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MANAGEMENT CONSULTANTS

Introducing FastFlow

Treasury Steering // Optimization

Christian Million

Budapest, 29.05.0214

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Agenda

- **Introduction**
- Challenges of Treasurers
- The FastFlow Concept
  - FastFlow Index One - a risk perspective
  - FastFlow Index Two - a growth perspective
- FastFlow Treasury Optimization Topics

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IFUA Horváth & Partners: Steering Business Successfully

Competence

Corporate Performance Management and Performance Optimization

Employees

Over 500

Clients

Large and medium-sized companies from the industry, service and retailing sectors, as well as public organizations

Offices

Abu Dhabi, Berlin, Budapest, Bucharest, Düsseldorf, Frankfurt, Hamburg, Jeddah, Munich, Stuttgart, Vienna, Zurich

Industries

Automotive, Chemicals, Consumer Goods, Financial Industries, High Tech, Industrial Goods, Media, Oil, Pharmaceuticals, Public Sector, Retail, Telecom, Transportation, Utilities

International alliance

Global delivery competence in the Cordence Worldwide Alliance

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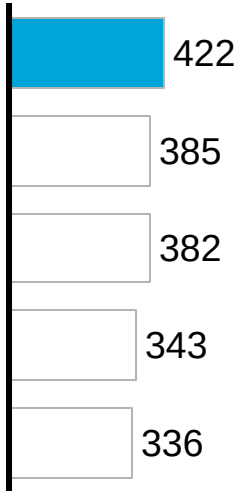
Top Spot in Consulting Rankings: Hidden Champions and Wirtschaftswoche – No. 1 in Controlling and Finance

Expertise in "Controlling and Finance"

TOP 5 Management Consultants as seen by clients



We also finished first for selection criteria

- Professional competence
- Method expertise

"Best of Consulting" Project Excellence

Nr. 1 in Finance & Risk Management

Source: The Hidden Champions: Study by Prof. Dr. D. Fink (Institute of Management & Consulting Sciences, WGMB) based on survey responses from 481 top managers (500 points = outstanding expertise); published in: Capital 2012/06/12

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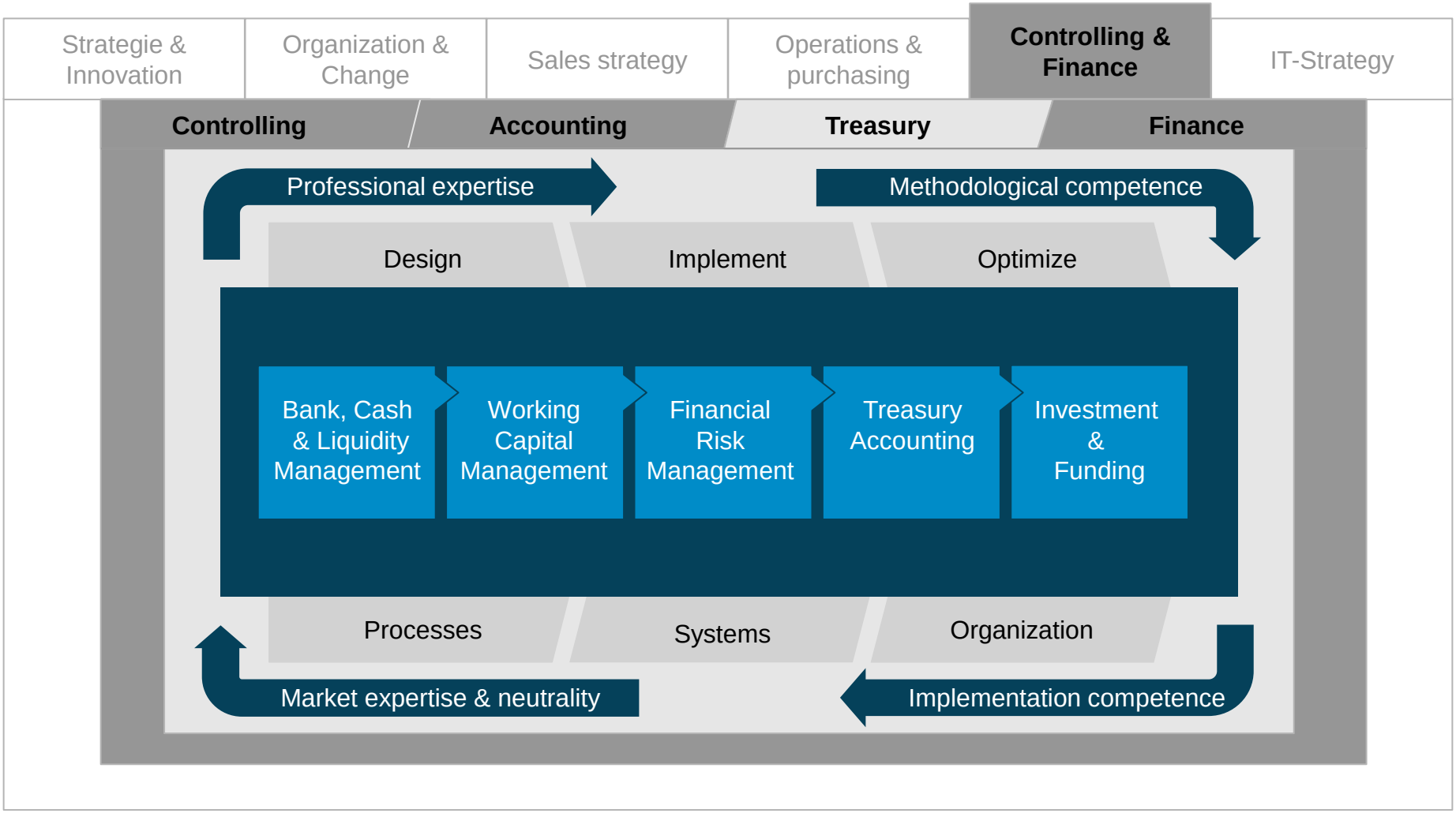
IFUA Horváth & Partners Treasury and Capital Management at a glance



