ASUG | Webcast

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- This webcast will be recorded
- Recording and slides will be posted to the Discussions area on ASUG.com

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38 CHAPTERS U.S. & CANADA

150 MEETINGS HELD ANNUALLY

50% INCREASE IN ATTENDANCE

14,000 ATTENDEES

27 ACTIVE INFLUENCE COUNCILS

1,800 CUSTOMER CONNECTION PARTICIPANTS

350 JOINED CEI PROJECTS

100+ SPECIAL INTEREST GROUPS (SIG's)

375 WEBCASTS

30,000 WEBCAST ATTENDEES
2015 Year to Date

ASUG CONFERENCE | SAP Analytics & BusinessObjects

New Orleans
October 18-20, 2016

SAVE THE DATE: October 18-20, 2016
The best choice for SAP Analytics, BI, and BusinessObjects education and training.

S/4HANA Finance

SAP Credit Maangement

Katharina Reichert, January, 2016

Customer

Series on Receivables – Every other Thursday

- **Jan 14 - Introduction to Receivables – high level overview**

- **Today– "The SD Credit Check is gone!" What is new in Credit Management in S/4HANA**

- **Feb 11 – Tools to Lower DSO**

- **Feb 25 – Deployment and Integration Options: Deeper Dive on HANA Cloud Platform apps and Central Finance**

A comprehensive Portfolio for the CFO
Covering all business areas across all Finance roles

SAP S/4HANA

SAP S/4HANA Finance - delivers functional completeness across all financial roles

Chief Financial Officer

VP of Finance	Head of Corporate Reporting	Corporate Treasurer	Head of Finance Operations	Chief Compliance Officer
Financial Planning & Analysis	**Accounting & Financial Close**	**Treasury & Financial Risk Management**	**Finance Operations**	**Enterprise Risk & Compliance Management**
Strategy Development and Translation	Accounting	Payments and Bank Communications	Receivables Management	Enterprise Risk Management
Planning, Budgeting and Forecasting	Entity Close	Cash and Liquidity Management	Invoice Management	Controls and Compliance Management
Profitability and Cost Management	Corporate Close	Debt and Investment Management	Travel Management	International Trade Management
Monitoring and Reporting	Reporting and Disclosure	Financial Risk Management	Real Estate Management	Fraud Management
	Financial Close Governance	Commodity Risk Management	Financial Shared Services	Audit Management

SAP Receivables Management is a portfolio of automation solutions

Accounts Receivable – standard process automation

Manage all financial accounting–related aspects of customer accounts receivable.

Credit Evaluation and Management
Embed proactive credit management in transactional processes and portfolio analysis.

Billing and E-Invoicing
Deploy a customer bill payment portal or an e-billing process.

Dispute Resolution
Clarify and resolve customer payment disputes quickly and efficiently.

Collections Management
Proactively manage customer collections and customer service.

SAP Credit Management – Balance risk and return with a unified global view of your customers

- Cross-enterprise and cross-system credit evaluation and management process, including disputes and dunning information

- Customer scoring based on your rules, including internal and external factors

- Easy access to credit information for your sales team

- Workflow for faster decision-making once credit limits reached

0.3% The amount of accounts receivable write-offs by the 25% top-performing companies (compared to 3.1% for the bottom 25%)
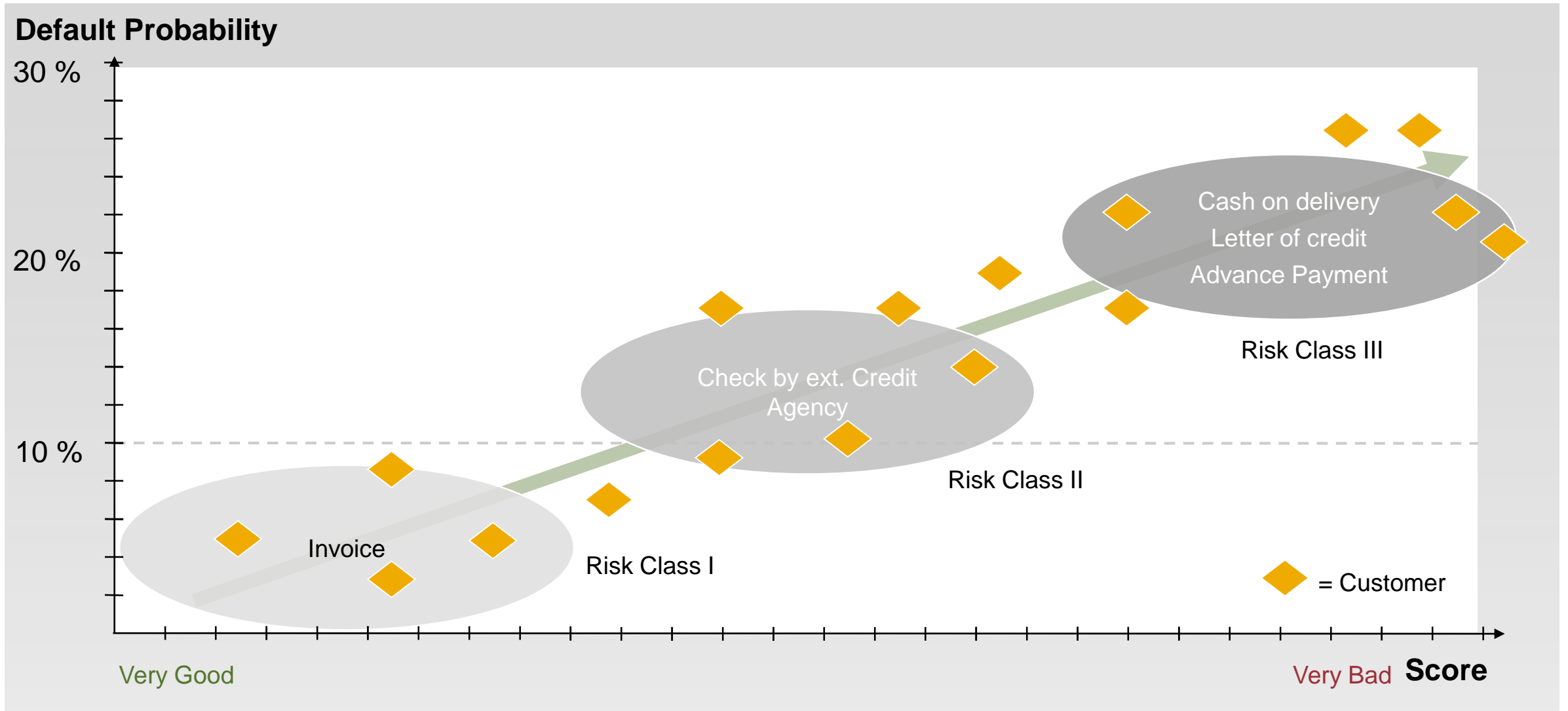Source: ASUG Benchmarks

Challenges in managing credit

- **Inconsistency in credit policy**: a customer is treated differently in different business units within the same company; ineffective credit management in distributed sales systems

- **Cross-department collaboration**: information needed for credit decisions is spread out all over the company; iommunication between sales, credit, and finance departments is very time-consuming

- **Treatment of new customers:** No credit history available when doing business with new customers

