

# Best Practices of Credit Bureau Services for Inclusion of Low Income

**MFI GLOBAL FORUM**

17-18th March 2016, Berlin, Germany



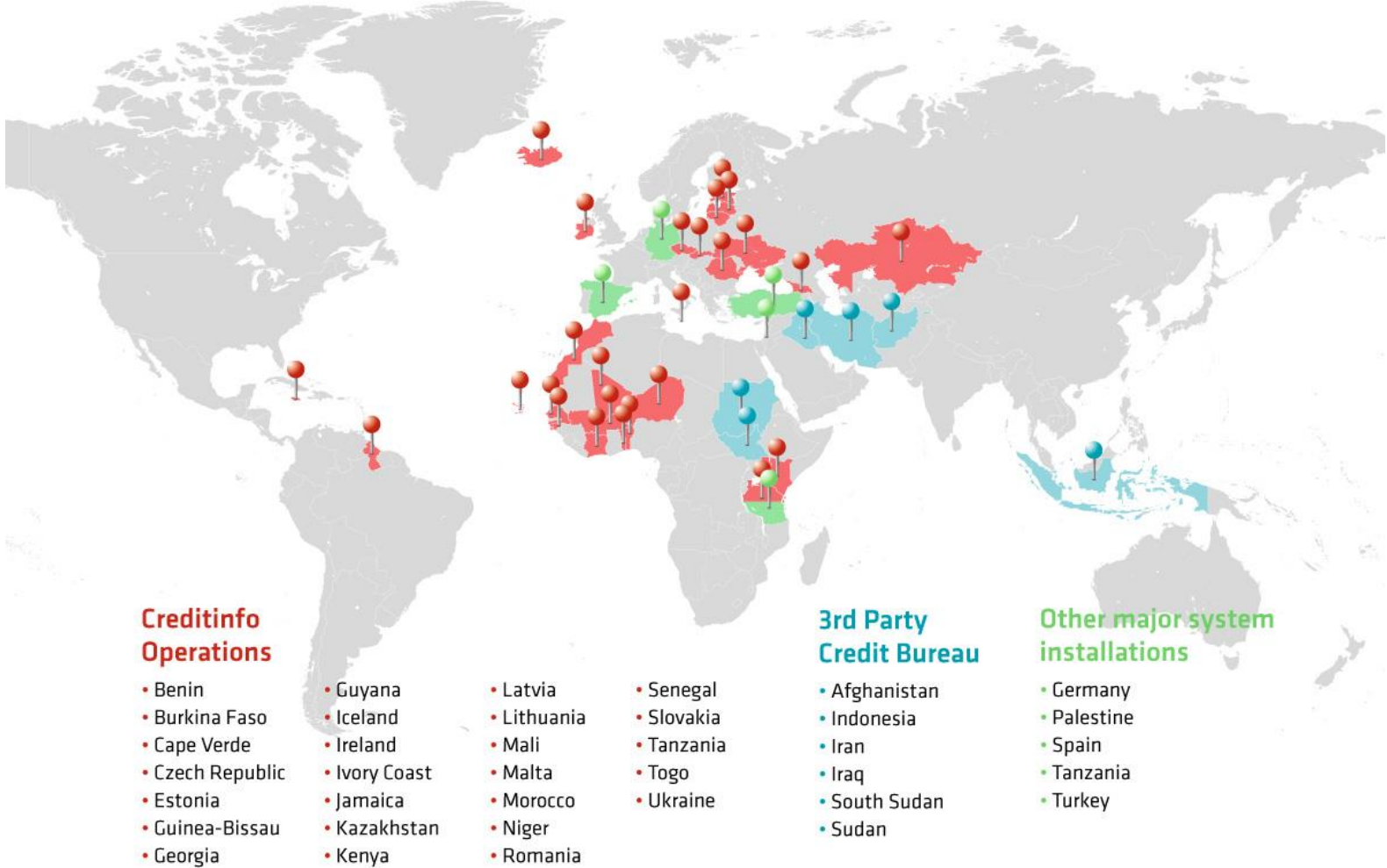
## The Presentation Highlights

- Introduction
- Challenges faced by SMEs & MFIs
- Credit Scoring Solutions for Low Income sector
- How Innovative Credit Bureau solutions can improve holistic Credit Risk Management
- Summary

# Introduction

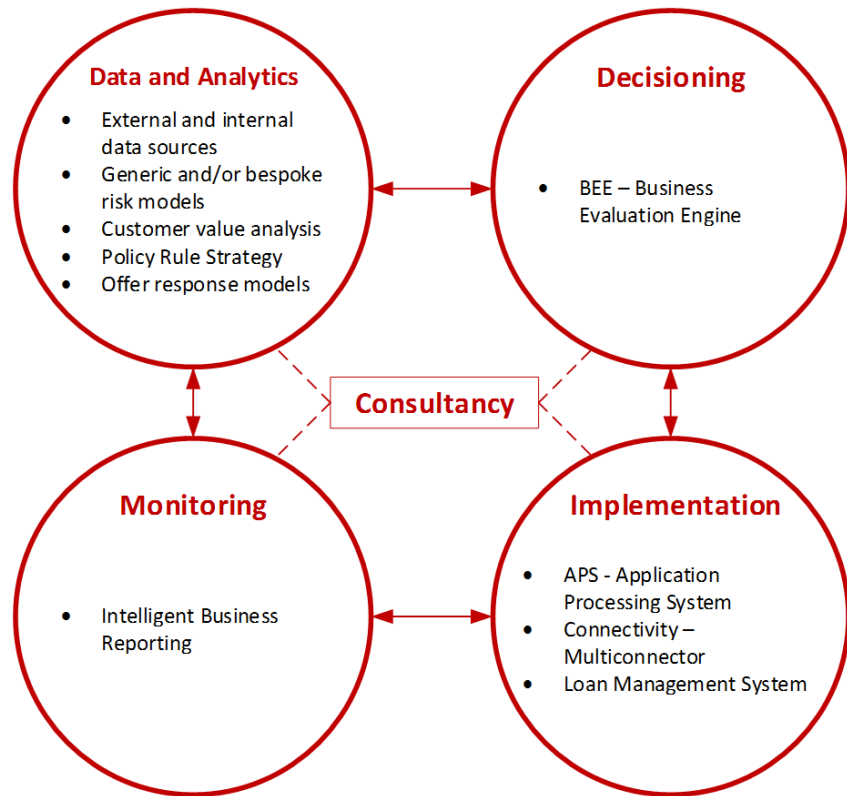
# About Creditinfo Group

- Established in 1997
- Dynamic & innovative
- Expertise in emerging markets
- Cooperation with local partners
- 26 operations with a presence in 37+ countries and 4 continents and still counting
- **Fasting expanding Credit Bureau**