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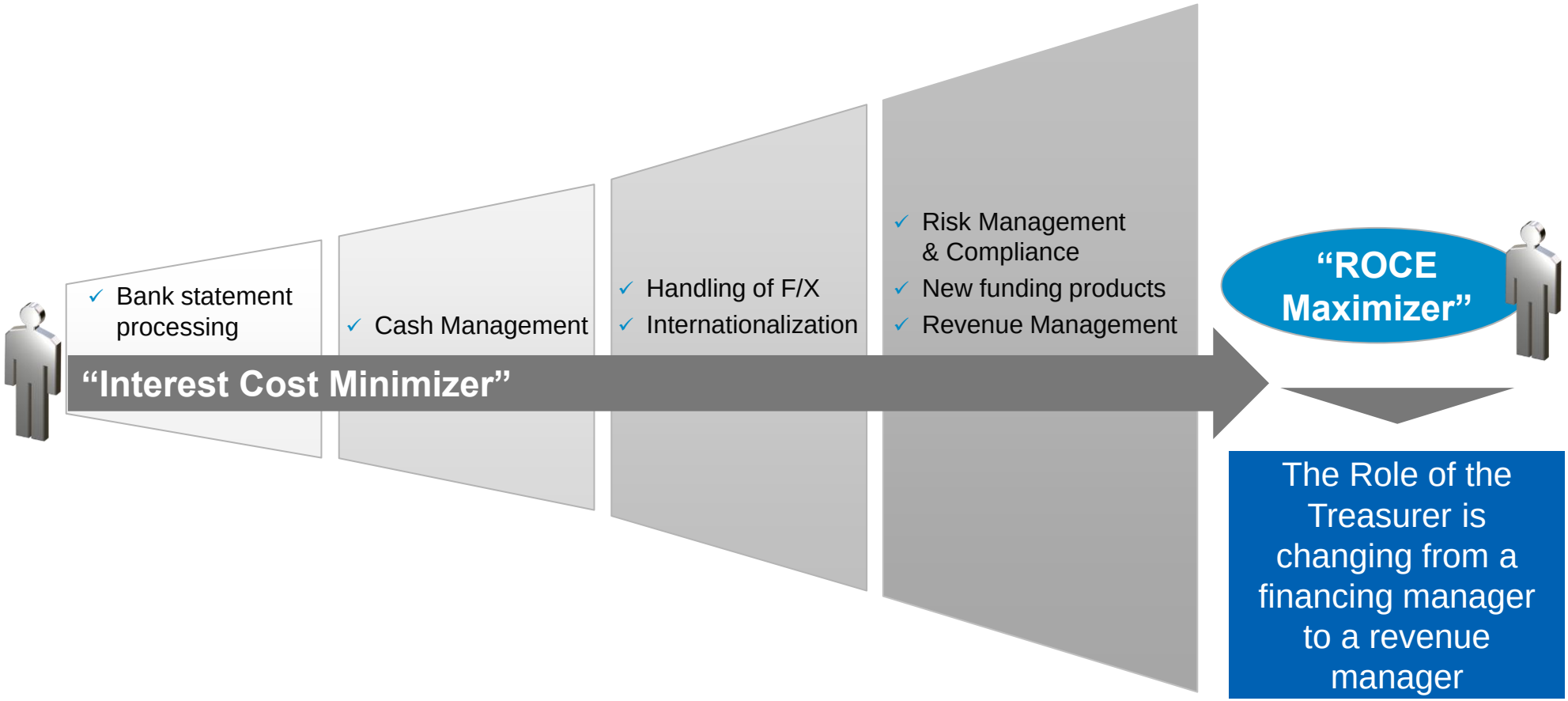
Development of the Role of Treasurers



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The CFO Agenda for 2014/15 embodies the latest trends for Treasury

CFO functions

Controlling	Accounting	**Treasury & Capital Mgmt.**	Tax	Corporate Control	…

CFO Agenda 2014/15

- ✓ Transparency
- ✓ Centralisation
- ✓ Integration / Harmonisation

- **Increasing focus on risk management**
  - Increased commodity risks
  - Manage market volatility through cash pooling
- **Regulation**
  - SEPA, EMIR
- **Islamic Finance**
  - Growing importance for organisations operating in the Middle East

Hot Topics 2014

- **Technology / systems / formats**
  - Globally integrated standard systems
  - Harmonisation of formats
  - Closed Loop Payment Systems (CLP)
  - Mobile payments
- **New funding opportunities**
  - Large scale Crowdfunding
  - Value Net Banks
- **Treasury organisation**
  - Adjustment of governance structures
  - Functional separation
  - Payment Factory & Inhouse Bank

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The recent past made risks and interdependencies of a globalized economy visible

A **customized target liquidity** concept was established which **incorporates insights from the financial**. The liquidity situation is continuously monitored on a company level and is recorded and controlled by a **group-wide planning** of the **financial requirements** and the sourcing of **funds**.

