Treasury & Trading**  
Coordination of the implementation activities in the new product process, responsible to plan, design and implement the product requests from treasury & trading along the system and process chain.
- **Implementing OTC Interest Rate & Credit Derivatives**  
Introduce the organizational structure for the banking function „Financial Engineering“ along the process chain (Capital Markets, Risk Management, Back Office, Accounting, Compliance etc.), decide about appropriate interest rate term structure and credit risk models, develop the pricing libraries and also the integration layer for the trading and risk management system (FRONT ARENA, Calypso).

# Project summary

Position	Customer	Project	Span of control	Budget	System Environment
FRONT ARENA Expert /Business Analyst	Bank (Capital Markets)	FRONT ARENA Upgrade (Version 2012.1 to 2017.4)			FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project, HP Quality Center, Jira
Project Lead & FRONT ARENA Expert	Bank (IT)	FRONT ARENA Upgrade (Version 2012.2 to 2016.5)	30 Co-workers	3 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
Project Lead & Consultant	Bank (IT)	Implementing Quantifi CVA (Credit Valuation Adjustment)	30 Co-workers	8 Mio. €	Quantifi CVA, Murex, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), FpML, Clarity, HP Quality Center, Jira
Project Lead & Consultant	Bank (IT)	Implementing interexa DMC (EMIR Risk Mitigation)	20 Co-workers	7 Mio. €	interexa DMC, Murex, FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), FpML, Clarity, HP Quality Center, Jira
Projekt Lead & FRONT ARENA Expert	Bank (IT)	FRONT ARENA Upgrade (Version 4.2 to 2012.2)	30 Co-workers	3 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
Project Lead & FRONT ARENA Expert	Bank (IT)	FRONT ARENA Upgrade (Version 2.2 to 2012.1)	60 Co-workers	19 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project, HP Quality Center
Project Lead & FRONT ARENA Expert	Bank (IT)	Coordination of new product launches for Treasury & Trading	30 Co-workers	3 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Murex, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
Project Lead & FRONT ARENA Expert	Bank (IT)	Reorganisation of IT for the business unit ETF	30 Co-workers	1 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), individual software ETF Trading & Market Making, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & FRONT ARENA Expert	Bank (Capital Markets)	Enhancing & Optimizing the ETF Business in FRONT ARENA	40 Co-workers	6 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), individual software ETF Trading & Market Making, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & FRONT ARENA Expert	Bank (Capital Markets)	Implementing OTC Interest Rate Derivatives in FRONT ARENA	20 Co-workers	4 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), QuantLib, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & Consultant	Bank (IT)	Implementing OTC Interest Rate Derivatives in Calypso	30 Co-workers	5 Mio. €	Calypso, Nordic Analytics, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & Consultant	Bank (IT)	Coordination of new product launches for Treasury & Trading	30 Co-workers	4 Mio. €	Kondor+, Murex, Sophis Risque, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & Consultant	Asset Manager (IT)	Upgrade Trading System & Introducing Portfolio Compliance-checks in Apollo	20 Co-workers	1 Mio. €	Apollo, Barra, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & FRONT ARENA Expert	Bank (Capital Markets)	Implementing OTC Interest Rate & Credit Derivatives in FRONT ARENA	20 Co-workers	3 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, SCI Finance, Mathematica, Moosmüller & Knauf, Numerix, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & FRONT ARENA Expert	Bank (IT)	Pre-study for OTC Interest Rate & Credit Derivatives in FRONT ARENA	20 Co-workers	1 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, SCI Finance, Mathematica, Moosmüller & Knauf, Numerix, Monis, QuantLib, MBRM, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
Project Lead & FRONT ARENA Expert	Bank (IT)	Implementing FRONT ARENA & Setup Line Operations	20 Co-workers	1 Mio. €	FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, Moosmüller & Knauf, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
FRONT ARENA Consultant /Business Analyst	Bank (Capital Markets)	Setup Fixed Income & Securities Finance Trading in FRONT ARENA			FRONT ARENA /INTAS /ATLAS /PRIME (ASQL, AEL, ACM, ADFL), Summit, Moosmüller & Knauf, Python, C/C++, SQL-Databases, ETL-Tools (Middleware)
IT Consultant & Trainer	Trading Firms, Industry and Public Sector	diverse			diverse

## Project details

### **FRONT ARENA Upgrade (Version 2012.1 to 2017.4)**

FRONT ARENA Expert /Business Analyst (Bank, Capital Markets)

