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Security & Integrity Issues in Updating Risk Data

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Presentation outline

- Why risk data needs updating
- What data needs updating
- Security and integrity issues
- Challenges in IT architecture

Why risk data needs updating

- Basel II
 - Global risk governance regime since 2007
 - Adopted by more than 100 countries
 - Compliance by all financial services eventually
- Basel II requirements for financial institutions
 - Capital requirement based on risk quantifications
 - Risk quantifications based on reliable data

- Updated capital requirement => updated data
- Data have to be updated at least annually or semi-annually
- Capital requirement has to be stressed tested
- Financial institutions (FIs) not complying can be slapped with higher capital requirement

What data needs updating

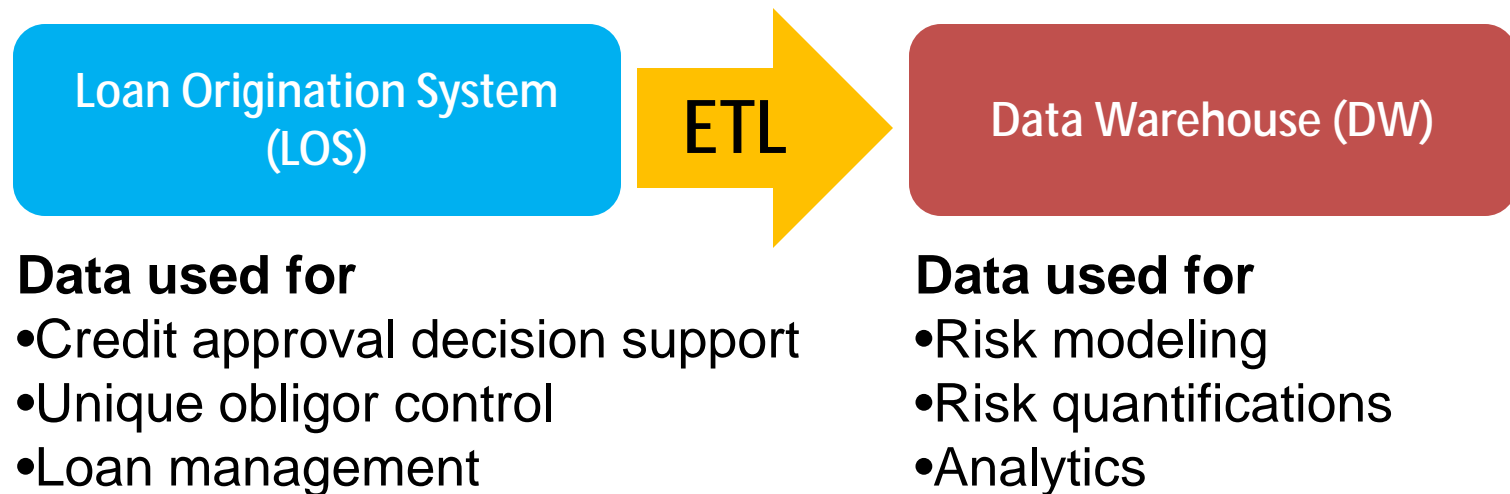
- Obligor (borrower) data
 - Demographics
 - Corporate profile and financials
 - Obligor risk rating (Probability of Default or PD)
- Facility data
 - Product type
 - Facility risk rating (Loss Given Default or LGD)

- Exposure data
 - Exposure maturity (Effective Maturity or M)
 - Exposure level at default (Exposure At Default or EAD)

- Risk mitigation data
 - Collateral value
 - Guarantor risk rating and guarantee coverage
 - Offsetting coverage

Security and integrity issues

- Typical IT architecture (for bank)



- Where should data be updated
 - At LOS
 - Not designed for existing customer data re-entry
 - Credit Administration staff resent extra work
 - Vendor warranty problem
 - Responsibility for data corruption
 - System access security compromised (updating can take whole year)




– At DW


- DW data supposed to be non-volatile
- Synchronisation with LOS data values (e.g. different risk ratings for same exposure)
- Risk quantifications improperly altered

- Who should update data

- Credit Dept

- Strong resistance (data already entered at loan origination)

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- No interest in risk quantifications (no impact on bonus)
 - No interest in capital requirements
- Risk Management Dept
- Can only access DW if permitted
 - Dependent on Credit Dept for reliable initial data values
- IT Dept
- Not a priority
 - Minimal concern for data integrity

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- When to update data
 - Year end
 - May take more than one year to update all data
 - Updated data outdated
 - Continually
 - Asynchronisation of risk quantifications (e.g. updated Obligor rating but outdated Guarantor rating)
 - Database always open to access

- How to update data
 - By record
 - Time consuming
 - Database always open to access
 - Batch upload
 - Stringent offline error-checking needed (e.g. on MS Excel spreadsheet)
 - Stringent upload interface design

Challenges in IT architecture

- Timely and reliable updated data values much more difficult than reliable initial data values
- Can DW data be volatile?
- Legacy system and DW data synchronisation
- Domain expertise



QUESTION & ANSWER