Annual Report BMW AG 2011

The **currency crisis** came **like an earthquake**. On a Wednesday two weeks ago, right in the holiday month of January, the central bank registered significant shocks in forex trading. One day later the explosion: **Within 38 minutes the Argentine currency lost twelve percent,** such a **price drop** was last registered before the economic crisis of 2001.

ARD Tagesschau 02/2014

Capital flight also puts a strain on the Ruble. Since the beginning of the year, **the Russian currency lost around ten per cent** against the dollar.

Handelsblatt 03/2014

Just in the year of the Soccer World Cup, euphoria at Adidas faded away. **Negative currency effects** pose a **risk** to the sporting goods manufacturer. Therefore **targets for 2015 are in danger.**

Wall Street Journal DE 03/2014

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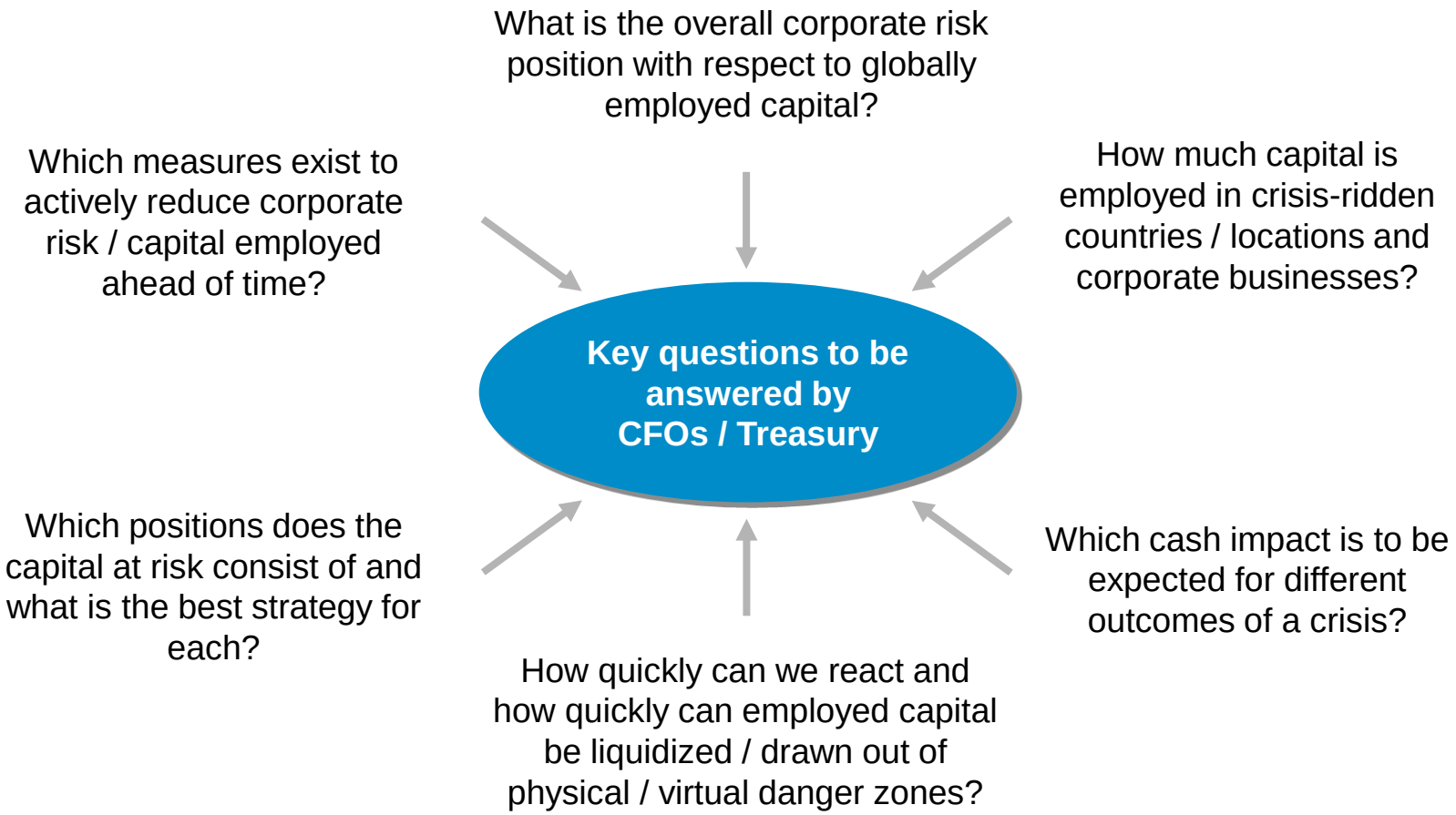
The Treasurer is confronted with various key questions concerning these risks and their impact on the corporation



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FastFlow - an innovative steering mechanism for value-based Corporate Risk & Growth Management

FastFlow Concept - ROCE Optimization

- Presents an innovative approach to Treasury-based **corporate steering and optimization needs**
- Follows a design principle building on existing KPIs and consolidation of available information in order to enable the Treasurer to become **ROCE Optimizer**

FastFlow Index One - a risk perspective

- Enhances existing KPIs to measure **global capital employed** and to derive **Capital@Risk results**
- **The** RO**CE Optimizer**

FastFlow Index Two - a growth perspective

- Provides a measure for **analytical optimization** measure of **top line results**
- **The RO**CE **Optimizer**

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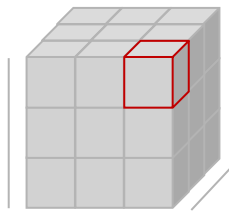
FastFlow Index One - a risk perspective
Gaining a global corporate perspective on Capital@Risk

