BearingPoint. Management & Technology Consultants

Loan Impairment according to IFRS
– Solution Approaches –

Bucharest, 11. April 2007

Agenda

- The Challenge
- Starting Point of Banks (i.e. in Germany, Ukraine)
- Dependencies regarding selected Basle II Methodology
- Solution Approaches according to the Basic Conditions
- Solution Alternatives
- Data Requirements
- Discussion

Compared with local GAAP, IFRS impairment rules have enhanced requirements for calculation methods, posting rules and reporting

- Segmentation depending on a significance level and selection of an adequate calculation method:
  - individually assessed impairment
  - portfolio based impairment
- Triggering events for the indication of a possible impairment case
- Impairment test for individually assessed impairment applying the DCF-Method
- Calculation of impairment and unwinding for a reporting date
- Posting rules for interest payments
- Reporting of interest income for impaired loans

Therefore Banks have to cope with additional issues

- Determination of the optimal strategy for the segmentation of the loan portfolio
- General guidelines for the estimation of future cash flows
- Preparation of the required data (i.e. effective interest rate, collateral realization)
- Documentation of the calculation parameters and the achieved results
- Implementation of the new processes within the organization, i.e. for determination of an impairment case, estimation of the future cash flows

The starting point for the banks can be very different

Local GAAP requires

- … in Germany:
  - simplified calculation of individually assessed impairment and portfolio based impairment
  - no differentiation within portfolio based impairment method
  - no calculation of unwinding effect
- … in Ukraine:
  - methodology given from national bank regarding segmentation and calculation
  - impairment based on portfolio segmentation
  - no differentiation within impairment method
  - no calculation of unwinding effect

An essential influence on the solution approach and the expected effort is determined by the selected Basle II methodology

Regarding portfolio based impairment the following versions have to be considered:

- Advanced Approach (IRBA)
- Standard or Foundation (IRBF) Approach
- No Basle II implementation so far

Impairment according to **IFRS** applies the **incurred loss method** where **Basle II** operates with the **expected loss method**. A **translation** between these two methods and thereby a use of Basle II parameters is given by using the **LIP-factor***

*loss identification period

For Individual Assessed Impairment the IFRS 39 regulations have to be used.

Banks with an implemented Advanced Approach provide a good basis for the calculation of the portfolio based impairment

- Parameter calculation and estimation already in place
- Portfolio segmentation according to the established processes
- Historical data for LIP-factor estimation available

- Calculation models are similar:
  - Expected Loss (EL) Approach according to Basle II:

EL = Exposure at Default **x** Loss Given Default **x** Probability of Default

  - Impairment requires an Incurred Loss (IL) Approach:

IL = Current Exposure **x** Loss Identification Period **x** Loss Given Default **x** Probability of Default

Banks that have not implemented Basle II IRBA have to implement a methodology that fulfills the requirements

An adequate methodology has to cover the following topics:

- Collection of historical data
- Portfolio segmentation into homogenous segments
- Development of a calculation model based on historical data (The calculation model has to consider the discount effect and is based on an incurred loss model.)

There are two solution alternatives for banks:

- Bank specific implementation for the portfolio based impairment
- Application of a methodology provided by the regulator

To limit the implementation effort banks could use (if available) a specific methodology provided by the regulator

Example Ukraine (Mapping local GAAP to Incurred Loss Model):

$$Impairment\ \ (local\ \ GAAP) = \boxed{(Prin - C\ \ *\ \ d(CT, LT(\ \ FS,LH)))} * \boxed{PD\ (LT(FS\ \ ,LH))}$$

$$\approx \qquad\qquad \approx$$

$$Impairment\ \ (interim)_{t_0} = \boxed{CE_{t_0} * LGD_{t_0}} * \boxed{PD_{t_0}} * LIP_{t_0}$$