# Creditinfo

## Fastest Expanding Credit Bureau



- **Managing Credit Bureau in 26 countries and majority emerging markets :**
  - AFRICA: Kenya, Tanzania, WAMU – Senegal, Cote d'Ivoire, Benin, Niger, Guinea Bissau, Mali, Burkina Faso, Togo, Morocco
  - EX USSR: Azerbaijan, Kazakhstan,
  - Other emergin regions: Asia
- **Creditinfo Vision of Credit Bureau – Single Data Portal of Multiple Data Sources**
  - Financial Institutions – Bank/MFI/insurance/Payment Services
  - Business Information – Corporate, SME, Director Links
  - Other Payment – Mobile Phone, Utilities
  - Direct to Consumer – MyCreditinfo
  - Government – ID register, Electoral Roll, Tax
  - Value Added Products – Scores, Blended Scores, Monitoring,
- **Focus on complete solutions in risk management:**
  - Providing scoring, decision engines, pricing modules, etc.
  - Credit Scoring
  - Consulting on credit processes, risk management, seminars
  - Fraud prevention, work flow-, collection-software & other credit tools
- **Independent ownership of employees and industry experts.**

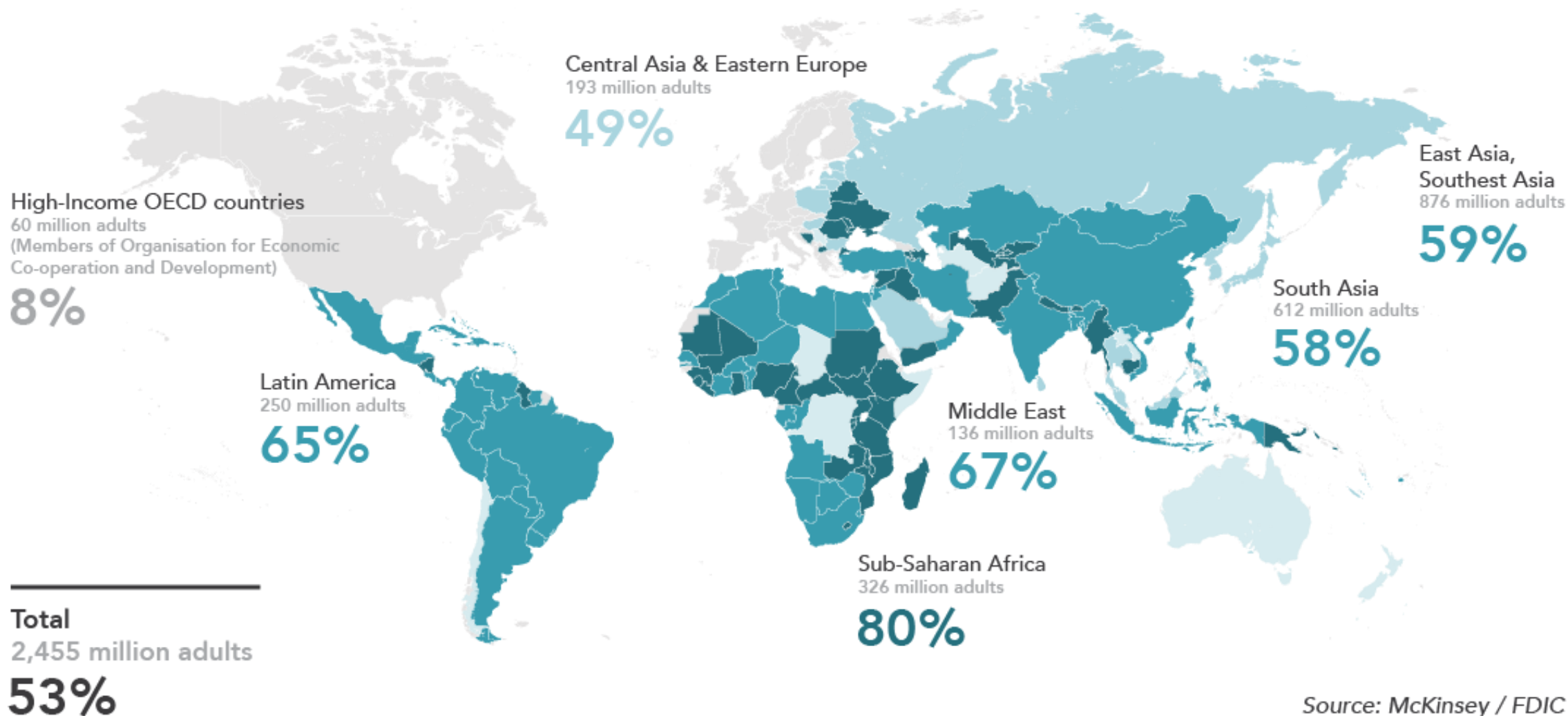
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# Challenges faced by SMEs & MFIs

# Percentage of total adult population who do not use formal or semiformal financial services

0-25%   26-50%   51-75%   76-100%

Estimates used to calculate regional averages



Source: McKinsey / FDIC

# Challenges in Microfinance

- High interest rates & high transaction costs (average microloan globally 1'026 USD at average rate of 30%)
- Inadequate donor funding (often related to high risk)
- Limited management and infrastructure capacity
- Danger of systemic credit risk in which default borrowers worsen the whole system (over-indebtedness main concern \*)
- Low level of technical understanding of banking and finance
- Limited diversification of innovative products for different market segments
- Difficulty to achieve profitability
- Regulations regarding transparency and credibility through disclosure.
- Lack of knowledge (general public) about microfinance services.

# The MSME Sector

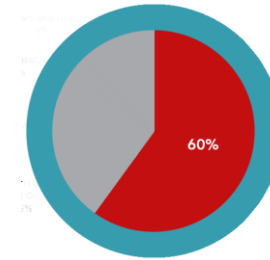
Small (incl. Micro) and Medium Sized Companies need credit

- As much as 224 m. SMEs need as much as 3.000\$ bn.\*
- As much as 221m. in middle or low income countries\*

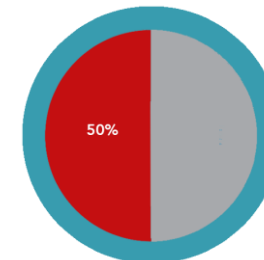
Commercial and Consumer Credit Reporting is key

- Making credit granting to MSMEs possible
- Ensuring responsible lending

## MSME sector in Credit Bureau



Around **60%** of MSMEs have no credit history



**50%** of MSME owners use personal bank account to finance their businesses

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# Credit Bureau Solutions for Low Income



# What are Value Added Products from a CB Perspective?

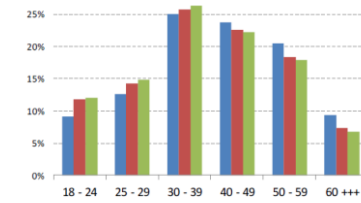
- A way to understand complex Credit Reports
- Using the raw material (data) for multiple purposes
- Enabling you to use that data in precise format to meet business needs
- Throughout the customer lifecycle