Default probability determines customer treatment
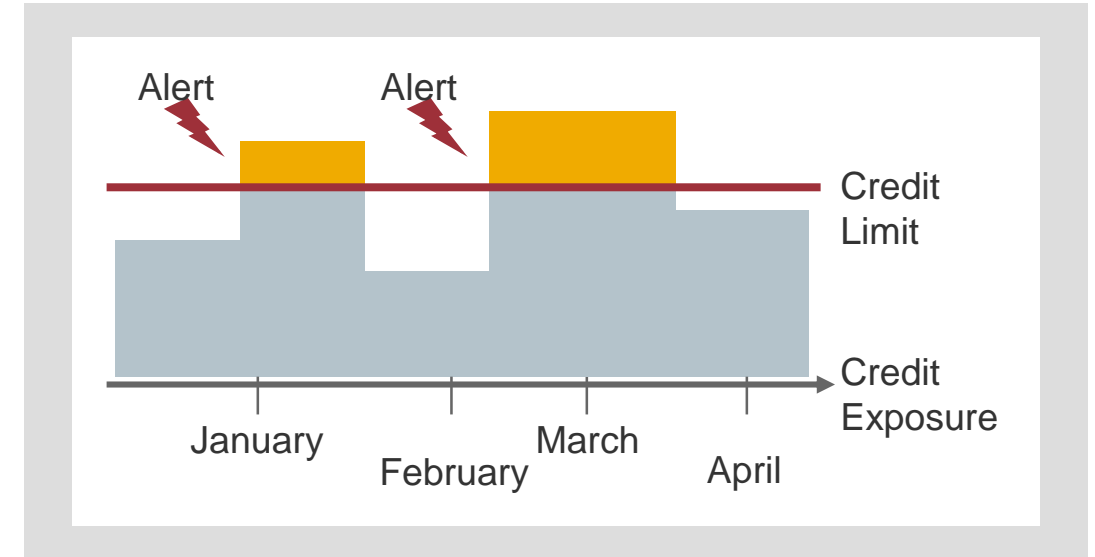

Default Probability

- 30 %
- 20 %
- 10 %

Invoice
Risk Class I

Check by ext. Credit Agency
Risk Class II

Cash on delivery
Letter of credit
Advance Payment
Risk Class III

◆ = Customer

Very Good

Very Bad **Score**

Credit limit management

Functions

- Manages the credit profile of a customer
- Monitor credit exposure / limit in a central system
- Web-Based access to customer's credit profile
- Rules Engine for implementing own scoring and limit rules
- Scalable platform to use in B2B and B2C Scenarios
- Score customers and vendors

Business Benefit

- Implement company wide credit policy
- Early identification of default risk
- Reduce processing costs by automating credit decisions

Credit case

Functions

- Virtual Folder to track credit applications

- A credit case contains
  - Major customer master data & credit profile
  - Status
  - Organizational data
  - Documents
  - Orders
  - Notes
  - Inbox

- A credit case can be sent from user to user via SAP Workflow

Business Benefit

- Sales people can enter an application for credit limit change

- Track status of the application

- Inform sales when decision is made

Documented credit decision

- A sales order which is entered in SD gets credit checked

- In case of a negative credit check the sales order gets a status "credit block"

- In this case the system automatically creates a new object called "Documented Credit Decision" (DCD) which is linked to the credit blocked sales order
  - Various attributes such as priority, responsible credit analyst
  - A snapshot of the credit account in order to document the exact state of all attributes and values
  - The log of the credit check
  - Notes & attachments
  - An approval process is supported which describes who may approve the credit decision / release the respective sales orders

- DCDs can also be created for delivery documents (in addition to sales orders)

Credit analysis

Functions

- Company-wide monitoring of credit risk

- Analysis of customer payment and order behavior

- Alert on high risk customers

- Risk structure analysis of the customer base by country / business unit / customer group

Business Benefits

- Proactive credit management

- Identification of risks before customer becomes insolvent

- Hedging of high risk customers reduces unexpected losses

- Aim marketing and sales activities to low-risk customers

- Drive price policy by a customer risk category

Real-time processing and integration

Automatic credit worthiness checks

- Credit limits checks carried out when entering orders, deliveries, good issues
- Any system can be connected to SAP Credit Management

Up-to-date credit exposure for all customers

- Any system can be connected to SAP Credit Management
- Immediate exposure updates
- Integration with Accounts Receivable
  - Exposure
  - Payment behavior key figures

Permanent customer scoring

- Scores are always updated in real-time
- Recalculation of scoring event-driven

Traceability
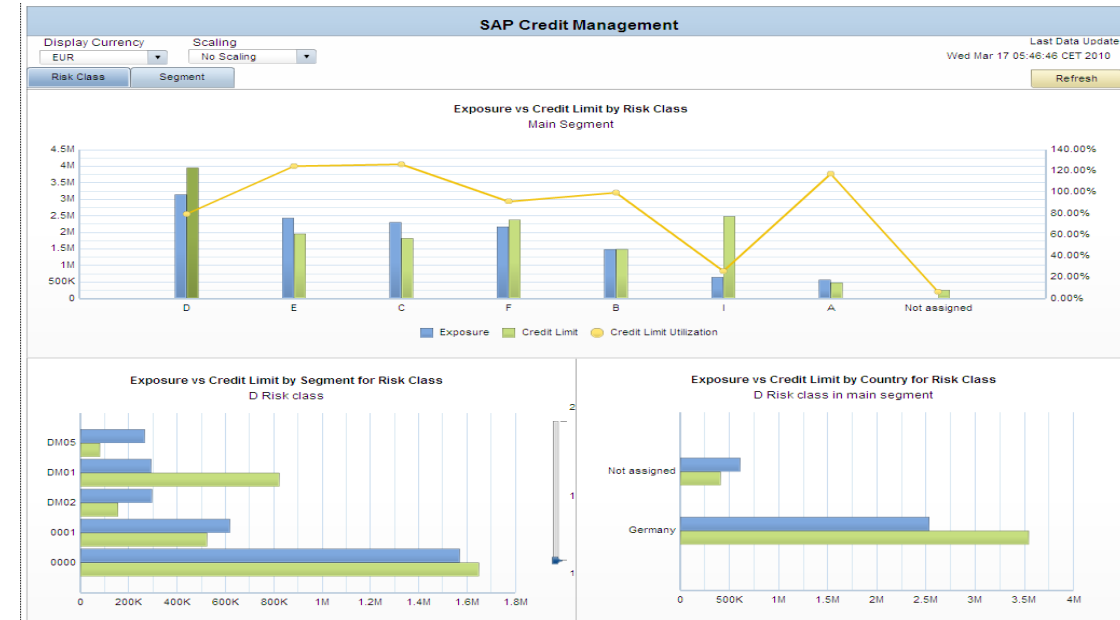
- Change documents, various logs, …

In releases before SAP HANA, Xcelsius dashboards visualize BW data

This dashboard helps you to analyze / answer following questions:

- What is the credit exposure to customers of various risk classes?

- What is the average credit limit utilization of customers of various risk classes?

- How do these figures look by country?

- How do these figures look by organizational entity (= credit segment)?

Based on this insight, following action might be taken (examples):

- Take provisions for anticipation credit default.

- Take measures to reduce overall credit exposure in critical risk classes if respective exposure appears to be too high.

- Try to optimize customer portfolio considering risk profile.

With SAP HANA, Fiori analytics provide real-time insight without data replication

- Cross-enterprise and cross-system credit evaluation and management process, including disputes and dunning information

- Customer scoring based on your rules, including internal and external factors

- Easy access to credit information for your sales team

- Workflow for faster decision-making once credit limits reached

Business partner in SAP Credit Management

Scoring Rule:

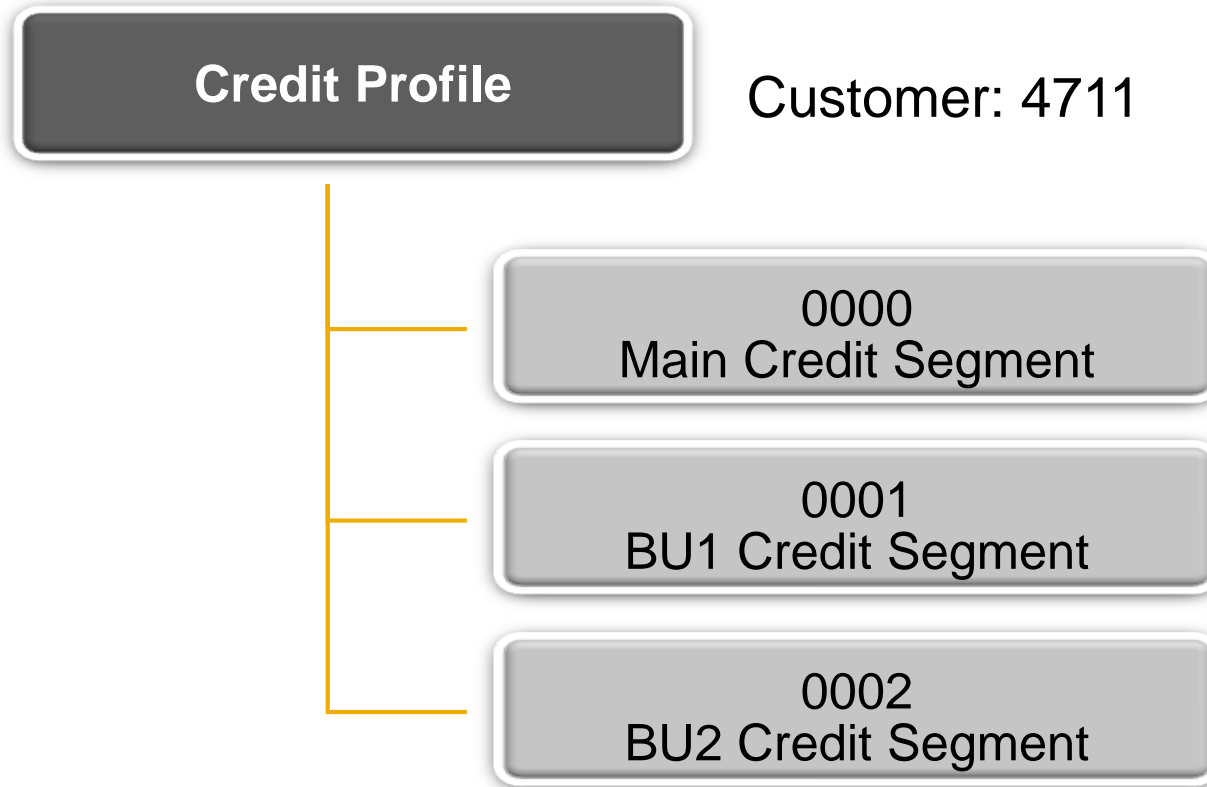Rules that define how a customer is scored (e.g. industry, D&B, legal form, country)

Credit Check Rule:

Rules that define how a customer is credit checked (e.g. static / dynamic check, oldest open item …)

External Rating from D&B

Concept of credit segments

Credit Profile

Customer: 4711

	0000 Main Credit Segment
	0001 BU1 Credit Segment
	0002 BU2 Credit Segment

Exposure HQ:	100.000€
Exposure BU1:	30.000€
Exposure BU2:	20.000€
Total Exposure:	**150.000€**
Limit:	160.000€
Exposure:	**30.000€**
Limit:	35.000€
Exposure:	**20.000€**
Limit:	30.000€

Customizing: Credit Segment 0001 + 0002

☑ Contribute to Main Credit Exposure

Relationships

Higher-level credit management account of …

Business Partner 4711
Segment 0000
Credit Exp.: 1.000.000 €

Total Credit Exposure:
3.100.000 €

Is the higher level credit management account of …

Business Partner 4712
Segment 0000
Credit Exp.: 1.500.000 €

Total Credit Exposure:
2.100.000 €

Is the higher level credit management account of …

Business Partner 4713
Segment 0000
Credit Exp.: 700.000 €

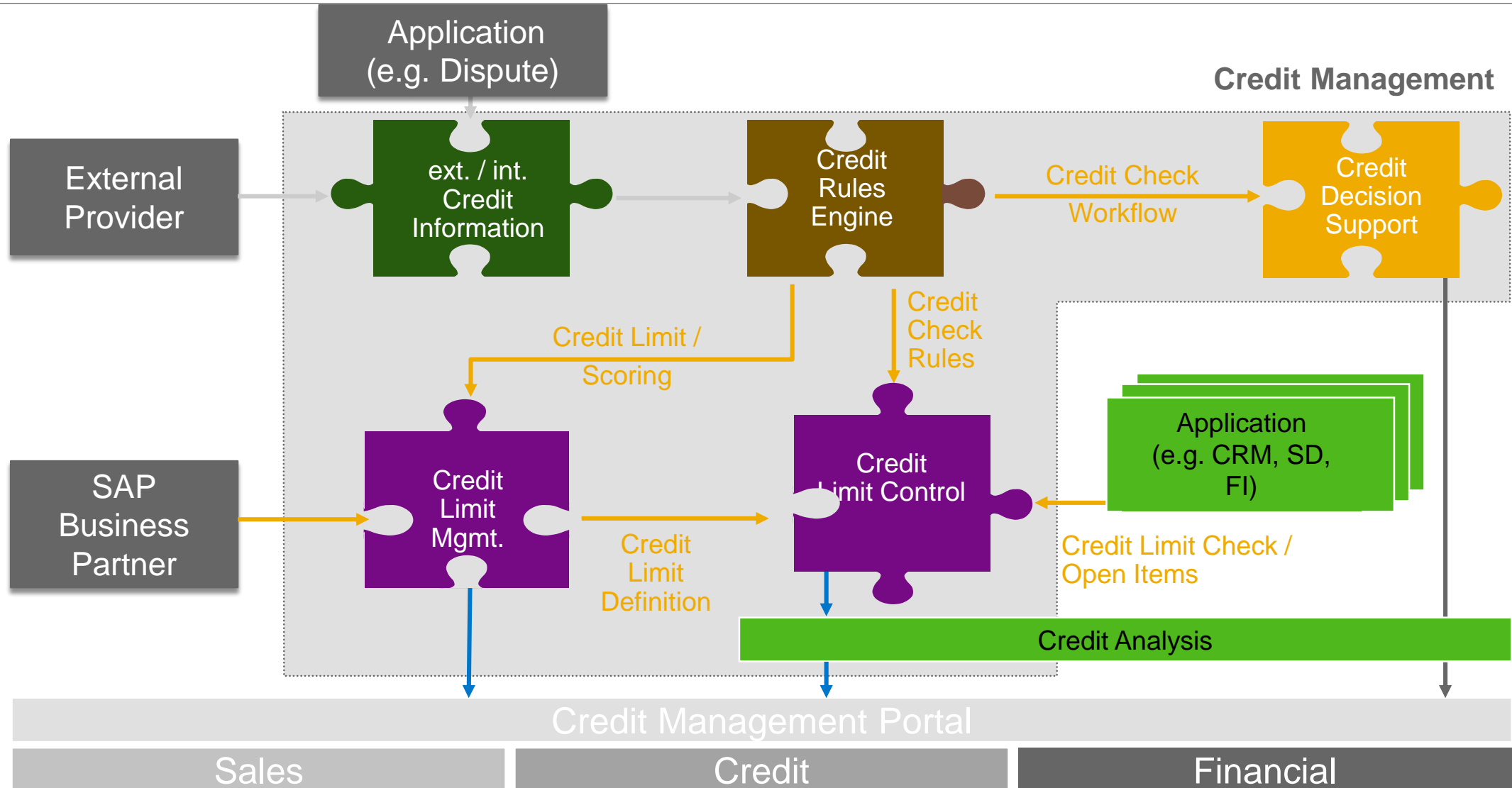Total Credit Exposure:
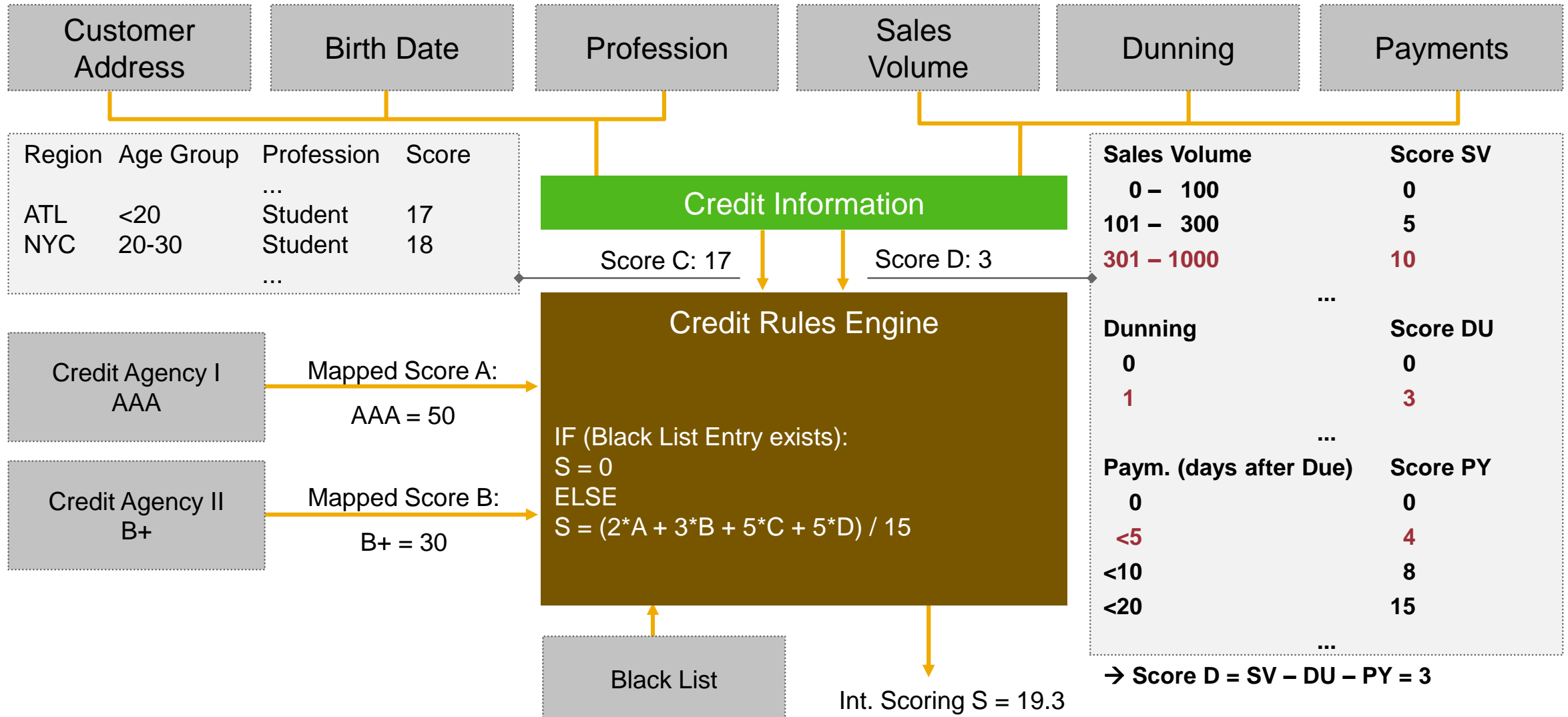700.000 €