Prin = Priciple outstanding

C = Collateral value

d = discount effect

CT = Collateral type

LT = Loan type

FS = Financial state of customer

LH = Quality of loan

PD = Probability of default

CE = Current exposure

LGD = Loss given default

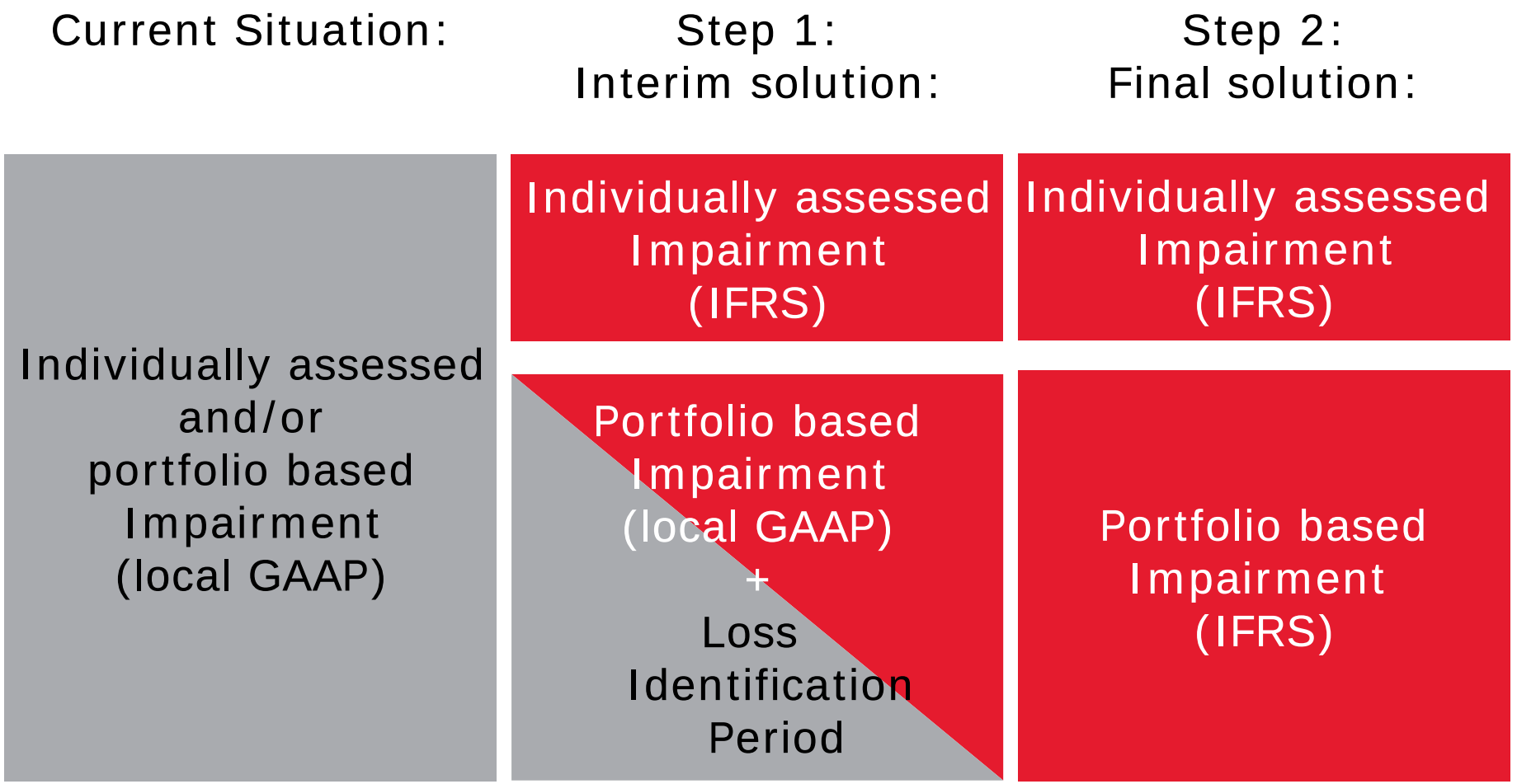
PD = Probability of default

LIP = Loss identification period

Depending on the basic conditions of the individual bank the solution approach for the implementation of impairment differs

- Individually assessed Impairment based on future cash flow estimation regarding
  - Receivables
  - Collateral realization (minus realization costs)
- Portfolio based Impairment
  - on the Basis of Basle II Parameters (IRBA) or
  - on the Basis of dedicated statistical data