Notification ID	Created	Type of Alert	Severity of Alert	On/Off	Subscriber	Notification Text
100000	11-01-2010	Individual	Good	On	Business	Subsequent Number of last All individuals =>
100001	11-01-2010	Company	Good	On	Business	Subsequent Number of last All individuals =>
100002	11-01-2010	Individual	Good	On	Business	Subsequent Number of last All individuals =>
100003	11-01-2010	Individual	Good	On	Business	Subsequent Number of last All individuals =>

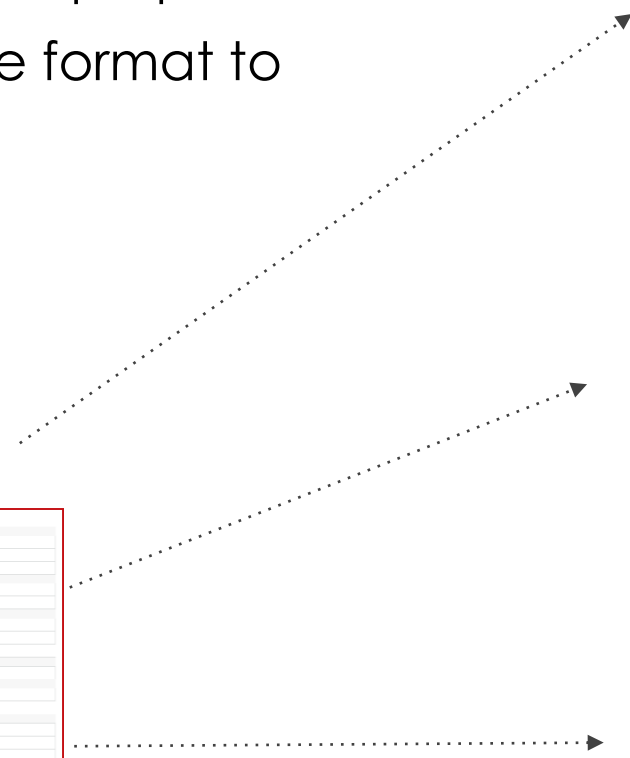
Total number of displayed notifications: 4 of 4

## Customer Management Monitoring



## Benchmarking

Credit Report



# Benefits of Value Added Products?

## Risk Management Benefits

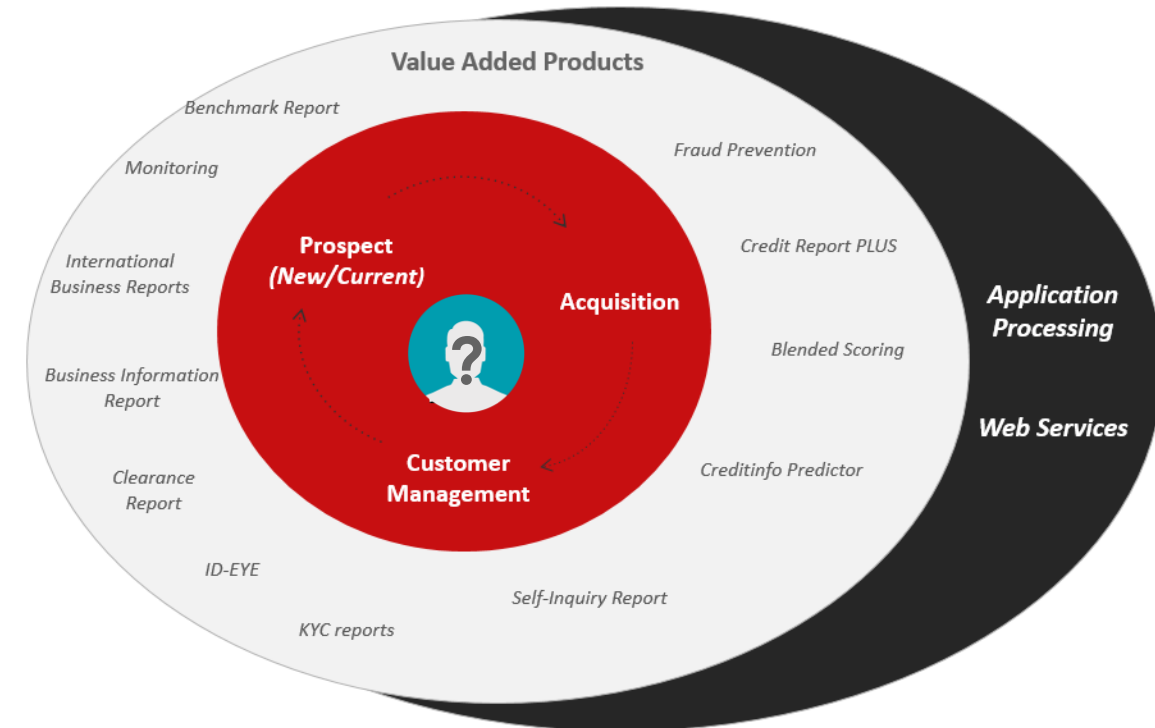
- Early warning of payment problems
- Observe trends of worsening payments
- Bad Payers go to Easy Targets, Non CB Users