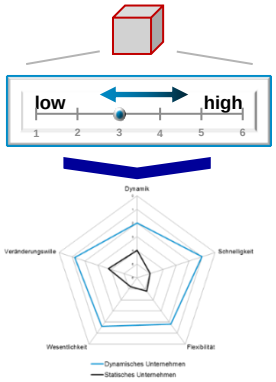
1 Monitor → 2 Analyze → 3 Optimize

FFI-Matrix:



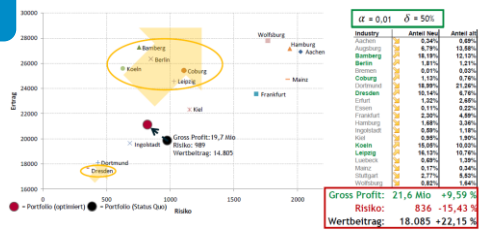
! Capital Employed

FFI-Risk Profile:



! Capital @Risk

FFI-based Simulation:



INFORMED TREASURY DECISION SUPPORT

1) The **FFIOne** is based on monitoring corporate **Capital Employed** along key dimensions:
   a) Asset Category & Value
   b) Business/ -Segment
   c) Country/ Location

Full global transparency on corporate Capital Employed

2) The **FFIOne** is measured by analyzing the risk profile of each position in the FFI-Matrix, along:
   - Reaction time (days)
   - Potential loss (% of “1a”)
   - External probability factors

Full global transparency on corporate Capital@Risk

3) The **FFIOne** is optimized by simulating potential management decisions, based on:
   - Mathematical optimization
   - Experience-based decisions

Full global transparency on impacts of potential decisions

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FastFlow Index One Use Case

Status Quo

A potential crisis situation - todays‘ corporate Treasury:

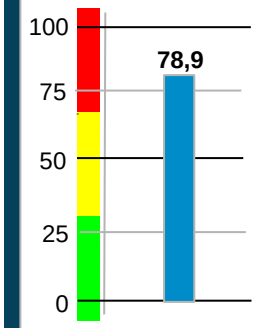
- No clear corporate data on Capital Emloyed or Capital@Risk along key dimensions
  - Geography
  - Organisation
  - Asset Category / Value
  - Risk Profile (reaction time, potential loss, etc.)
- Time-intensive ad hoc analyses required on risk structures and decisions support in case of sudden crises situations

On the upside:

- Standard KPIs are available but not interlinked to report overall exposure
- Value-oriented management and optimization is already in place in some corporate treasuries (e.g. WCM optimization)

FFIOne - Use Case in a crisis situation

Today‘s FFI:



FFI-Matrix (drill-down)

Today‘s FFI - by geography:

DE	UK	RUS	CHN	USA	FR	BRA
10	12	93	19	10	16	45
GR	**IT**	**ARG**	**UKR**	**THA**	**CAN**	**ESP**
26	12	50	96	65	15	19

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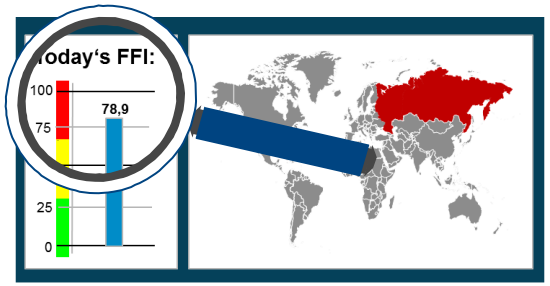
= *Measured by KPI*

FFIOne Use Case
Components of the FFIOne



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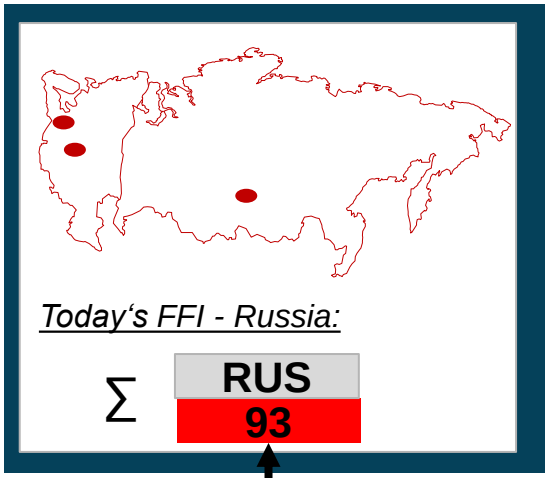
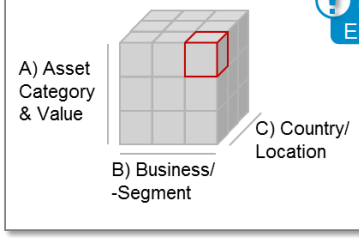


1 Monitor

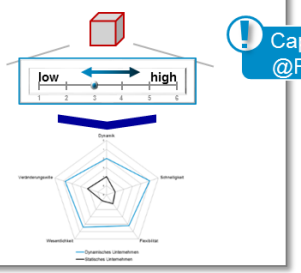
2 Analyze

FFI-Matrix:



Capital Employed

FFI-Risk Profile:



Capital @Risk

1) Monitoring of **Capital Employed** by Asset Category and Value: *[in EUR & days]*

2) Allocating the **Risk Profile** by Asset Category: *[e.g. Reaction Time]*

∑ Overall Capital Employed

Working Capital (WC)
- Current Assets
- Non-IR bearing current liabilites

Fixed Assets (FA)
- Land / Building
- Plant / Equipment

Intangible Assets (IA)

