



#### TriA

#### Korea (Headquarter)

#1819, 10, Seonyu-ro 9-gil, Yeongdeungpo-gu, Seoul, Korea [07281] TEL: + 82.70.8200.1353 FAX: +82.2.6280.1354

## USA

11360 Western Ave, Stanton, CA, USA 90680 TEL: +1.714.379.6899 FAX: +1.949.427.1661

© 2020 TriA Ltd.

TriA, founded in 2004 in Seoul, Korea, has been committed to providing financial and non-financial institutions with professional services specializing in accounting and risk management and provided consulting services and advanced solutions over 30 institutions in Asia region for helping clients control risks and comply with regulations as well. Not satisfied with such achievements, TriA will keep striving to develop and enhance its professional services for institutions to cope with rapidly-changing business environments and increase institutions' value.

#### **Professional Services**

TriA professional services mainly consist of two groups: consulting services and solution services.

TriA Consulting Services, made up of highly experienced professionals, provide institutions with the best internal and regulatory risk management framework and also guide system implementation to fully incorporate business requirements. Main areas for consulting services include:

· Market Risk

· Credit Risk

· Operational Risk

· RAPM

 $\cdot$  ALM

· Liquidity Risk

Fund Transfer Pricing

· Cost Allocation

TriA Solution Services, a suite of 8 solutions developed with trusted technology, provide institutions with the best accounting and risk management solutions, helping clients streamline processes and improve efficiency; each of solutions is being continuously enhanced in response to the need of our customers and evolving market conditions. Main solutions include:

· Amain.IFRS

· Amain.OPEX

· Amain.EPM

· Amain.ALM

· Amain.LRM

· Amain.AIR

· Amain.EBP

· Amain.JOB







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TriA Consulting Services, a group of experienced professionals, provide the best risk management services for institutions in areas of credit risk, market risk, operational risk, asset & liability management, liquidity risk and RAPM. Our risk professionals, keeping pace with rapidly-changing regulations such as BaselIII and ICS, also assist institutions to implement the best risk management systems incorporating the best practices and business requirements. We are confident that institutions, through our professional services, will be able to not only comply with regulations but also maximize corporate value.

## **MARKET RISK**

The landscape of market risk management is expected to dramatically change as the Fundamental Review of the Trading Book (FRTB), a more robust framework designed for institutions to withstand significant financial stress, is in effect in January 2023. Our Market Risk Services help institutions to implement the new market risk management framework corresponding to upcoming regulatory changes. Our services include:

- · Implementation of FRTB framework (incl. SA and IMA)
- · Model validation (incl. fair value, greeks)
- · Market data management (aligning FO/BO with MO)
- · P&L management (incl. APL, HPL, RTPL)
- · Integration with other risk management frameworks (incl. ISDA-SIMM)
- · Backtests and stress tests
- · Advanced analytics

#### **CREDIT RISK**

Managing credit risk is always a complex challenge. It has become even more complex in stressed environments and evolving regulatory landscape. Our Credit Risk Services help institutions identify, assess, monitor and control credit risk for the internal and the regulatory purposes. Our services include:







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# Visit us at www.triagroup.co.kr for more information.

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## CREDIT RISK Continued

- · Credit portfolio management (incl. credit concentration risk)
- · Exposure and limit management
- · Basel III implementation (incl. securitization, SA-CCR, and CVA)
- · Management of regulatory and economic capital
- · Validation of risk components (incl. PD, LGD, EaD, correlation)
- · Credit risk mitigation(incl. collateral management and CSA)
- · Advanced credit analytics
- · Stress tests

# **OPERATIONAL RISK**

Operational risk is inherent as institutions deal on a daily basis with services, processes, systems, technologies, people and more, which may cause business disruption unless properly managed, resulting in financial losses and reputational damage. Our Operational Risk Services help institutions establish processes of effectively managing operational risk drivers. Our services include:

- · Operational risk quantification (incl. standardized measurement approach)
- · Management of P&L components (Interest/Lease/Dividend, Services, Financial)
- · Management of operational loss data
- · Establishment of Risk Control Self Assessment