## Efficiency Benefits

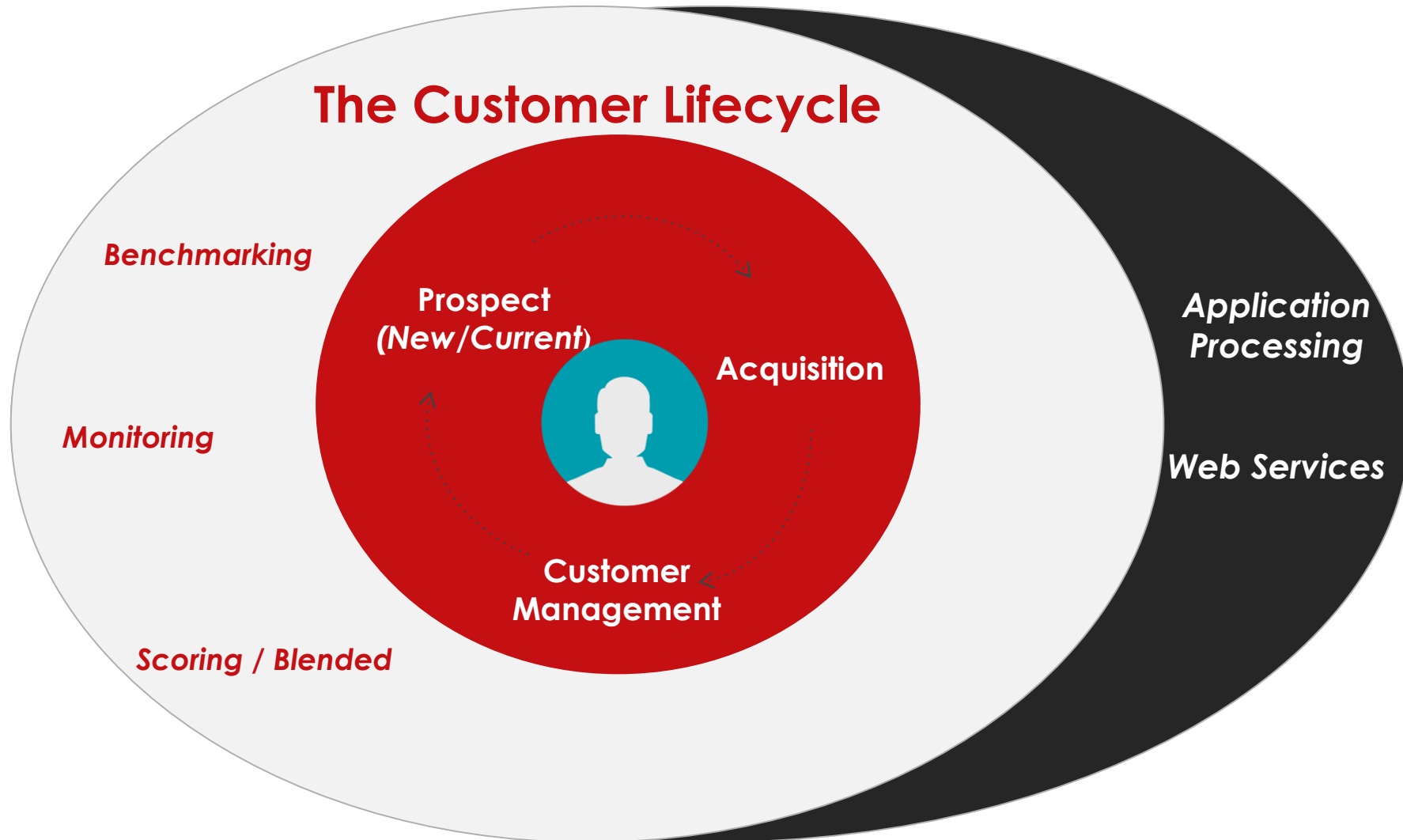
- Less Documents
- Faster Decisions
- Reduction in Cost

## Sales and Marketing

- Higher Accept Rate
- Cross Sell



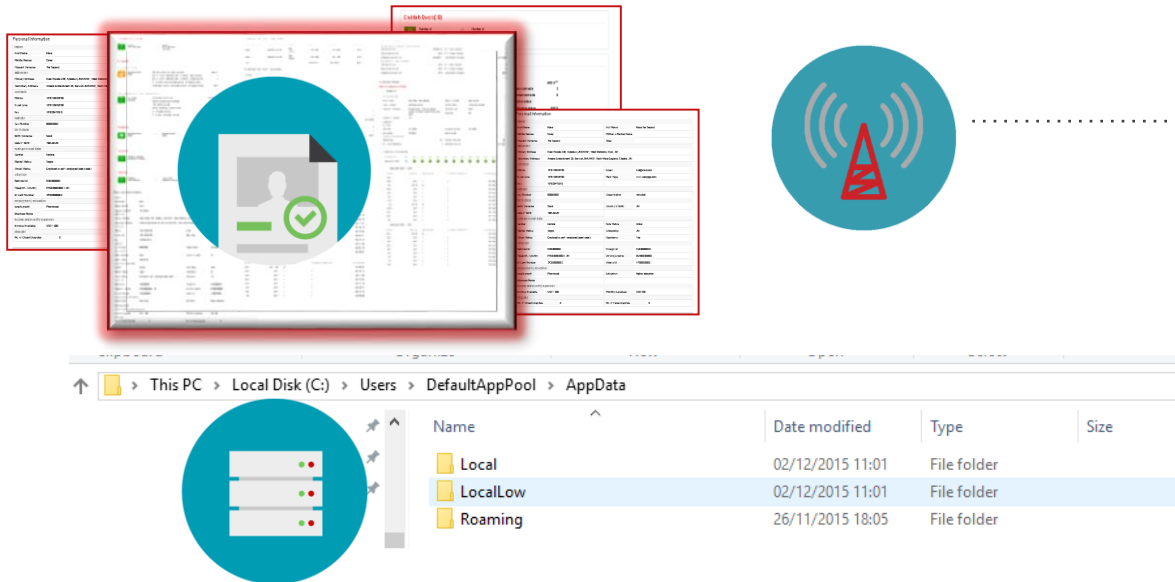
# Three Value Added Products important throughout the CLC




# Credit Scorecard

- A way to understand complex sources of data.
- Enabling lenders to use that data in precise format to meet business needs
- Throughout the customer lifecycle (application, monitoring, collections)

## Credit Report, Application Data, Mobile Data



## Risk assessment

	% probability	Risk category / description
Probability of default	<b>51,16%</b>	 <b>10</b>
Probability of insolvency	29,47%	Loss provision

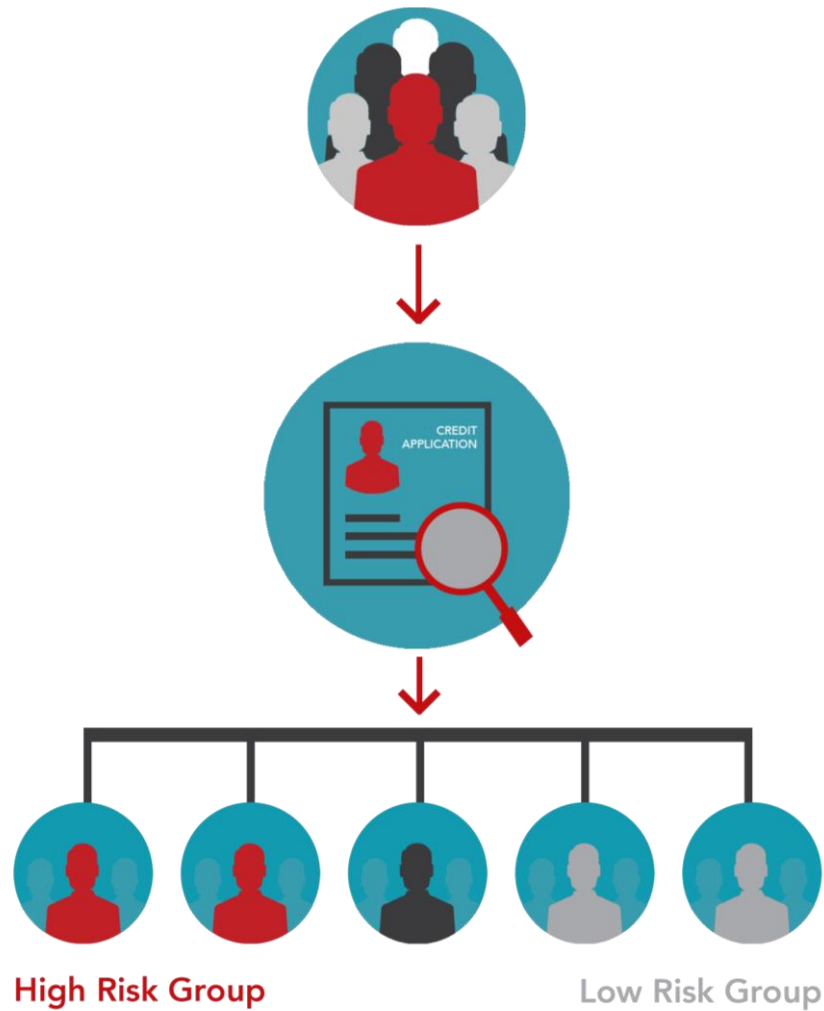
### The most decisive factors in risk score calculation:

#### Positive factors:

- ↑ 1. Payment average
- 2. Total Board Members
- 3. Payment average

#### Negative factors:

- ↓ 1. Avg. CIP-Score of Related Companies
- 2. Negative Queries
- 3. Current maturities of long term debts



## Scoring – a Statistical Model

A scorecard is, basically, a statistical model that predicts the performance of cases, at some future point in time, given information at the current time.

It uses a formula to convert pieces of information into numeric values.

Usually, the higher the score, the lower the probability that the account will become Bad.

**Higher Score = Better Quality**

# Why Blended Scoring?

What is the important factor in the risk of a business?

(A) The business?

(B) The individuals running and owning the business?

## **Answer:**

It is proven that it is both individuals and the business performance that is important.

We have measured the impact of each

# Why Blended Scoring

MSME's have some unique characteristics

- Finances of the owner and the business frequently intertwined
- They are often dependent on the owner's personal actions

Information	Business Person	Consumers
Bigger Debts on Average	EUR3,500	EUR 900
More Credit Report Enquiries on Average	5 per year	2 per year

- They are more affected by credit losses
- Seasonal revenue trends are difficult to monitor or predict
  - Especially when there is lack of financial information about the business

## Why Blended Scoring

- The smaller the business the greater the owner-centricity
- At which point will the owner's risk be the same or more than the risk for the company as a whole
- ScoreCards need to be adjusted to the size of the company and adapted to specific parameters
- Credit Bureaus that only provide either consumer or commercial data are unable to provide the holistic view needed to evaluate MSMEs

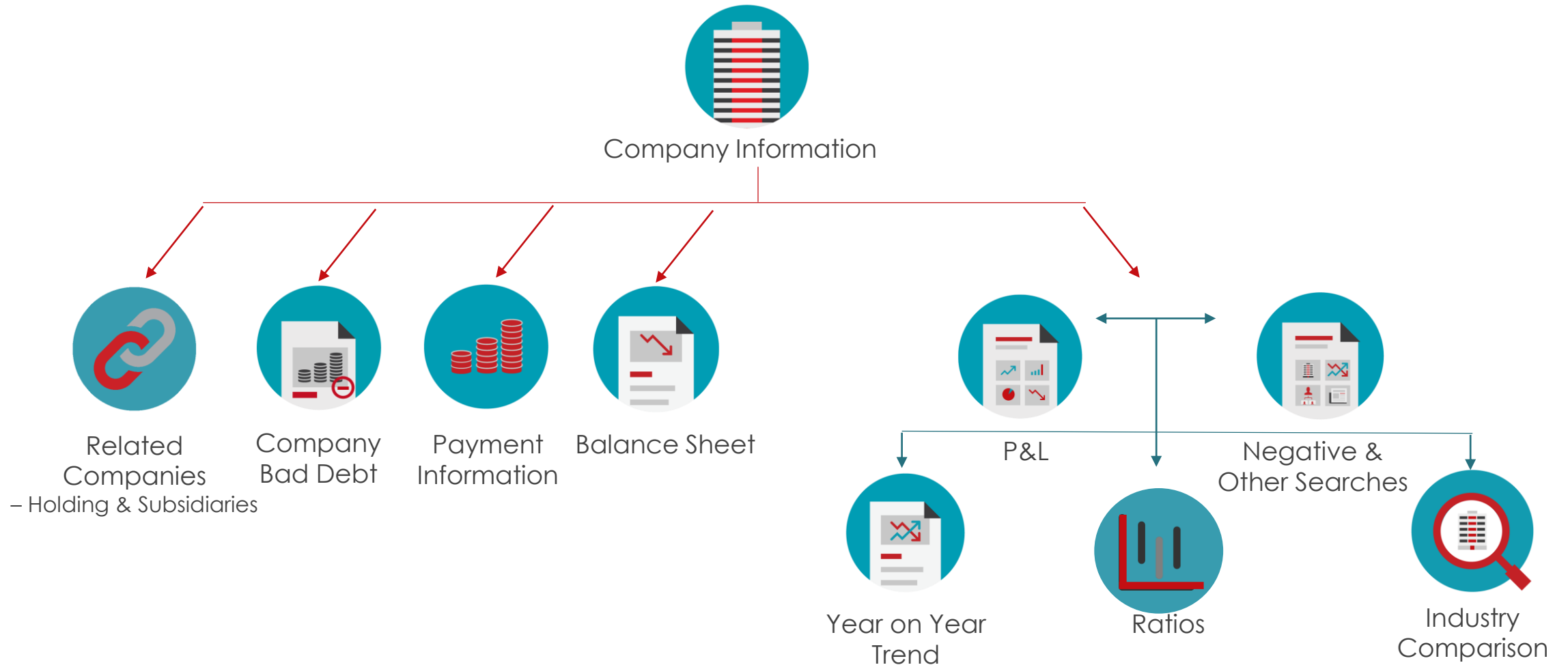
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# The Importance of Blended Scores for Small Businesses

## **Real Example**

# How Blended Data can Improve Risk Performance

How the use of blended Data can improve your decision



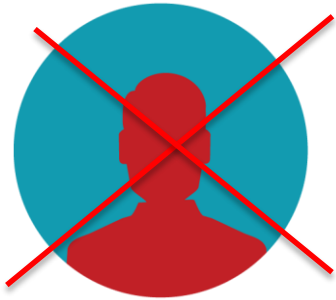
## Owner Information:

- Bad Debt
- Personal Assets
- Previous Directorships
- Age
- Tax Salary



## How Blended Data can improve Risk Performance

Adding Individual variables  
will increase the predictive  
strength of MSME Scorecards



## Question:

Would you lend this company without including information about its owner?