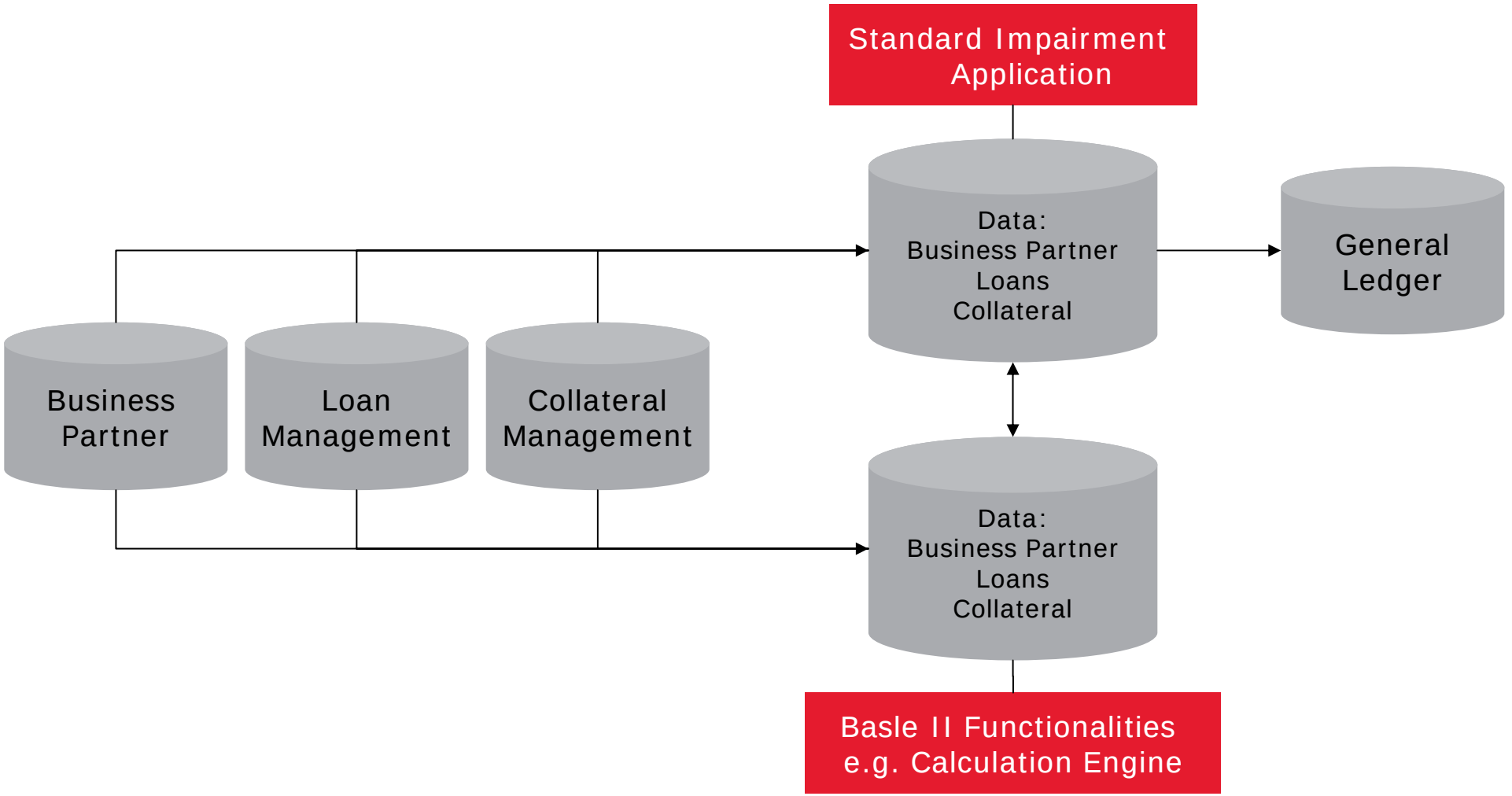
Combinations of the solution approaches like a 2-step approach for portfolio impairment may apply