2017 / actual

#### Activities and Responsibilities:

- FRONT ARENA expert and central contact person for the business departments involved in the customer's FRONT ARENA upgrade project from the current version 2012.1 to the target release 2017.4.
- Conducting a professional validation of the FRONT ARENA target release:
  - Checking the relevant calculated values ("Calculated Values Analysis"), in particular for the valuation, risk calculation and profit & loss determination.
  - Analysis and, if necessary, adaptation of the parameterization (for example, consideration of changed accounting and valuation parameters, context mappings and authorization objects).
  - Execution of a Value at Risk (VaR) probation calculation to determine the necessity of a regulatory parallel operation of the FRONT ARENA releases (if the VaR jump is greater than 1%).
  - Verification of the functionality for the external valuation library and the remote grid for the structured OTC products and certificates.
  - Analysis of data quality problems as well as the coordination of activities for their correction with line units (keyword: increased data quality requirements in the FRONT ARENA target release).
  - Coordination of the valuation relevant changes between the FRONT ARENA releases with the responsible line unit "Model Validation".
- Documentation and linking of the aforementioned analysis results with the affected FRONT ARENA test objects in Jira and HP Quality Center.
- Regular clarification of methodical changes between the FRONT ARENA releases as well as the identified software bugs with a customer panel of business matter experts.
- Coordination of necessary bug fixes and workarounds with the software vendor FIS in Stockholm and the FRONT ARENA development team at the customer's site.
- Professional support of the FRONT ARENA development team with the migration of customer-specific business logic to the target release.
- Coordination of the test procedure and planning with Test and Project Management.
- Support of the User Acceptance Tests (UAT) by providing detailed explanations for deviations in Trading Manager Workbooks, Python interfaces and ASQL queries.
- Regular reporting on management level about methodical findings of the Calculated Values Analysis and the current state of quality of the target release.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project, HP Quality Center, Jira

### **FRONT ARENA Upgrade (Version 2012.2 to 2016.5)**

Project Lead & FRONT ARENA Expert (Bank, IT)

2016 / 2017

#### Activities and Responsibilities:

- Planning, implementing and controlling the FRONT ARENA upgrade from version 2012.2 to target 2016.5.
- Conducting a comprehensive cleanup task to reduce migration costs.
- Setting up the configuration management: FRONT ARENA instances and their releases, source code management, delivery of migrated objects and parametrisations, rhythm of database and software updates etc.
- Coordinating the migration process of FRONT ARENA objects, the external valuation architecture and the Softbroker infrastructure.
- Validation and clarification of methodical changes between the releases until final business sign-off.
- Controlling relevant dependencies of the project, e.g. the implementation of the MiFID2 requirements.
- Establishing a requirement and fault management with the software vendor Sungard.
- Implementing an effective test management and regular reconciliation with the test manager.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 3 Mio. €

### **Implementing Quantifi CVA (Credit Valuation Adjustment)**

Project Lead & Consultant (Bank, IT)

2015 / 2016

#### Activities and Responsibilities:

- Planning, conducting and controlling the system implementation of Quantifi CVA, a solution used for integrated exposure simulations of credit risks and refinancing costs for OTC derivatives.
- Coordinating the negotiations with the external software provider.
- Supporting risk management and trading in the design of risk factor simulations, risk figures and surrounding processes (CVA, DVA, FVA, sensitivities, P&L explain, end of day-/end of month processes etc.).
- Design of data requirements and integration of the application in the complex IT architecture.
- Coordinating the IT implementation as well as necessary process changes in business units.
- Establishing a requirement and fault management with the external software vendor.
- Implementing an effective test management and regular reconciliation with the test manager.

## Project details

- Reporting of project progress and risk situation to senior management.
- System environment: Quantifi, Murex, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), FpML, Clarity, HP Quality Center, Jira
- Leadership for up to 30 employees and 2 business units.
- Budget responsibility: 8 Mio. €

### **Implementing interexa DMC (EMIR Risk Mitigation)**

Project Lead & Consultant (Bank, IT)

2013 / 2014

Activities and Responsibilities:

- Planning, conducting and controlling the system implementation of interexa DMC, a solution to support the regulatory EMIR risk mitigation: regular portfolio reconciliation, timely confirmation, daily valuation and the agreement of dispute processes with counterparties.
- Coordinating the IT implementation as well as necessary process changes in business units.
- Establishing a requirement and fault management with the external software vendor.
- Implementing an effective test management and regular reconciliation with the test manager.
- Reporting of project progress and risk situation to senior management.
- System environment: DMC, Murex, FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), FpML, Clarity, HP Quality Center, Jira
- Leadership for up to 20 employees and 2 business units.
- Budget responsibility: 7 Mio. €