FFI1 cycle I:
KPI: CCC *(DIO, DSO, DPO)*

FFI1 cycle II:
KPI: ACE *(=Average Capital Employed)*

FA - Land / Building

Value (EUR) **X** Risk Multiplier (%)

= **Capital@Risk** (EUR)

X *weighted by* **Reaction Time** (days)

= **Asset FFI**

$$Country\ FFI = \sum_{k=i}^{n} (Weighted\ Asset\ FFIs)$$

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FFIOne Use Case
Example of the FFIOne

FFI-Matrix (drill-down)

Today's FFI - by geography:

DE	UK	RUS	CHN	USA	FR	BRA
10	12	93	19	10	16	45
GR	IT	ARG	UKR	THA	CAN	ESP
26	12	50	96	65	15	19

Today's FFI - Russia:

RUS
93

Capital Employed

Drill-down by Asset Category & Value:

Overall Capital Employed: *(in EUR)*	**EUR 79.3 mn**
Working Capital (WC): *(in EUR)*	**EUR 22.9 mn**
Current Assets	EUR 10.0 mn
Non-IR bearing current liabilities	EUR 12.9 mn
Fixed Assets (FA): *(in EUR)*	**EUR 45.1 mn**
Land / Building	EUR 19.1 mn
Plant / Equipment	EUR 26.0 mn
Intangible Assets (IA): *(in EUR)*	**EUR 11.3 mn**

Capital@Risk

Average Reaction Time	**95 days**	**93**
Overall Capital@Risk	**EUR 73.7 mn**	
Reaction Time (WC)	30 days	**87**
Capital@Risk (WC)	EUR 21,3 mn	
Reaction Time (FA)	118 days	**96**
Capital@Risk (FA)	EUR 41,9 mn	
Reaction Time (IA)	67 days	**94**
Capital@Risk (IA)	EUR 10,7 mn	

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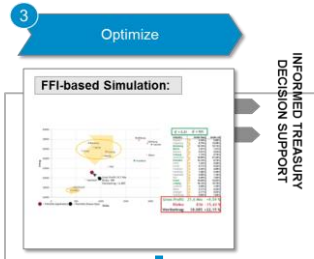
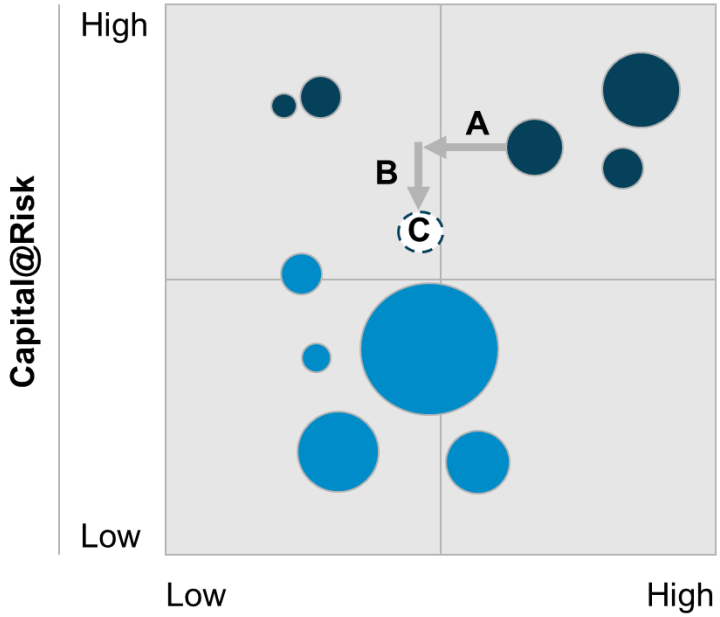
FFIOne Use Case
Active prevention and optimization



FFIOne Component Optimization

3) Simulation & **Component Optimization** of selected **FFIOne Portfolios**:



Optimization:

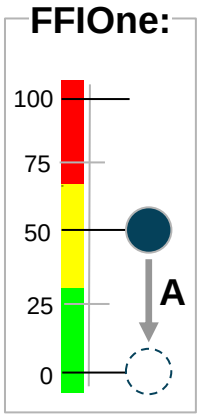
A: Reduction of reaction time

B: Reduction of risk multiplier

- *Hedging*
- *Sale&Lease*

C: Reduction of capital employed

Active prevention



Optimization:

A: Optimize FFIOne Cycle I Working Capital

- *WCM Optimization*
- *Closed-Loop Payment*

A: Optimize FFIOne Cycle II Fixed Assets

- *Asset-less Production*

Benefits of FFIOne - Optimization:

- ✓ Optimization based on the **FFIOne** and its components **frees up Capital Employed**
- ✓ Additionally the overall **Risk Structure (Capital@Risk)** is improved
- ✓ **ROCE is optimized**
- ✓ Released Capital can be used for **FFITwo** Optimization i.e. internal financing
- ✓ Additionally improved capital structure i.e. D/E-ratio.