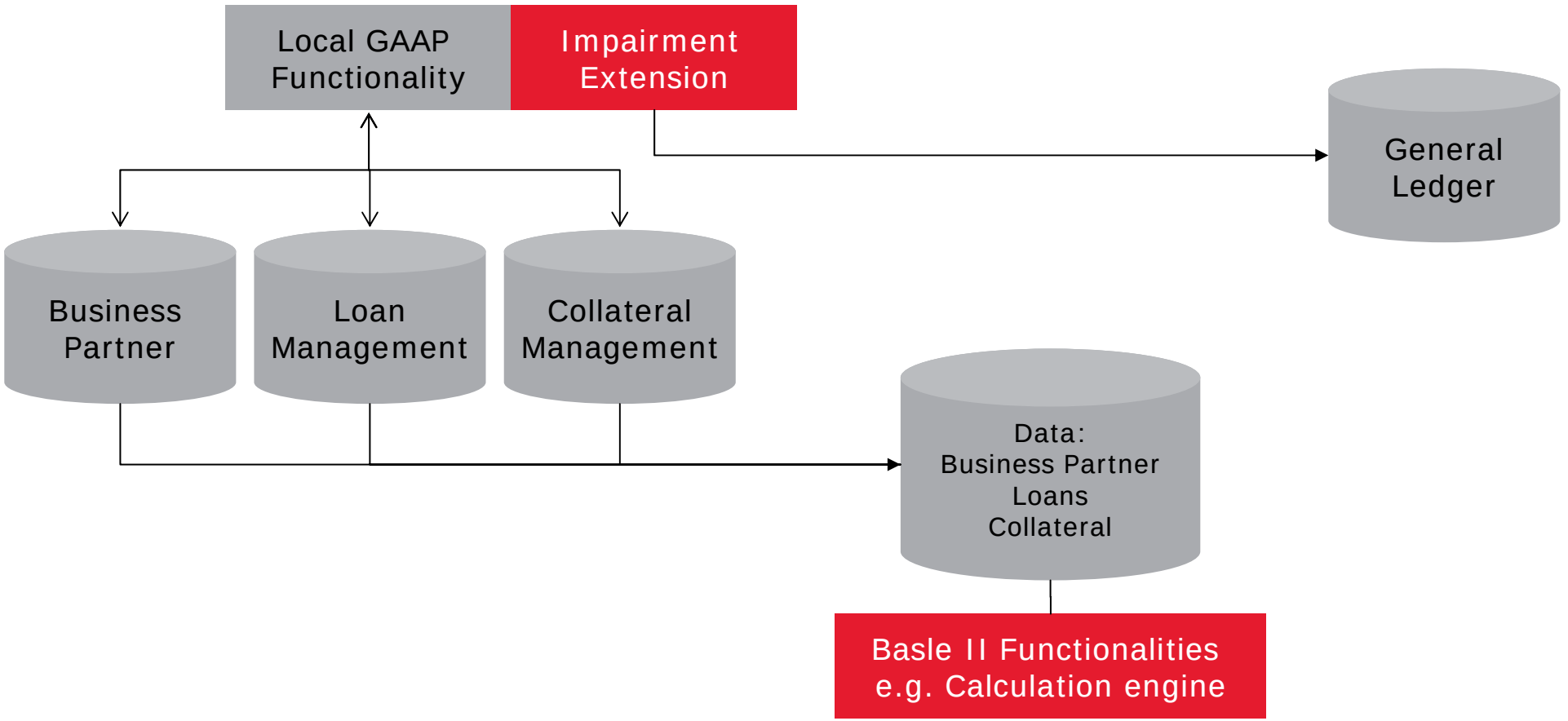
The implementation of the appropriate impairment application depends on the existing IT-architecture and the IT-strategy

- standard impairment application
- enhancement of existing applications
  - Core banking systems
  - Basle II (already implemented)
- development of an impairment application as part of a new risk management architecture