Credit rules engine

- Create a **scoring formula** and **credit limit formula** by using the **formula editor**. Parameters (for example, business partner data) and functions are used as input parameters.

- One scoring formula and several credit limit formulas (for each credit segment) are assigned to the rule for scoring and credit limit calculation, which is assigned to each customer in the credit profile. The **risk class** is determined directly from the score.

- In customizing, specific score ranges which do not overlap are assigned to each risk class. For the **check rule**, the system determines the steps which are taken to check the creditworthiness of a customer when a sales order is created. This may include the static check of the credit limit or acheck of the highest dunning level.

- Customer-specific process chains in SAP Credit Management can be defined through **events which trigger follow-up actions**

Credit rules engine

Calculate internal credit scoring (existing customer)

Customer Address	Birth Date	Profession	Sales Volume	Dunning	Payments

Region	Age Group	Profession	Score
		...	
ATL	<20	Student	17
NYC	20-30	Student	18
		...	

Credit Information

Score C: 17 → Score D: 3 →

Sales Volume	Score SV
0 – 100	0
101 – 300	5
301 – 1000	10
...	

Dunning	Score DU
0	0
1	3
...	

Paym. (days after Due)	Score PY
0	0
<5	4
<10	8
<20	15
...	

→ **Score D = SV − DU − PY = 3**

Credit Agency I AAA → Mapped Score A: AAA = 50

Credit Agency II B+ → Mapped Score B: B+ = 30

Credit Rules Engine

IF (Black List Entry exists):
S = 0
ELSE
S = (2*A + 3*B + 5*C + 5*D) / 15
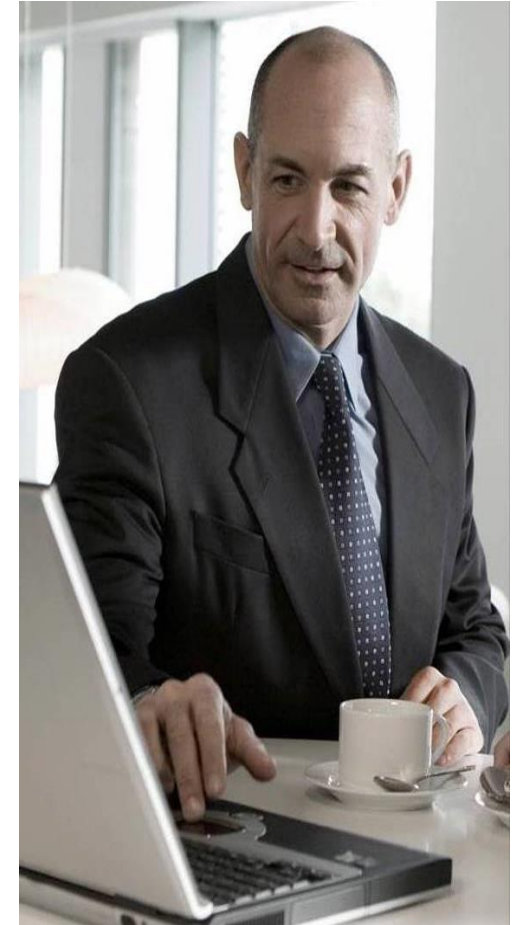
Black List

Int. Scoring S = 19.3

Scoring formula

- The scoring rules define the way a customer is scored – the result is a score

- You define the scoring rules in the formula editor by using the following input parameters
  - SAP Business Partner – Master Data (preconfigured field selection)
  - Input parameters can be enhanced via BAdI implementation
  - Result of the scoring formula:
    - Score (numeric or alphanumeric)
    - "Valid to" data
    - Risk class determined
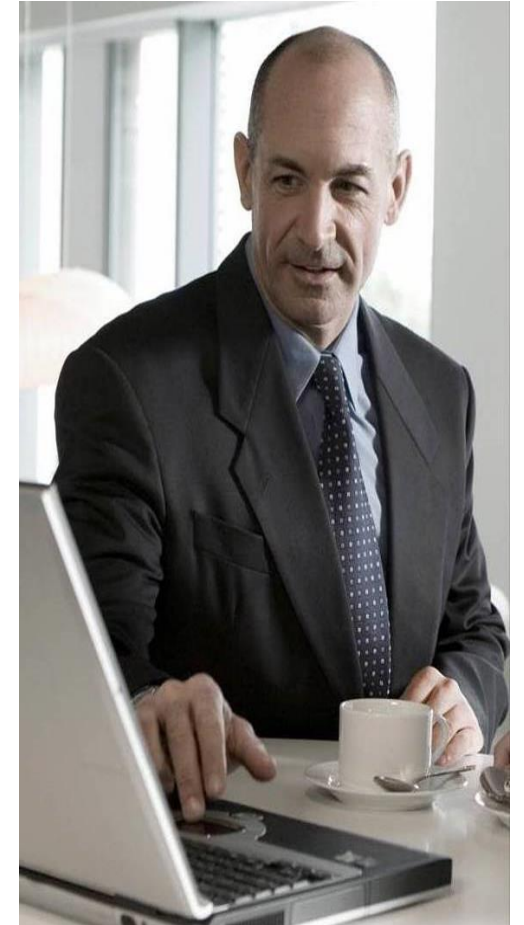 - A valuation log is available to clarify the results