# **RAPM**

RAPM is the key driver for the value-based management (VBM), where institutions can maximize investment returns and increase profitability, taking into account the risks taken. Our RAPM Services help institutions implement the RAPM framework with which they can measure their risk-based performance by various dimensions such as customer segments, product domains and individual products. Our services include:

- · Calculation of RAPM measures (incl. RAROC, EVA etc.)
- · RAPM components management (incl. FTP, cost of capital etc.)
- · Integration and allocation of risk capitals
- · Use in business strategies







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#### **ASSET AND LIABILITY MANAGEMENT**

Asset and liability management (ALM) is the traditional practice to mitigate financial risks resulting from a mismatch of assets and liabilities, in particular, risks to earnings and capital arising from adverse movement of interest rates. Recently, financial authorities have strengthened related regulations for managing interest rate risks as interest rates are expected to be more volatile. Our ALM Services help institutions improve interest rate risk identification, measurement, valuation, monitoring and governance while maintaining interest rate risks at prudent levels. Our services include:

- · Interest rate risk quantification (incl. duration gap, VaR, NII, EaR)
- · Cashflow projection (incorporating behavioural and modelling assumptions)
- · Scenario management (incl. regulatory and internal scenarios)
- · ICCAP process (incl. limit setting, model validation, etc.)

# **LIQUIDITY RISK**

Liquidity risk has become, during the financial crisis, one of the most important risks to be managed; liquidity crunch alone forced many institutions to fail to survive. Our Liquidity Risk Services help institutions establish a sound process for identifying, measuring, monitoring and controlling liquidity risk, leading to being better prepared for future liquidity crisis. Our services include:

- · Liquidity risk quantification (incl. LCR and NSFR)
- · Cashlfow projection (incl. derivatives and contingent claims)
- · Collateral management (incl. high quality liquidity assets and CSA)
- · EWI and limit management (designing and setting EWIs and limits)
- · CFP management (setting procedures for liquidity shortfalls in stressed situations)
- · Balance sheet optimization (striking the balance between profitability and liquidity)







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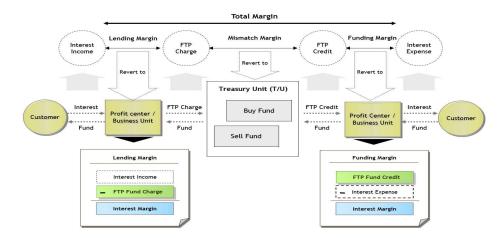
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# **Fund Transfer Pricing**

Fund Transfer Pricing (FTP) is a conceptual process of computing cost of funds to distribute of fund margin to major contributors which means lending and funding side and identifying mismatch profit/loss based on reasonable internal pricing policy through virtual treasury unit.

Our services include:

- · Measure accurate cost of Fund based on Market Rate
- · Remove Interest Rate Risk from business unit and Product Manager
- · Provide consistent guidance in Pricing Management
- · Facilitate to drive the business unit toward Bank's strategy



# **Cost Allocation**

Cost Allocation is one of the most important part of performance measurement for institutions; It is a series of process to find the relationship between expenses and cost objects in multiple dimensions such as organization unit, product, channel, customer, contract and transaction. The allocations can be done by many ways including unit cost, drivers, internal ratio and etc. Our services include:

- · Identify cost items to be adjusted (Reposting) (ex. Special Bonus)
- · Go-through the cost items in detail to find reasonable allocation logic
- · Categorize the cost items by checking the nature of cost
- · Find out the relationship between cost and cost consumer
- · Drive to change the indirect cost to direct cost if it is traceable







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TriA Solution Services, a suite of 8 solutions, provide institutions with the best accounting and risk management solutions: Amain for IFRS, Amain for OPEX, Amain for ALM, Amain for LRM, Amain for AIR, Amain for EPM, Amain for EBP, Amain for JOB. Our solutions, each being continuously developed in response to our clients' need and evolving market conditions, will surely help provide clients with greater transparency, efficiency and control across business areas. We are confident that institutions, with our solutions, will be able to streamline processes and improve efficiency, maximizing business value. Solutions' main features include:

- · Reliability: fast and accurate developed with trusted technology
- · Openness : completely transparent across all stages
- · Scalability: highly scalable adaptable to meet higher efficiencies and demands
- · Flexibility: highly customizable and configurable to accommodate clients' needs

## **Amain For IFRS**

Amain for IFRS, developed in cooperation with accounting firms, is a solution designed to meet the IFRS requirements. Specifically, it supports fair value-based accounting treatments for revenue recognition, loan loss provision, hedge transactions and disclosure. Our over-20-year-long financial implementation experiences and the application of state-of-the-art technology help institutions achieve compliance more quickly and efficiently. Its functionalities include:

- · Generating cashflows · Calculating EIR, LOC/F Amortization
- · Calculating fair value by discount · Calculating loan loss provisions, PD, LGD

# **Amain For OPEX**

Amain for OPEX is a managerial accounting solution for financial institutions including insurance companies. It provides institutions with total flexibilities where institutions allocate expenses to account, channel, products, or user-defined levels. And allocated expenses can be also easily verified with the validation functionalities at fingertips without any endeavor. Its functionalities include:

- · Supporting various allocation methods · Supporting hierarchical allocation
- · Performing automatic validation · Result Analysis with a pivot function







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## **Amain for EPM**

Amain for EPM is a stable and reliable managerial accounting solution developed with our own technology accumulated through over 20-times implementation experiences. It mainly consists of two engines; the cashflow engine for calculating funding costs and the allocation engine for allocating administered costs. It is also easily customized according to clients' requirements. Its functionalities include:

- · Defining FTP components
- · Managing allocation rules
- · Calculating FTP componens
- · Supporting cost & profit analysis

## **Amain for ALM**

Amain for ALM, an asset & liability management solution, is designed to measure, monitor and control interest rate risk for the internal and regulatory purposes. It supports both economic value-based measures (Gap, VaR) and earnings-based measures (NII, EaR), fully incorporating behavioral and modelling assumptions when projecting cashflows. It also supports scenario analysis that enables users to analyze changes in ALM measures under the stressed environments. Its functionalities include:

- · Generating contractual/expected cashflows · Calculating ALM measures
- · Managing NII simulation with scenarios
- · Managing behavior assumptions

#### **Amain for LRM**

Amain for LRM, a liquidity risk management solution, is designed to measure, monitor and control liquidity risk for the internal and regulatory purposes. It supports projecting cashflows on and off-balance sheet items reflecting behavioral assumptions built into product types and funding sources. It also supports collateral management for high quality liquidity assets, which plays a role, in combination with projected cashflows, of baseline for measuring internal and regulatory liquidity risk measures such as liquidity gap, LCR and NSFR. Its functionalities include:

- · Generating contractual/expected cashflows · Calculating liquidity risk measures
- · Managing collateral incl. RP and Repo
- · Supporting scenario analysis





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# Amain for AIR

Amain for AIR is a profitability analysis solution, in particular, designed for carriers(FSC and LCC). Applying the "business matching methodology", Amain for AIR enables carriers to carry out profitability analysis more efficiently by various dimensions such as flight and air route. Also, its data modelling framework, if necessary, would be easily integrated with internal systems such as contract management system or forecasting system. Its functionalities include:

- · Providing various allocation methods
- · Supporting hierarchical calculation
- · Matching between flight & transportation · Result Analysis with a pivot function

#### **Amain for EBP**

Amain for EBP is a business planning solution, in particular, designed to forecast future profits and losses not only from existing contracts but also future business transactions. Its forecasting capabilities could be easily expanded by integrating with the internal managerial accounting system, leading to forecasting outcomes more communicable. Its functionalities include:

- · Generating forecasting cashflows
- · Optimizing pricing levels

- · Simulating a set of scenarios
- · Measuring future performance

## **Amain for JOB**

Amain for JOB provides clients with a full set of job managing functionalities including job execution, termination, monitoring, etc.

It enables system managers quickly to detect any system errors, analyze the causes and take necessary actions for efficient system operation and response to any case in speed. Its functionalities include:

- · Executing many kinds of job
- Managing job dependency
- · Controlling sequence(error, skip)
- · Monitoring job status