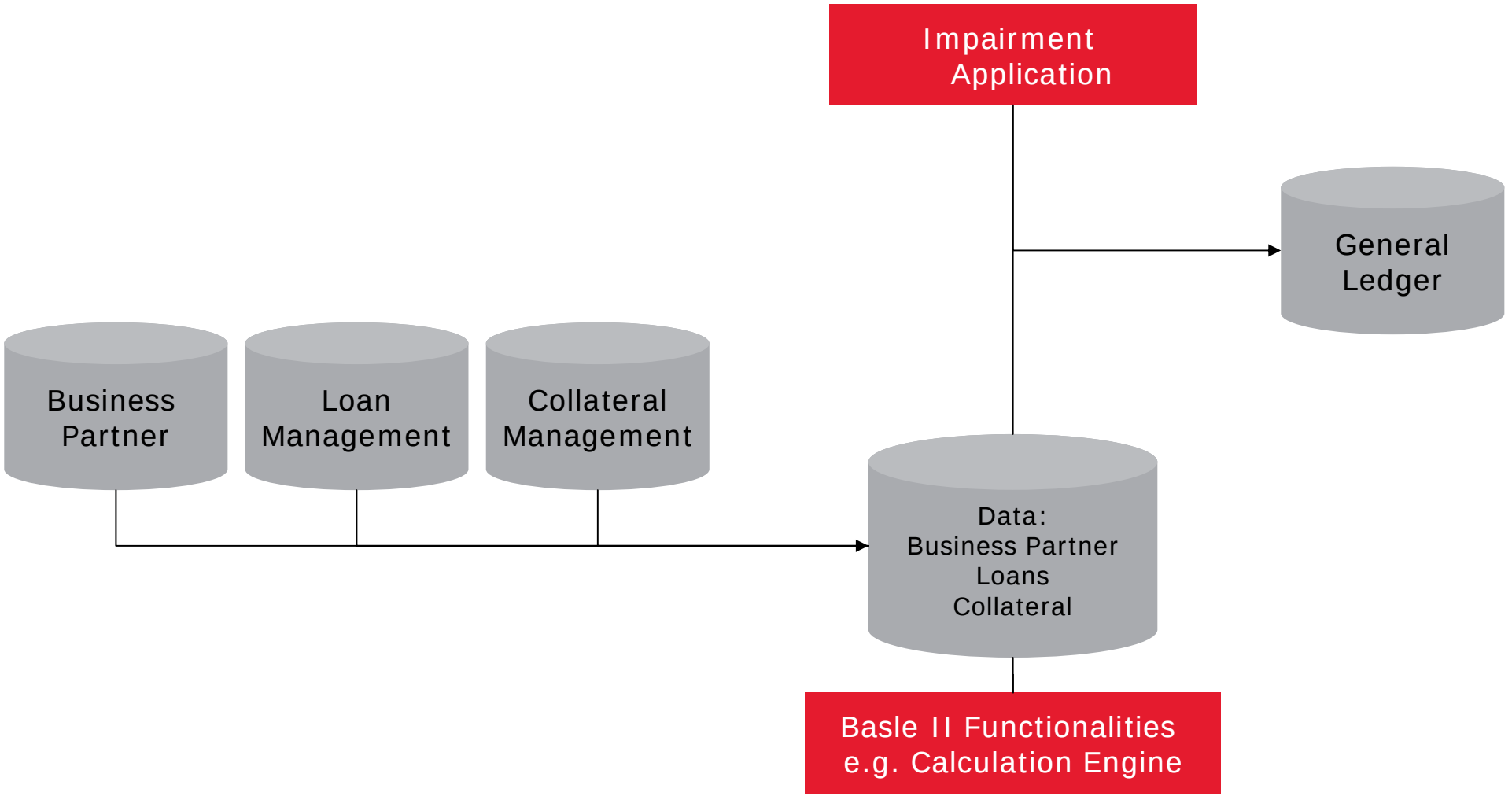
The implementation of a standard impairment application causes at least redundant data



The enhancement of existing systems reduces complexity but needs a flexible data structure and architecture



An integrated risk solution facilitates the use of common data for impairment and Basle II business requirements



The implementation of an impairment application requires the management of additional business data

- Effective interest rates
- Triggering Events
  - Business Partner
  - Loan
- Future expected cash flows
  - receivables
  - collateral
- Calculation results
- Documentation for auditors

Discussion

- Your questions?

Contact

Alexander Beck
Manager

BearingPoint GmbH
Speicherstrasse 1
60320 Frankfurt am Main
www.bearingpoint.com

Tel: +49 (69) 13022 4333
Mobile: +49 (174) 3463361
alexander.beck@bearingpoint.com

Roland Schoebel
Senior Manager

BearingPoint GmbH
Schwarzenbergplatz 16
A1010 Vienna
www.bearingpoint.de

Tel: +43 (1) 50632 5105
Mobile: +43 (664) 814 23 05
roland.schoebel@bearingpoint.com


BearingPoint®