### **FRONT ARENA Upgrade (Version 4.2 to 2012.2)**

Project Lead & FRONT ARENA Expert (Bank, IT)

2012 / 2013

Activities and Responsibilities:

- Planning, implementing and controlling the FRONT ARENA upgrade from version 4.2 to target 2012.2.
- Conducting a comprehensive cleanup task to reduce migration costs.
- Setting up the configuration management: FRONT ARENA instances and their releases, source code management, delivery of migrated objects and parametrisations, rhythm of database and software updates etc.
- Coordinating the migration process of FRONT ARENA objects.
- Validation and clarification of methodical changes between the releases until final business sign-off.
- Controlling relevant dependencies of the project, e.g. the change of the server platform (HP cluster) and the upgrade of the client hardware and operating system (Windows 7).

## Project details

- Establishing a requirement and fault management with the software vendor Sungard.
- Implementing an effective test management and regular reconciliation with the test manager.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 3 Mio. €

### **FRONT ARENA Upgrade (Version 2.2 to 2012.1)**

Project Lead & FRONT ARENA Expert (Bank, IT)

2011 / 2012

#### Activities and Responsibilities:

- Planning, implementing and controlling the FRONT ARENA release-upgrade from version 2.2 to target 2012.1.
- Conducting a comprehensive cleanup task to reduce migration costs.
- Setting up the configuration management: FRONT ARENA instances and their releases, source code management, delivery of migrated objects and parametrisations, rhythm of database and software updates etc.
- Coordinating the migration process of FRONT ARENA objects.
- Functional Lead for a comprehensive validation of calculated values in FRONT ARENA with a team of 8 quantitative analysts over 9 months, clarification of the results with a customer committee of experts.
- Controlling relevant dependencies of the project, e.g. the clarification of the governance for FRONT ARENA regards the final sign-off from above 50 business units.
- Establishing a requirement and fault management with the software vendor Sungard.
- Implementing an effective test management and regular reconciliation with the test manager.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project, HP Quality Center
- Leadership for up to 60 employees and 50 business units.
- Budget responsibility: 19 Mio. €

### **Coordination of new product launches for Treasury & Trading**

Project Lead & FRONT ARENA Expert (Bank, IT)

2010 / 2011

#### Activities and Responsibilities:

IT coordinator in the new product process, responsible for the planning and implementation of product applications from the Trading units and Treasury.

- Analysis of business requirements for the integration of new products in the existing IT landscape.
- Design of the downstream processing of new products in cooperation with the concerned business units.
- Integration of new products in terms of technical changes and revised processes along the whole process-chain.
- Coordination of the technical and business sign-off process as a prerequisite for the approval to start trading.
- Ensure maintainability and efficiency of the implemented solution for line operations.
- Optimising the new product process regarding time-to-market, costs and quality.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Murex, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Clarity, HP Quality Center
- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 3 Mio. €

### **Reorganization of IT for the business unit ETF**

Project Lead & FRONT ARENA Expert (Bank, IT)

2010

#### Activities and Responsibilities:

Planning, implementing and controlling all the activities to transfer the trading IT for the business unit ETF into IT/Org.

- The general conditions for the organisational transfer of staff, functions and processes have been arranged.
- Definition and fulfillment of documentation guidelines and standards for the complex individual developed software-system of the market maker ETF.
- Handover of the technical ETF infrastructure into the regular operation process of the bank.
- Definition of processes, roles and responsibilities in the new IT organisation unit.
- Planning, realisation and control of all the necessary activities for closing the existing issues from the external auditing.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), individual software ETF Trading & Market Making, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project

## Project details

- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 1 Mio. €

### **Enhancing & Optimising the ETF Business in FRONT ARENA**

Project Lead & FRONT ARENA Expert (Bank, Capital Markets)

2009 / 2010

#### Activities and Responsibilities:

Planning, implementing and controlling diverse projects and activities to enhance the trading infrastructure of the business unit ETF.

- Analysis and optimization of business processes along the process-chain.
- Conducting a pre-study for the consolidation of the trading unit ETF with the agency trading.
- Management of inter-divisional implementation projects for new asset classes in ETF and the related NPP processes.
- Coordination of requirements from the ETF issuer.
- Optimisation of Sungard FRONT ARENA for ETF trading.
- Development of an electronic market making platform for trading and quotation at Leading European exchanges and markets.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), individual software ETF Trading & Market Making, Python, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 40 employees and 10 business units.
- Budget responsibility: 6 Mio. €



### **Implementing OTC Interest Rate Derivatives in FRONT ARENA**

Project Lead & FRONT ARENA Expert (Bank, Capital Markets)

2008 / 2009

Activities and Responsibilities:

Planning, implementing and controlling the sub-project FRONT ARENA Valuation for providing the central valuation architecture for structured OTC interest rate derivatives.