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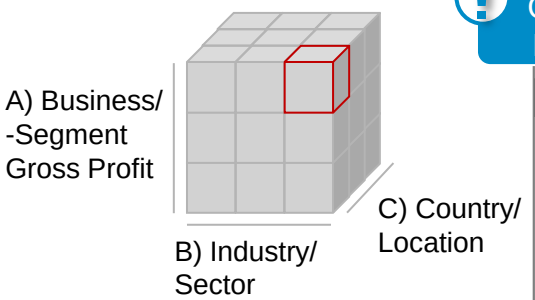
FastFlow Index Two - a growth perspective
Gaining a global corporate perspective on Growth Opportunities

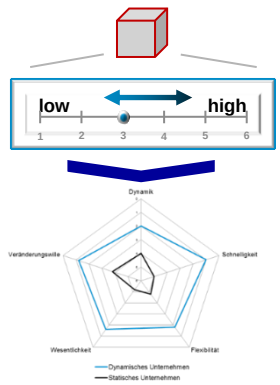
1 Monitor → 2 Analyze → 3 Optimize → INFORMED TREASURY DECISION SUPPORT

FFI-Matrix:



! Gross Profit

FFI-Growth/Risk Profile:



! EVA

FFI-based Simulation:

1) The **FFITwo** is based on monitoring corporate **Gross Profit** along key dimensions:
   a) Business/ -Segment
   b) Industry/ Sector
   c) Country/ Location

2) The **FFITwo** takes the growth-risk profile of each position in the FFI-Matrix into account, along:
   - Growth-Risk Factors
   - Interdependencies (correlation analysis)
   - External probability factors

Full global transparency on corporate Growth Opportunities

3) The **FFITwo** is optimized by simulating potential management decisions, based on:
   - Mathematical optimization
   - Experience-based decisions

Full global transparency on impacts of potential decisions

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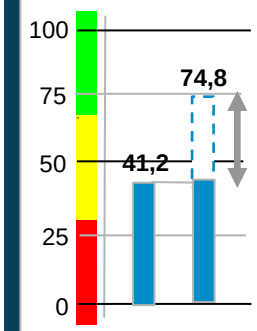
FastFlow Indext Two
An Introduction

The Approach

- ✓ FFITwo Optimization is based on **available „big data“**
- ✓ The FFITwo indicates the **attractiveness** of a corporate business, business segment or industry based on its **growth-risk profile**
- ✓ **A mathematical optimization algorythm** is **applied to the FFITwo**, maximizing Gross Profit maximization while taking into account the growth-risk profile
- ✓ The FFITwo can flexibly be scaled within the FFI-Matrix to e.g. a corporate country‘s or location‘s attractiveness

FFITwo - Portfolio Optimization

Portfolio FFI:



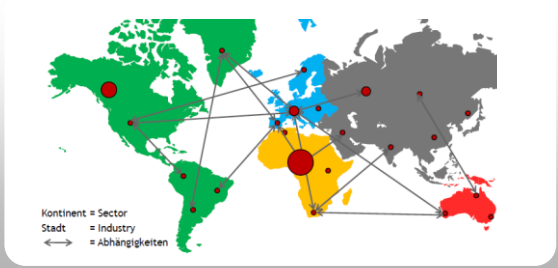
Preference Function:

$$\varphi(PF) = \underbrace{\mu_{PF}}_{A} - \underbrace{\frac{\alpha}{2} * \sigma_{PF}^2}_{B}$$

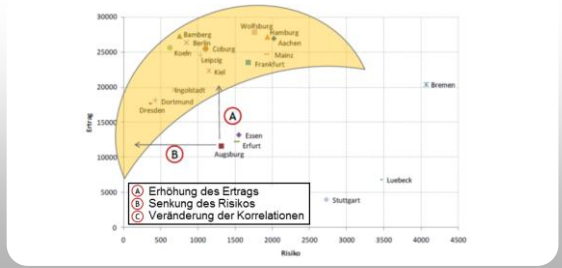
- ➢ **Maximization of FFITwo measured by EVA**, through:
  - A Gross Profit maximization
  - B Growth-Risk Profile

Real Data Use Case:

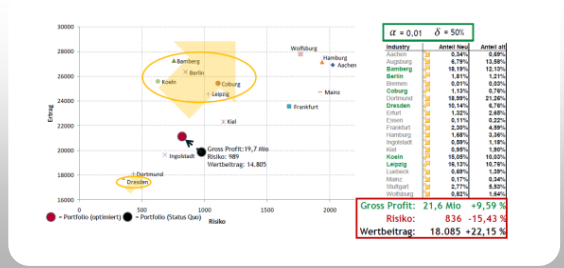
1 Monitor FFITwo Matrix



2 Portfolio / Opportunity View



3 Optimization / Decision Dash Board



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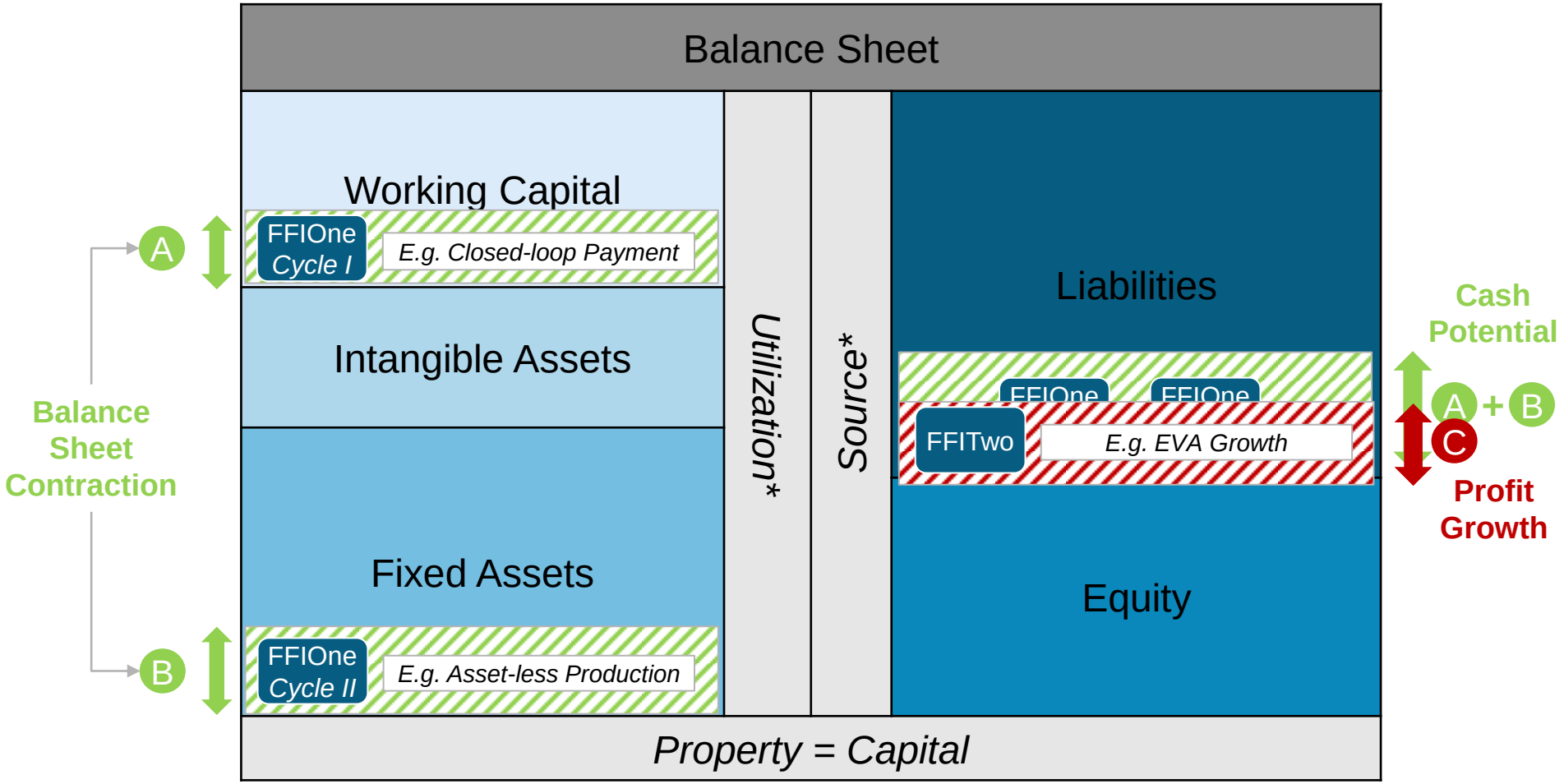
Summary FastFlow Index One & Two
Improving corporate steering towards ROCE Optimization

** of Capital*

Optimized ROCE via FFIOne & optimized ROCE via FFITwo



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Exemplary summary of the results of a Working Capital analysis, revealing relevant levers that need to be adjusted

	Findings	Potential actions
DSO	• DSO remarkably above the competitors' DSO • Optimisation recommended	• Effective claims management • Implement straight through processing approaches
DIO	• DIO above industry average and far above the industry's Top 3 values	• Decrease value by optimising purchasing processes
DPO	• Competitive DPO value • Hold/ enhance position	• Use potentials to increase payment periods • Attempt to extend vendors' tolerance levels

DWC

Findings

- DWC value significantly higher than industry average (more than twice the value)
- Focus should be on decreasing DSO and further enhancing DPO

Potentials of a better DWC value

- Decrease of capital lockup
- More free liquidity
- Increase of ROCE
- Free funds can be allocated more efficiently

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A Closed Loop Payment System consists of payment transactions, financing, customer retention & credit management