## An example of an MSME Creditscore

Using business information only:



Risk assessment	% probability	Risk category / description
Probability of default	4,77%	 6
Probability of insolvency	4,08%	Watch

## An example of an MSME Creditscore

Information about the owner revealed:

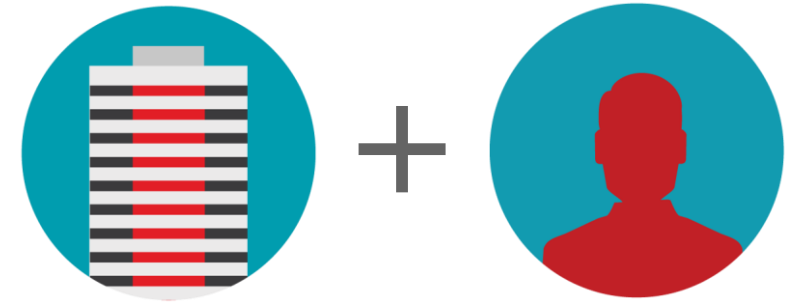
- A poor score of related companies
- Negative payment remarks on the owner
- Linkages to bankrupt companies



# The result by using blended Data:

Risk assessment	% probability	Risk category / description
Probability of default	33,01%	 9
Probability of insolvency	20,42%	Extreme Risk

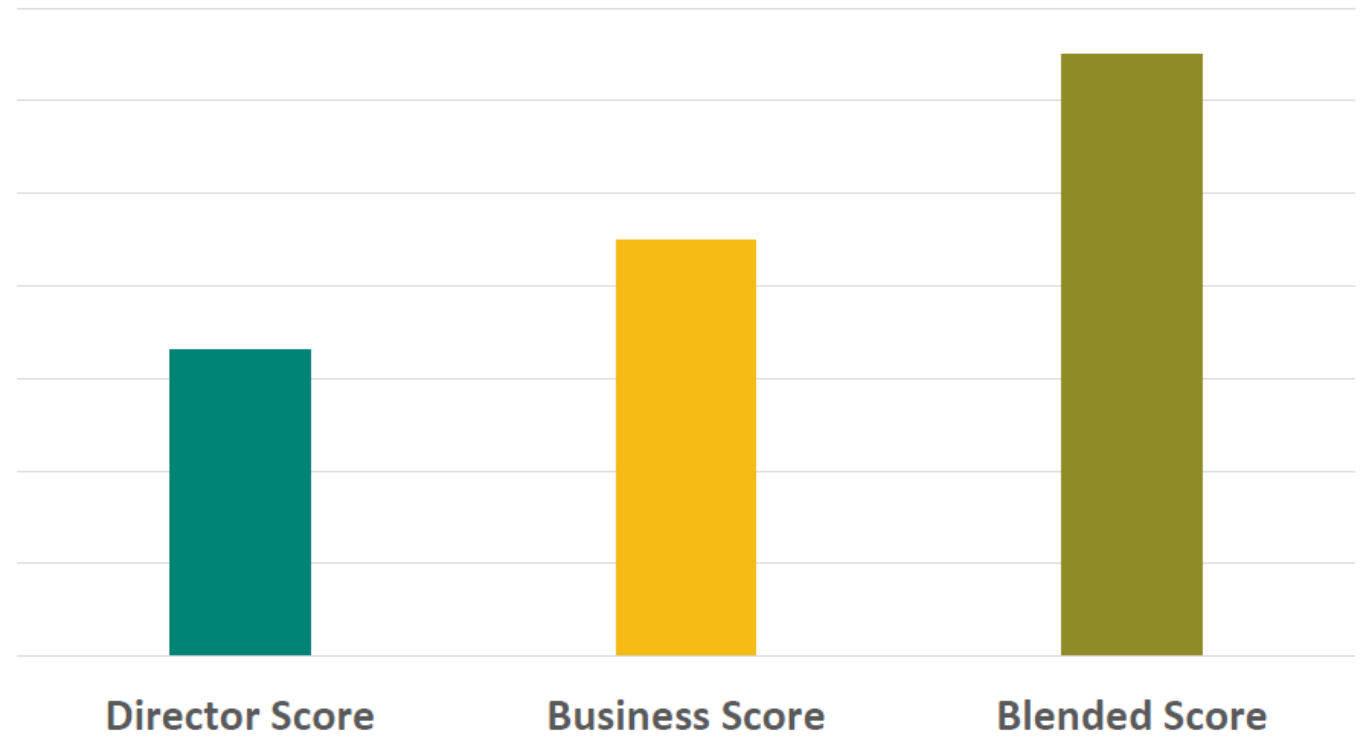
Risk assessment	% probability	Risk category / description
Probability of default	4,77%	 6
Probability of insolvency	4,08%	Watch



Would you still lend this company?

Clear Increase in the  
Decision Quality

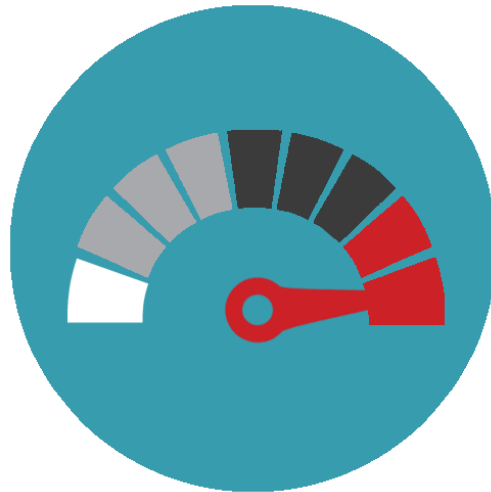
## Comparison of SME Model Power



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# Credit Scoring for Low Income

## New Technology - Times are Changing



## Problem Definition – short term & low value loans

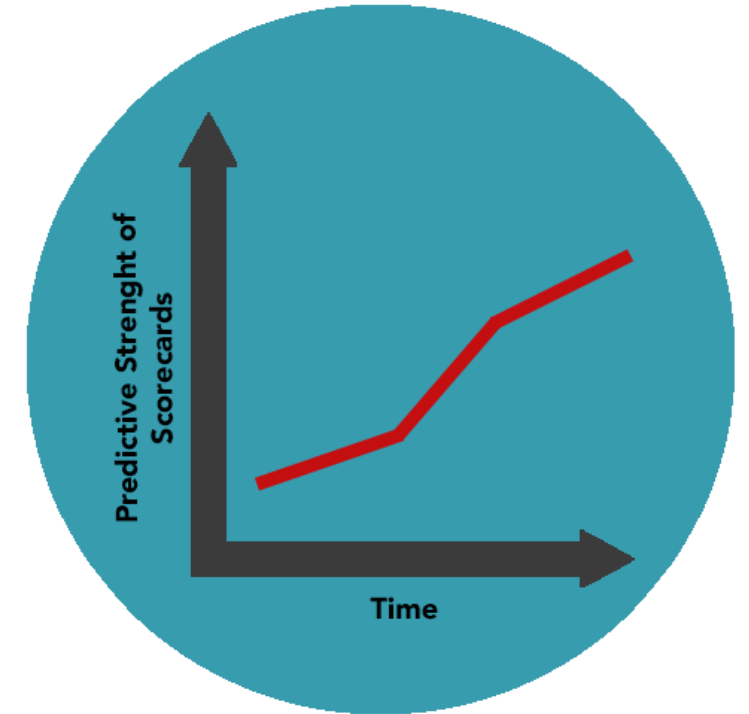
### Mobile Loan Products – Kenya example

- Loan Amounts from 1'000 KES
- Small loans over short period (high frequency)
- Relatively new product to many banks
- New customer data limited to Mobile Phone usage and other external data such as credit bureau (few expected to have history in initial phase)
- How to on-board low income clients without increase of NPLs?