Credit limit formula

- The credit limit formula determines how the credit limit proposed by the system is calculated

- You define the credit limit formula in the formula editor by using following input parameters:
  - SAP Business Partner – Master Data (preconfigured field selection)
  - Input parameters can be enhanced via BAdI implementation
  - Result of the credit limit data:
    - Credit limit (numeric or alphanumeric)
    - "Valid to" data
  - A credit limit formula can be assigned for each rating procedure and credit segment
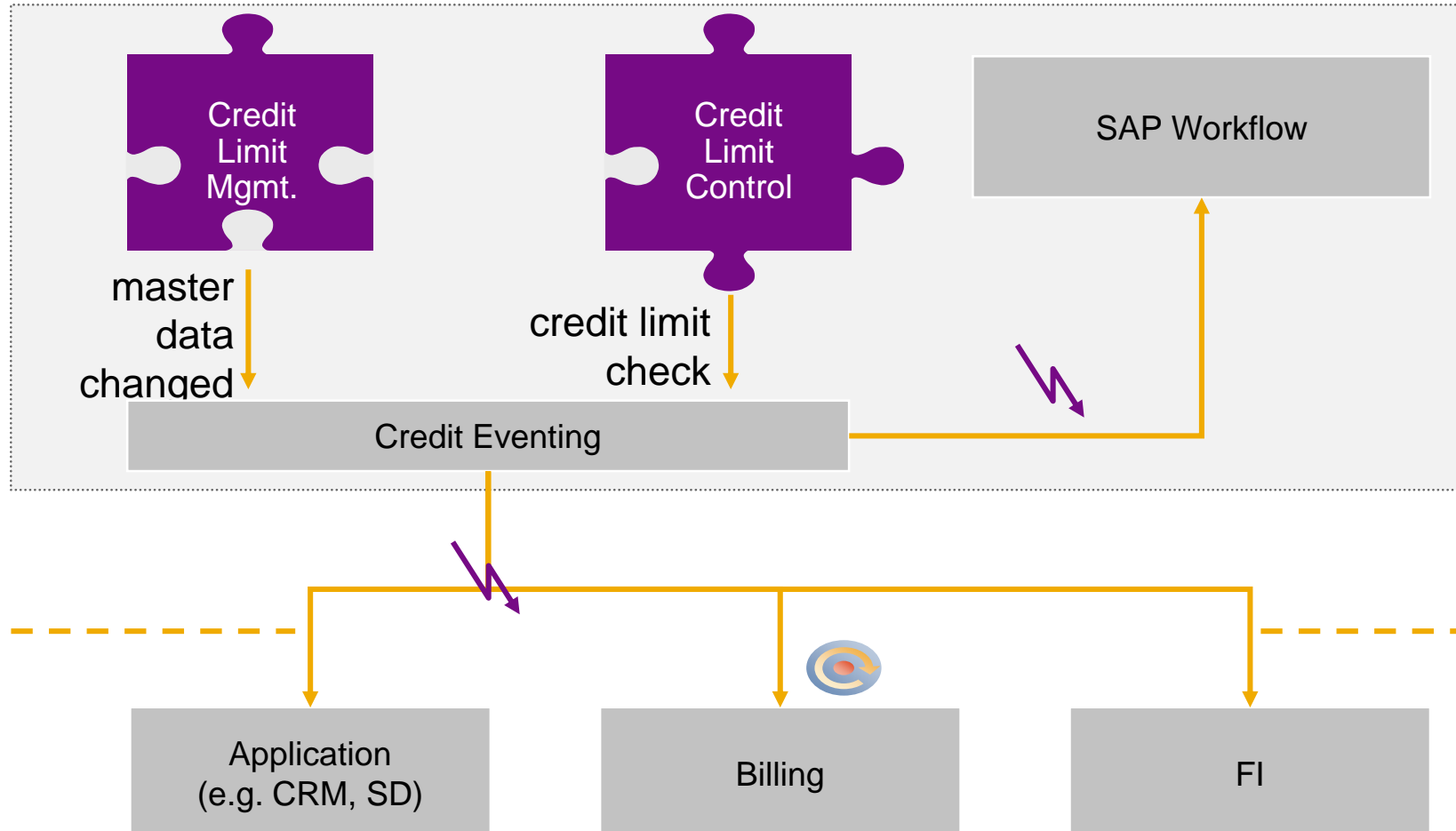 - A calculation log is available to explain the credit limit proposal

Credit checking rules

- The check rule determines the steps that are taken to check the credit worthiness of a customer when a sales order is created, and leads to a credit decision about the order

- Available credit checks:
  - Dynamic/static credit limit check
  - Check for collateral, credit insurance
  - Check for the Maximum dunning level
  - Check for the oldest open item
  - Check for an order block set centrally by credit management
  - Check for key figures for the customer's payment behavior (e.g. DSO)

Credit eventing

Credit Management

Credit Limit Mgmt.

Credit Limit Control

SAP Workflow

master data changed

credit limit check

Credit Eventing

Application (e.g. CRM, SD)

Billing

FI

Credit Events

- Credit limit exceeded
- Credit master data changed
- Scoring changed
- Credit limit changed
- Ext. rating changed
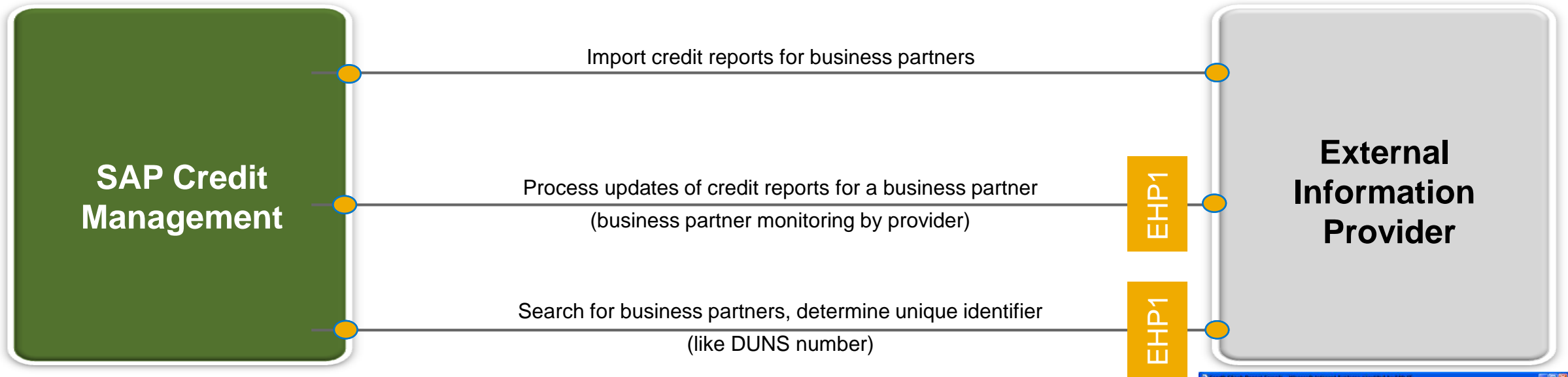
Follow-up Activities

Trigger int. workflow

- e.g. call customer
- e.g. request cash/ down payment
- Trigger ext. applications
- Lock customer account
- Disable service
- Create bill

External Information Providers

Integration with external information providers

SAP Credit Management

Import credit reports for business partners

Process updates of credit reports for a business partner
(business partner monitoring by provider)