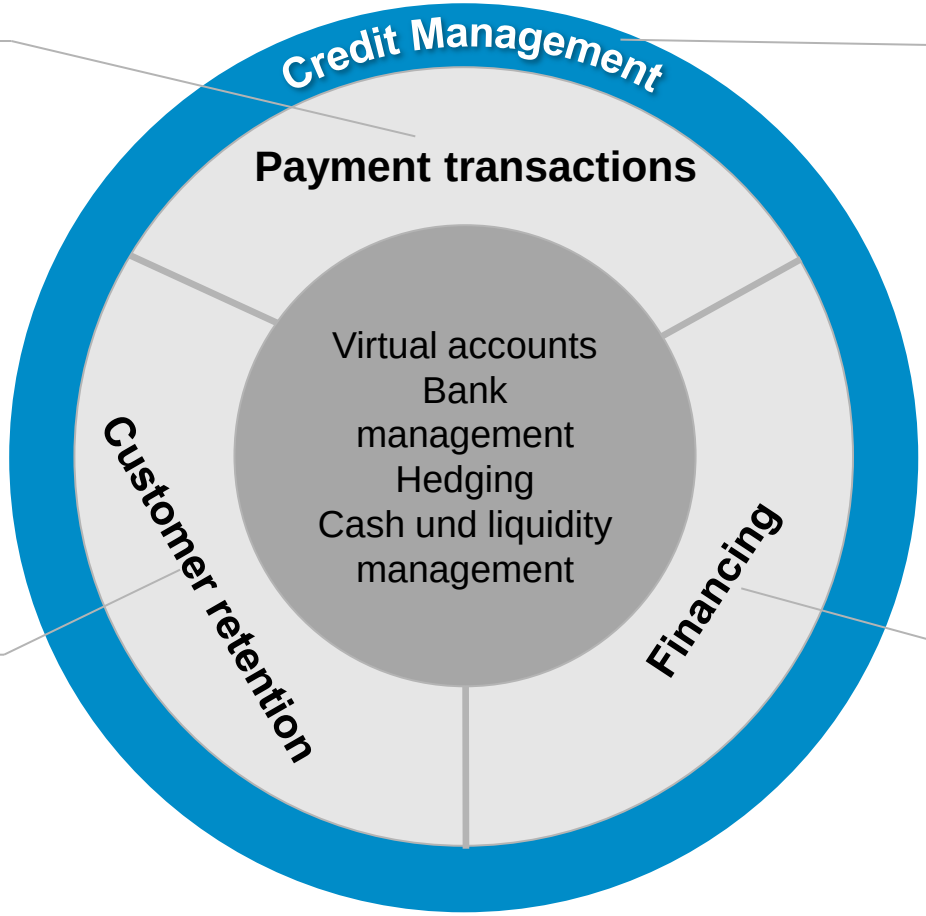
Closed Loop Payment System

Advantages for payment transactions

- Increase of Liquidity
- Cost reduction and independence through adoption of financing services
- Flexibility at connecting new partners to the system

Advantages for credit management

- Real-time credit worthiness check, therefore decreased credit risk
- Straight through data processing without any media breaks



Advantages for customer retention

- Stronger customer tie
- Better customer understanding through the collection and analysis of transaction data

Advantages for financing

- Buying incentives through financing models
- Long-term customer relationships and improving the planning ability of cash inflows

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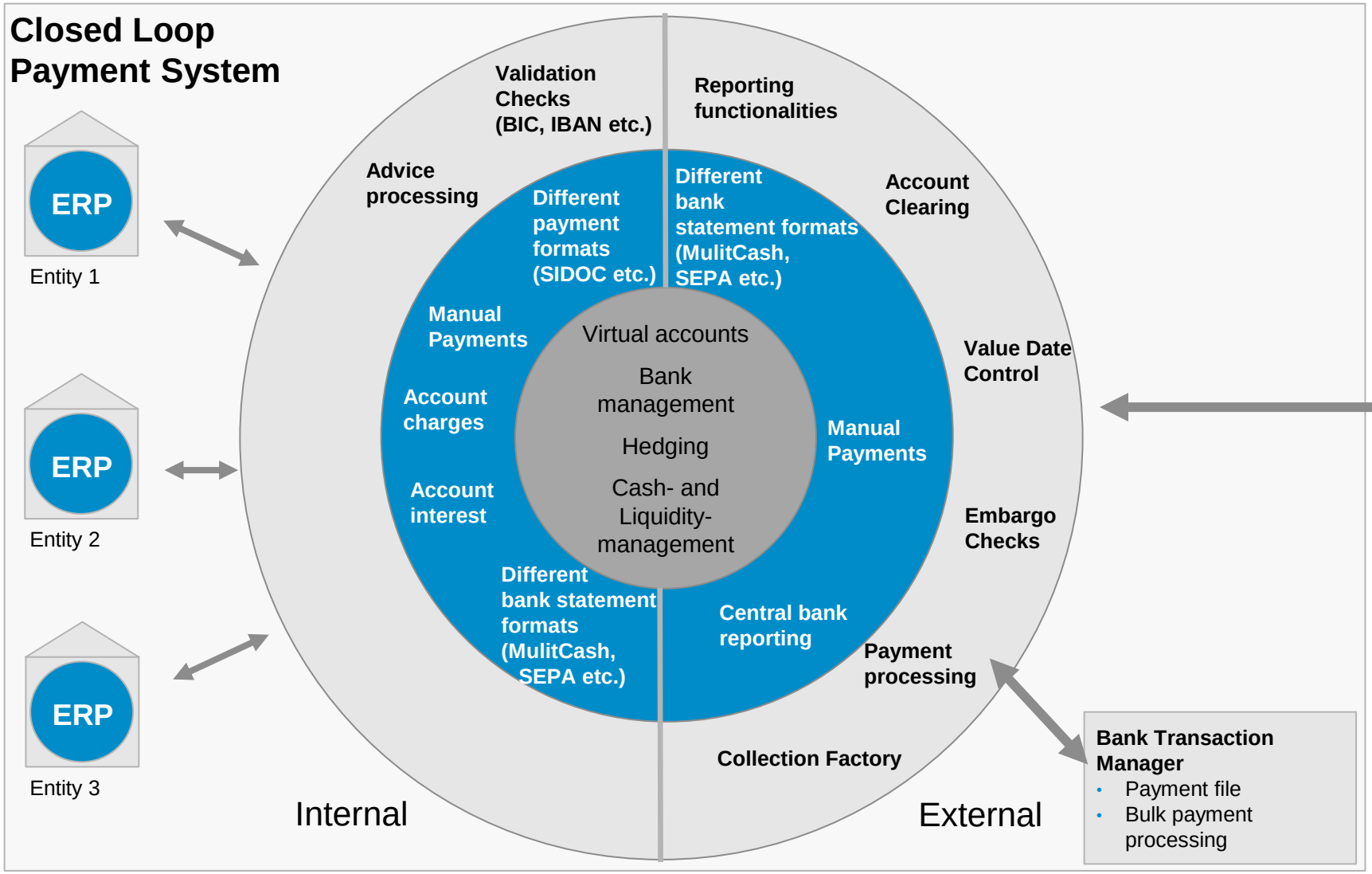
If a Closed Loop Payment System fulfills certain requirements, it can serve as an In-House Bank for the entire company



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Asset-less Production

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