- Analysis of the business requirements along the process chain.
- Analysis, design and implementation of the valuation interface for the external pricing library.
- Enhancement of the data-model to capture the instrument-features and derived model- and market-data.
- Implementation of a performance optimized application to calculate Profit and Loss and Greek figures per full-valuation.
- Implementation of a Profit and Loss application based on a Taylor approximation with Greeks.
- Optimisation of computationally intensive valuation processes.
- Implementation of distributed calculations for the model calibration and valuation process (grid-parallelization).
- Definition of the inter-divisional testing and sign-off processes for changes or enhancements in the valuation models.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), QuantLib, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 20 employees and 10 business units.
- Budget responsibility: 4 Mio. €

### **Implementing OTC Interest Rate Derivatives in Calypso**

Project Lead & Consultant (Bank, IT)

2007 / 2008

Activities and Responsibilities:

Planning, implementing and controlling the sub-project Calypso Models for providing the central valuation architecture for structured OTC interest rate derivatives.

- Planning, control and realisation of projects in the Investment Banking area.
- Business Leadership and integration of the project teams, consisting of internal and external staff.
- Development of comprehensive business cases.
- Creation of decision memos taking into account the target criteria of the management.
- Preparation and attendance of project committees and execution of review meetings.
- Close collaboration with customers, specialists and the management board.

## Project details

- Responsible for the creation of IT concepts on the basis of business requirements and the user-documentation.
- Handover-process of the project results to operation.
- Design, implementation and development of the external pricing library and its integration in the trading system Calypso.
- Requirement to reach trading book accuracy for complex innovative financial products.
- Reporting of project progress and risk situation to senior management.
- System environment: Calypso, Nordic Analytics, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 5 Mio. €

### **Coordination of new product launches for Treasury & Trading**

Project Lead & Consultant (Bank, IT)

2007

Activities and Responsibilities:

Planning, implementing and controlling the different NPP requests from Investment Banking to the end, that new financial products will be integrated in the complex IT architecture of the bank.

- Analysis of business requirements for the integration of new products in the existing IT landscape.
- Design of the downstream processing of new products in cooperation with the concerned business units.
- Integration of new products in terms of technical changes and revised processes along the whole process-chain.
- Coordination of the technical and business sign-off process as a prerequisite for the approval to start trading.
- Ensure maintainability and efficiency of the implemented solution for line operations.
- Optimising the new product process regarding time-to-market, costs and quality.
- Reporting of project progress and risk situation to senior management.
- System environment: Kondor+, Murex, Sophis Risque, Java, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 30 employees and 10 business units.
- Budget responsibility: 4 Mio. €

### **Upgrade Trading System & Introducing Portfolio Compliance-checks in Apollo**

Project Lead & Consultant (Asset Manager, IT)

2006

Activities and Responsibilities:

- Providing new tradable asset classes for the fund management.
- Project Leadership for the release-upgrade of the central trading system Apollo.
- Implementation of automatic portfolio pre-order compliance checks in Apollo.
- System environment: Apollo, Barra, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Functional and disciplinary Leadership of the team.
- Budget responsibility: 1 Mio. €

### **Implementing OTC Interest Rate & Credit Derivatives in FRONT ARENA**

Project Lead & FRONT ARENA Expert (Bank, Capital Markets)

2005 / 2006

Activities and Responsibilities:

- Establishing the inter-divisional processes, roles and responsibilities for an efficient development of innovative financial products and derivatives.
- Enhancement of the existing process to introduce new products (NPP-process).
- Analysis and definition of appropriate quantitative models and methods for the valuation and risk management of the interest rate and credit derivatives portfolio.
- Development of corresponding hedging strategies together with the derivative traders.
- Implementation of the pricing models and derivative products in SCIFinance ASPEN, C/C++ and Python.
- Implementation of the valuation and risk functions in the trading system FRONT ARENA.
- Definition of the documentation, test and sign-off processes for releases in close cooperation with the business units and IT/Org.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, SCI Finance, Mathematica, Moosmüller & Knauf, Numerix, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 20 employees and 5 business units.
- Budget responsibility: 3 Mio. €

### **Pre-study for OTC Interest Rate & Credit Derivatives in FRONT ARENA**

Project Lead & FRONT ARENA Expert (Bank, IT)

2004

Activities and Responsibilities:

- Conducting the pre-study for OTC Interest Rate & Credit Derivatives:
  - Definition of processes, roles and responsibilities and, as a result of new duties, the need of additional resources in the different business units and IT/Org.
  - Analysis of proper interest rate term-structure-models for the interest rate derivatives portfolio.
  - Analysis of proper credit-risk-models for the credit derivatives portfolio.
  - Analysis and comparison of standard pricing libraries available in the market against the option of proprietary development.
  - Development of a prototype for the integration of external pricing libraries into FRONT ARENA.
  - Planning the implementation project.
- Project Lead for the FRONT ARENA upgrade from version 1.5 to 2.1.
- Reporting of project progress and risk situation to senior management.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, SCI Finance, Mathematica, Moosmüller & Knauf, Numerix, Monis, QuantLib, MBRM, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 20 employees and 5 business units.
- Budget responsibility: 1 Mio. €

### **Implementing FRONT ARENA & Setup Line Operations**

Project Lead & FRONT ARENA Expert (Bank, IT)

2003

Activities and Responsibilities:

- Project Lead for implementing Sungard FRONT ARENA.
- Project Lead for the FRONT ARENA upgrade from version 1.3 to 1.5.
- Functional FRONT ARENA support for treasury & trading, risk management and downstreaming business units.
- Implementing Collateral management for derivatives in FRONT ARENA.
- System environment: FRONT ARENA /PRIME (ASQL, AEL, ACM, ADFL), Summit, Moosmüller & Knauf, Python, C/C++, SQL-Databases, ETL-Tools (Middleware), Microsoft Project
- Leadership for up to 20 employees and 5 business units.
- Budget responsibility: 1 Mio. €

### Setup Fixed Income & Securities Finance Trading in FRONT ARENA

FRONT ARENA Consultant /Business Analyst (Bank, Capital Markets)

1999 / 2002

#### Activities and Responsibilities:

- Optimising business processes for the fixed income, swap and derivative trading by:
  - capturing the product types and market usances (bonds, swaps, options, futures, FRA etc.).
  - continuous improvement of valuation, profit & loss and risk calculations.
  - implementing reports and interfaces for traders and downstreaming business units.
- Optimising business processes for the repo & security lending desk by:
  - capturing the product types and market usances (repo, buy/sellback, security lending).
  - continuous improvement of valuation, profit & loss and risk calculations.
  - determining the security and cash positions.
  - creating trade confirmations.
  - handling of manufactured dividends, haircuts and substitutions.
  - collateral management including threshold observation.
  - annual settlement of the repo accounts.
  - introducing the electronic trading platform "Eurex-Repo".
  - implementing reports and interfaces for traders and downstreaming business units.
- Supporting Risk Management in controlling:
  - valuation relevant curves.
  - pricing informations.
  - limit utilisation.
  - risk figures.
  - validity of user access rights
- Supporting Trade Control in:
  - solving valuation issues.
  - creating a trading independant profit & loss.
  - conducting market conformity checks.
  - parametrisation of FRONT ARENA.

## Project details

- Supporting BackOffice in:
  - creating trade confirmations.
  - conducting control and reconciliation duties.
  - initiating payments and delivering securities.
- Implementing regulatory requirements (Basel 1, MaH).
- Development, test and implementation of a concept for user access rights in FRONT ARENA.
- Archiving trades and profit & loss cutoff in the year-end procedure.
- Support of diverse FRONT ARENA release-upgrade projects (Intas, Atlas, PRIME).
- System environment: FRONT ARENA /INTAS /ATLAS /PRIME (ASQL, AEL, ACM, ADFL), Summit, Moosmüller & Knauf, Python, C/C++, SQL-Databases, ETL-Tools (Middleware)

### Trading Firms, Industry and Public Sector

IT Consultant & Trainer

1993 / 1999

#### Activities and Responsibilities:

- IT Consultant Automotive:
  - Large-scale project MERLIN (More Efficiency through Right Logistic INformations) to develop an integrated production, sales and logistic system.
  - Project to develop a database solution to manage and consolidate cost on an enterprise level including the different international locations of the company.
- DV-Trainer at a Local Government to introduce Microsoft-Office in combination with Siemens ComfoDesk.
- Development of a Windows-based business solution (C/C++ with SQL database) for invoicing and accounting, designed for small and medium sized companies.
- DV-trainer for government-funded vocational retrainings with over 400 training days and workshops:
  - Microsoft Office development
  - Optimising the business with Microsoft Office
  - Project planning with Microsoft Project
  - Visual Basic development
  - Data modelling and normalisation
  - Database development with Microsoft Access
  - SQL
  - PC technology
  - Network technologies