Search for business partners, determine unique identifier
(like DUNS number)

EHP1

EHP1

External Information Provider

- Real-time XML integration of external information providers has been available since ERP 2004
- The integration scenario is extended:
  - Search for business partner's unique identifier
  - Process monitoring updates

Original XML Document is stored in the document management system that is used by the SAP Business Partner

Searching for the external ID

The search for an external ID can be triggered directly out of the business partner maintenance in SAP Credit Management

HCP Credit Information

Current Situation

On Premise

SAP ERP

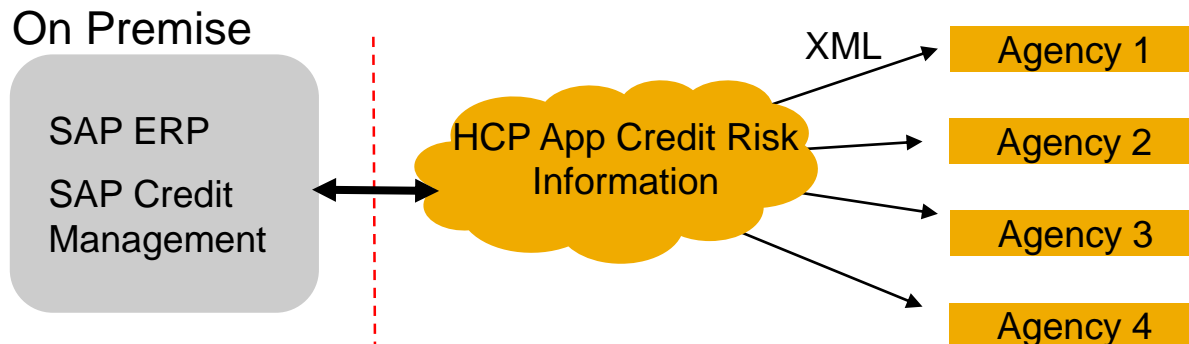SAP Credit Management

SAP PI

XML → Agency 1
Agency 2
Agency 3
Agency 4

- Integration of external credit agencies done by the customer / during the implementation project
- Significant implementation effort per interfaces (= per agency)

HCP Solution

On Premise

SAP ERP

SAP Credit Management

HCP App Credit Risk Information

XML → Agency 1
Agency 2
Agency 3
Agency 4

- Maintenance of interfaces to credit agencies done by HCP service provider (= SAP)
- Bulk of external credit report data remains in HCP app
- Target data fields (external rating, foundation date,…) transferred to Credit Mgmt for use in scorecard
- SAP customers have a broad choice of external credit agencies
- Reduced TCO and faster ROI for Credit Management projects

Assumptions

- Customer must sign contracts with credit agency directly
- SAP roles remains purely technical; SAP does not own the data; SAP will not use this data for own purposes.
- The HCP Credit Information shall be able to connect to SAP Credit Management releases (down to ERP 6.0)

What's new in S/4 with Simple Logistics?

SAP®

Historically, SAP had 2 solutions for credit management

	"FI-AR" Credit Management	SAP Credit Management
Master Data	FI-AR Account	SAP Business Partner
FI Data	FI-AR	FI-AR, FI-CA, others
Monitor Credit Exposure	Only for simple system-landscape (1xFI, 1xSD); SAP system only	Distributed system-landscape (multiple FI, SD and CRM systems); SAP and non-SAP
Automated Customer Scoring, Rating, and Limits	Not available	Credit Rules Engine
External Credit Information (e.g. D&B)	Only through partner products	Any XML based credit information service
Workflow	Only in SD	Any credit event, documented credit decisions, credit limit requests
Analysis	Customer fact sheet	Fiori Smart Business / HANA Live; OLAP/OLTP (incl. BW Content)

"Single-system credit checks against a limit you determine"

"Cross-system credit checks against calculated ratings and limits"

Beginning with the simplified logistics processes in S/4HANA, FI-AR credit checks done by base edition of SAP Credit Management*

	Basic S/4HANA Credit Management – technical foundation is SAP Credit Management	SAP Credit Management
Master Data	SAP Business Partner	SAP Business Partner
FI Data	FI-AR	FI-AR, FI-CA, others
Monitor Credit Exposure	Distributed system-landscape (multiple FI, SD and CRM systems); SAP and non-SAP	Distributed system-landscape (multiple FI, SD and CRM systems); SAP and non-SAP
Automated Customer Scoring, Rating, and Limits	Not available	Credit Rules Engine
External Credit Information (e.g. D&B)	Not available in standard	Any XML-based credit information service
Workflow	Documented credit decisions	Any credit event, documented credit decisions, credit limit requests
Analysis	Fiori Smart Business / HANA Live	Fiori Smart Business / HANA Live; OLAP/OLTP (incl. BW Content)

*No additional license required for this basic functionality; if additional functionality required (scorecards, automatic determination of limits, workflow, integration of external credit information, customers must license SAP Credit Management

Summary

If you have <u>not</u> licensed SAP Credit Management:

You can still do a credit check for sales orders if you migrate to the business partner

You still have to determine what the limit should be in an "offline" process

If you have licensed SAP Credit Management:

No changes

Migration is required from FI-AR credit management to new S/4HANA Credit Management

LAB PREVIEW

Technical implications

Transaction FD32 ("customer credit master") will not work anymore

Deleted tables include S066 / S067

Customers wanting credit checks in S/4HANA must migrate to SAP Credit Management

**planned functionality

SAP migration reports**

Migrate credit accounts from FD32 to UKM_BP (business partner)

SAP Credit Management configuration is automatically created based on existing FI-AR credit configuration data

Credit exposure in FSCM is re-build

Documented Credit Decision (DCD) created for credit blocked sales orders

Benefits to SAP Customers

Easier upgrade from basic credit management functionality to advanced automated credit management processes
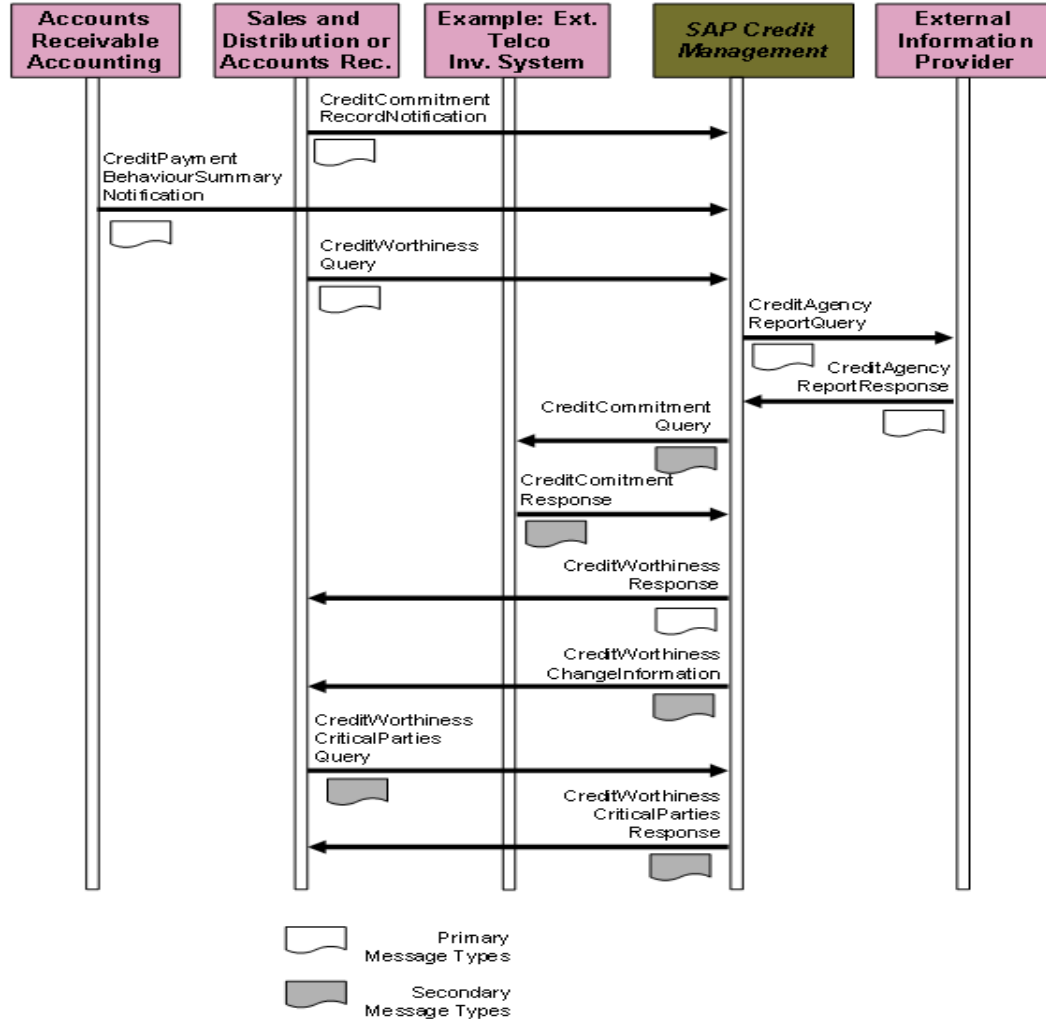
HANA-based reporting and analytics