# Problem Definition

## Developing Long Term Customer Relationship from Initial Minimal Data For the Low Income

- Initial Decision Minimal Data Using Mobile Usage and Other Sources (1)
- Managing Losses through Allocation of Limits by Risk (2)
- Cementing Customer Relationship through Expansion of Limits over time (3)



# Solution Overview

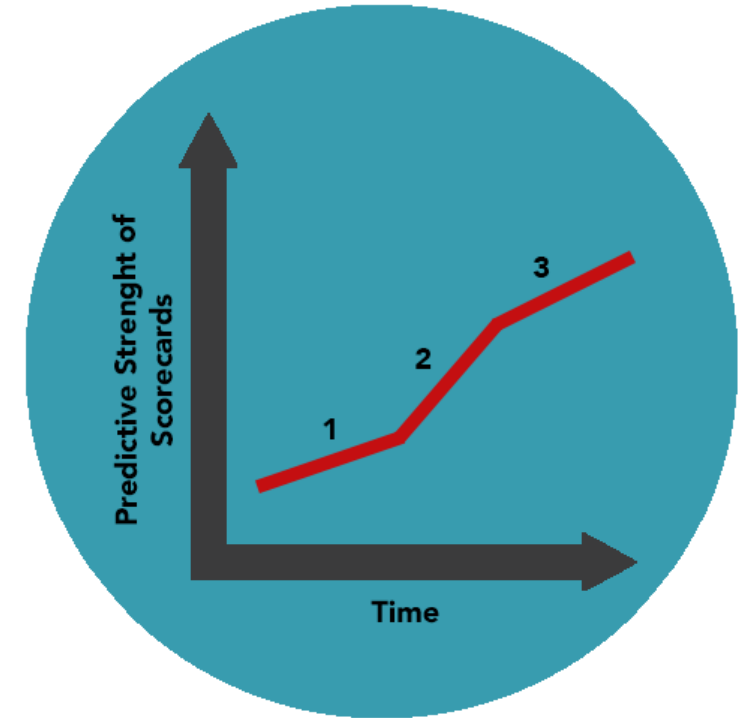
## Developing Long Term Customer Relationship from Initial Minimal Data For the Low Income

Initial Decision, based on Mobile Score + Bureau Score + Rules

- High Accept Rate
- Low Limits

Subsequent Decisions, using Behavioural Score + Bureau Score + Rules

- Accept – Decline
- Higher Limits over time
- This information is available so customers can be pre-scored



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How Credit Scoring  
assists small value lending  
- real case studies

# Behavioural Scoring Creates Bottom Line Benefit

## **Situation**

A small loans provided with wide network was making manual decision in face to face meeting. Decisions were made manually under wide guidelines. Customers would take multiple loans each year, often with 2 loans running in parallel.

## **What we did**

We introduced customer management system and behavioural score. On each cycle point a score and maximum limit was calculated and 3 possible recommended new loans made for those customer which were eligible by the system rules.

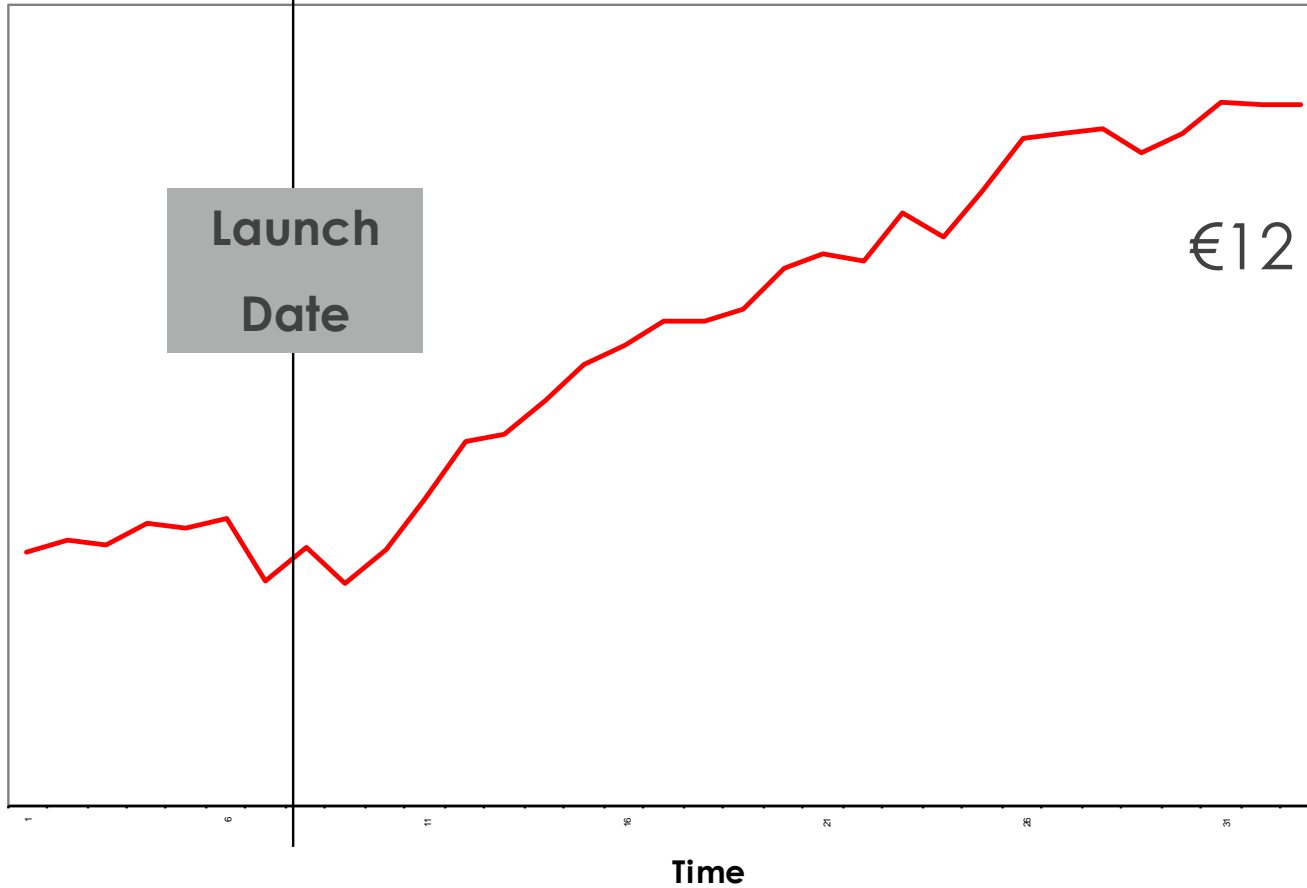
## **The result**

Client facing staff appreciated the support and guidelines. Benefits were seen in both;

Increased sales where sales staff too conservative reduced losses to higher risk customers whose relationship with the staff made it difficult to say no

## Profit per Customer

Contribution



## Bottom Line Benefit

A well managed Scorecard Solution can generate increased Profitability.