Future Fiori apps for Credit Management**

Principle of one: unified SAP solution means improvements can focus on single product

Orchestration of messaging
SAP Credit Management before S/4HANA OP 1511

SAP Credit Management was technically decoupled from SAP ERP
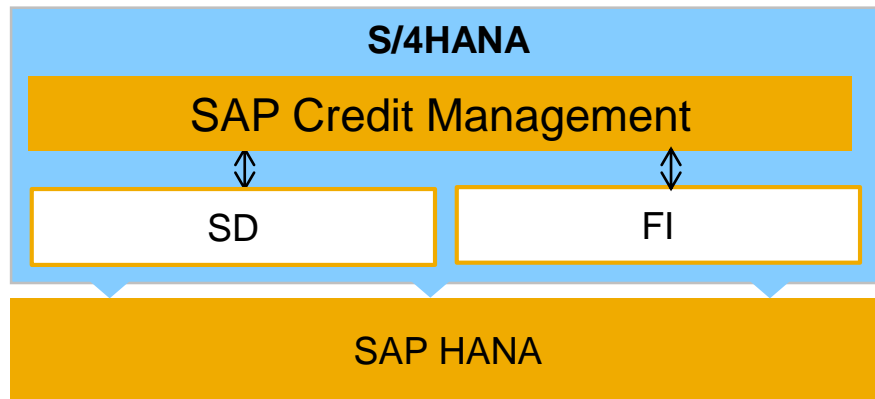
- XML messages are exchanged to update credit commitments (exposure) or to do credit worthiness checks
- This can be facilitated with SAP NetWeaver PI (XI) or WS-RM (since EHP 5 for ERP6.0)

This decoupling allowed for a high degree of flexibility in deployment scenarios; however, the messaging orchestration added technical complexity

Orchestration simplification
SAP Credit Management in SAP S/4HANA Finance OP 1511

One-system landscape: SAP Credit Management and SD in S/4HANA system

S/4HANA

| SAP Credit Management |
| SD | FI |

SAP HANA

SD commitments/exposures (sales orders, deliveries, billing documents) are updated in same LUW (Logical Unit of Work) as the create / update for SD documents

No XML messages / web services are used

No aggregates (table UKM_TOTALS not updated)

Lower TCO, less configuration

Mixed-system landscapes

SD	FI	Technology
S/4HANA	S/4HANA Finance	Migration to SAP Credit Management required; connectivity via PI or WS-RM
S/4HANA	ERP	
ERP	S/4HANA Finance	Use FI-AR Credit Management or SAP Credit Management; connectivity via PI or WS-RM
ERP	ERP	

Streamlining
SAP Credit Management in SAP S/4HANA Finance OP 1511

Elimination of data redundancy*

- No commitment updates are sent from FI-AR to SAP Credit Management
- Instead, a HANA view reads the AR exposure in real-time on the fly when exposure is required in SAP Credit Management
  - For credit-worthiness checks
  - Customer reporting

Use of web-services with generic proxies*

- Lower TCO and reduced configuration effort and lower TCO; no configuration is needed through the SOAMANAGER transaction in this case
  - For credit-worthiness checks
  - For Documented Credit Decision (DCD) creation if sales order is blocked
  - For credit vector / payment behavior updates
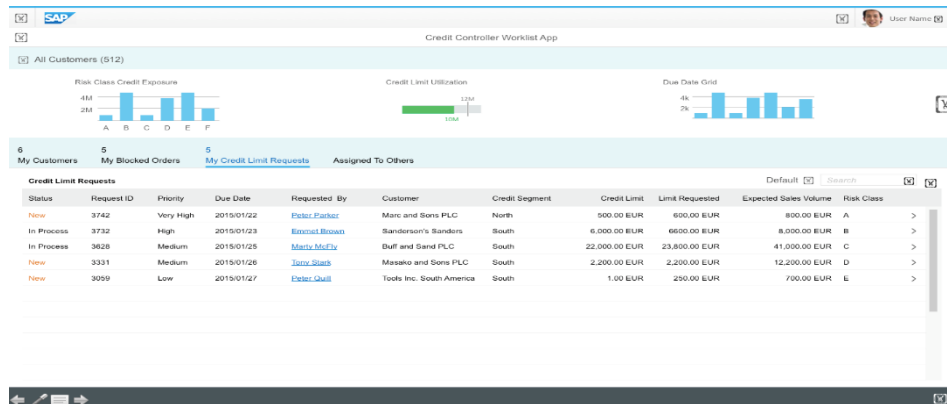
Delightful user experience
SAP Credit Management in SAP S/4HANA Finance

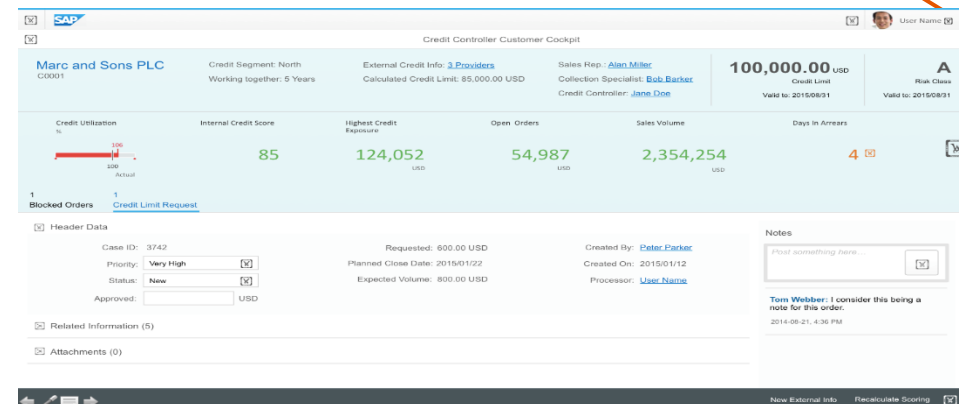## Credit worklists bring tasks to the user

- Blocked credit orders for quick review, unblocking
- Time-based resubmissions, periodic evaluations of customer's creditworthiness
- Processing of requests for new/extended credit limit lines

Analytics focus your attention

- Smart Business analytics for credit limit utilization
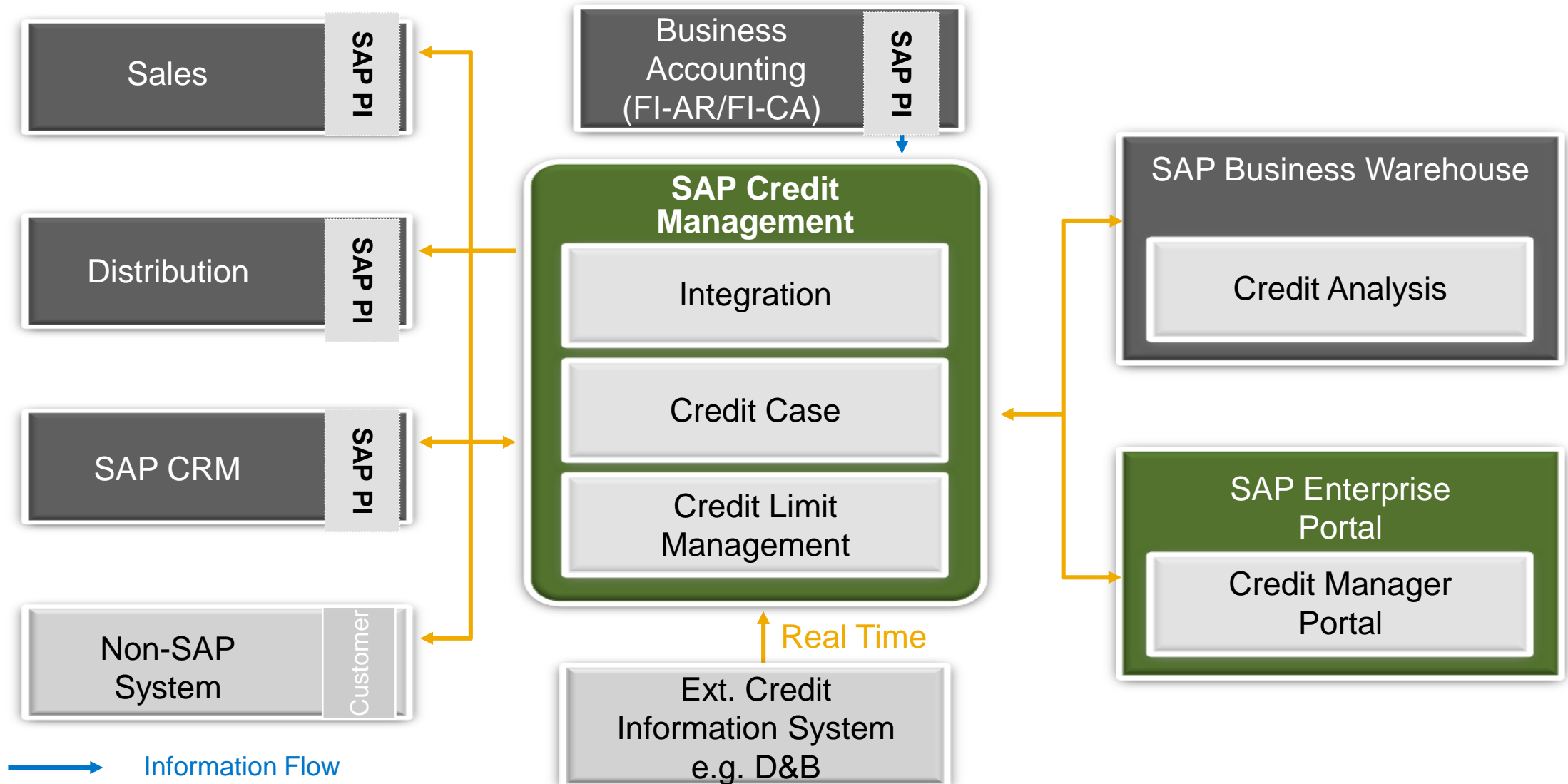- Jump into credit controller cockpit to take action

LAB PREVIEW

Credit Worklist

Credit Cockpit

Architecture – multi-system setup before S/4HANA

Sales — **SAP PI**

Distribution — **SAP PI**

SAP CRM — **SAP PI**

Non-SAP System — Customer

Business Accounting (FI-AR/FI-CA) — **SAP PI**

SAP Credit Management
- Integration
- Credit Case
- Credit Limit Management

Real Time

Ext. Credit Information System e.g. D&B

SAP Business Warehouse
- Credit Analysis

SAP Enterprise Portal
- Credit Manager Portal

→ Information Flow

Architecture – new S/4HANA options

S/4HANA

SD

Business
Accounting
(FI-AR/FI-CA)

SAP Credit Management

Integration

Credit Case

Limit Management

HANA Analytics

HANA Cloud Platform
Credit Integration

LAB PREVIEW

External Credit
Information System
e.g. D&B

Summary

Automated, integrated credit evaluation processes with SAP Credit Management in S/4HANA

Automatic credit limit checks

Credit limits checks carried out when entering orders, deliveries, good issues

Documented Credit Decisions create a PDF document snapshot with all details for account team

Real-time customer credit exposures

Integration with Accounts Receivable for exposure details and payment behavior key figures

Reporting in Fiori Smart Business analytics

Any system can be connected

Ongoing scoring of customers

Recalculation based on credit events (new orders, payments, changes in external credit ratings, etc)

Time-based workflow triggers for periodic updates

Workflow support for credit limit requests

Traceability

Change documents, various logs, DCDs …

10%

Decrease in bad debt write-offs by enforcing global proactive credit management policies

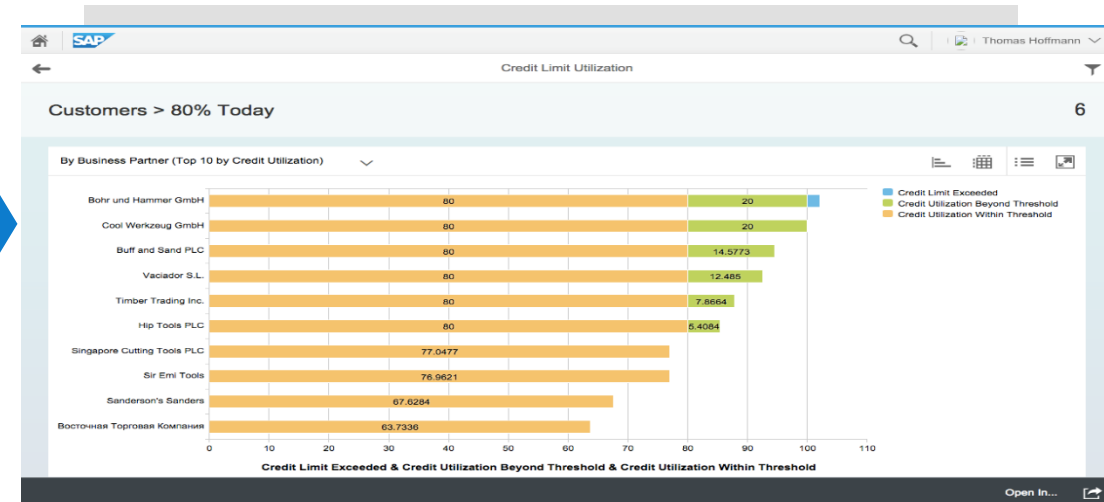Source: SAP Performance Benchmarking

SAP Credit Management – Summary

Customer Challenges

- Takes too long to evaluate credit
- Inconsistent methods and policies
- No global view of exposure
- Evaluations hold up sales orders

SAP Functionality

- Analyze risk and set policy quickly
- Consistent evaluation and policy
- Global view of credit exposure
- Automatically update exposure throughout customer lifecycle

Benefits

- Faster credit decisions
- Lower costs and resource demands
- Reduce bad debt write-offs
- Reduce sales order delays

Series on Receivables – Every other Thursday

- **Jan 14 - Introduction to Receivables – high level overview**

- **Jan 28 – "The SD Credit Check is gone!" What is new in Credit Management in S/4HANA**

- **Feb 11 – Tools to Lower DSO**

- **Feb 25 – Deployment and Integration Options: Deeper Dive on HANA Cloud Platform apps and Central Finance**

Thank you

Contact information:

Katharina.Reichert@sap.com