This Bank increased contribution by €12 per customer per annum

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# Benchmarking

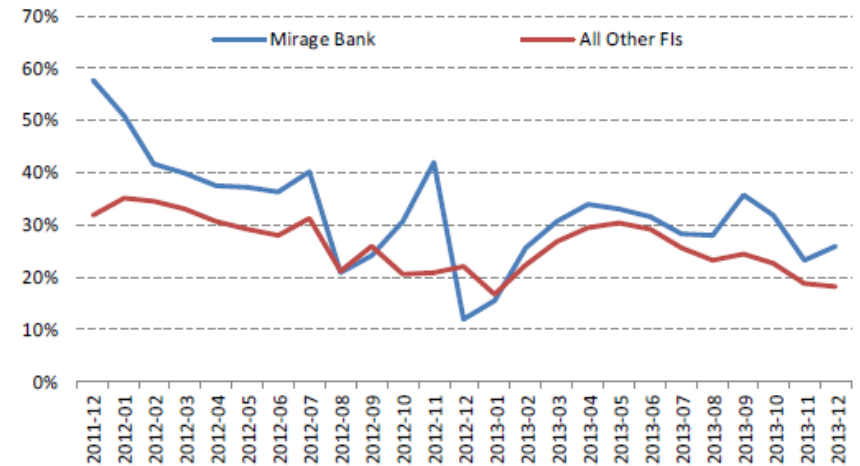
# Benchmarking

- Compares key performance metrics of the client portfolios with those of the market
- The information is derived from credit bureau data
- Typically changes to a lenders credit risk strategy are measured against previous performance
- Benchmarking offers MFI's the opportunity to evaluate the true impact of their credit and customer management strategies against the marketplace in which they are being deployed

# Benchmarking

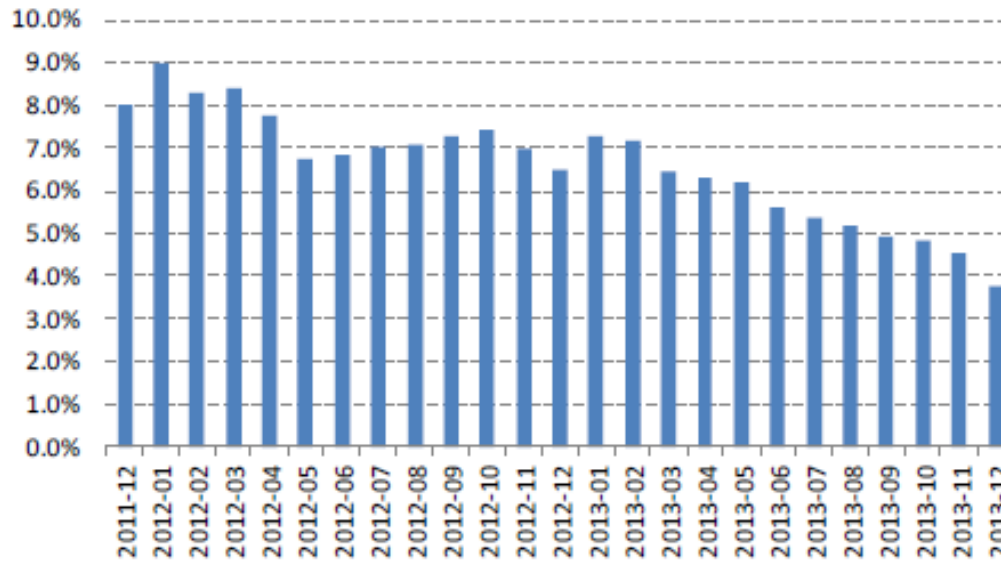
Benchmarking offers the following types of information:

- Market Share
- Default Rate
- Current Customer Portfolio
- Marketing Effectiveness and Competition



# Benchmarking

## Market Share – Number Of Contracts



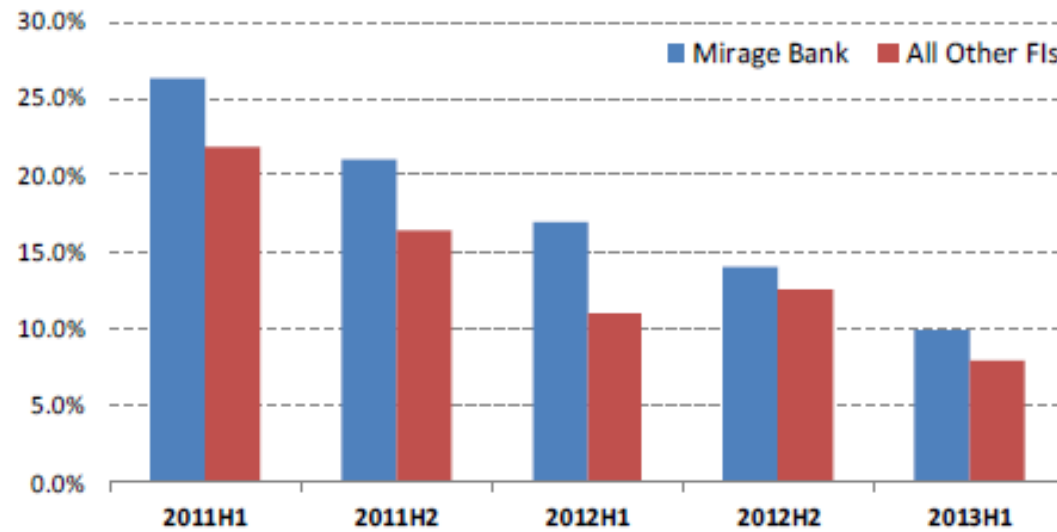
- The report shows, for each month, the percentage of new consumer loans in the market which were attributed to this lender.
- The Start Date reported to the bureau is used to determine the appropriate month.

## Market Share

Month	Market Share
2011-12	8.0%
2012-01	9.0%
2012-02	8.3%
2012-03	8.4%
2012-04	7.8%
2012-05	6.7%
2012-06	6.8%
2012-07	7.0%
2012-08	7.1%
2012-09	7.3%
2012-10	7.4%
2012-11	7.0%
2012-12	6.5%
2013-01	7.3%
2013-02	7.2%
2013-03	6.5%
2013-04	6.3%
2013-05	6.2%
2013-06	5.6%
2013-07	5.4%
2013-08	5.2%
2013-09	4.9%
2013-10	4.8%
2013-11	4.6%
2013-12	3.8%

# Benchmarking

## Default Rate

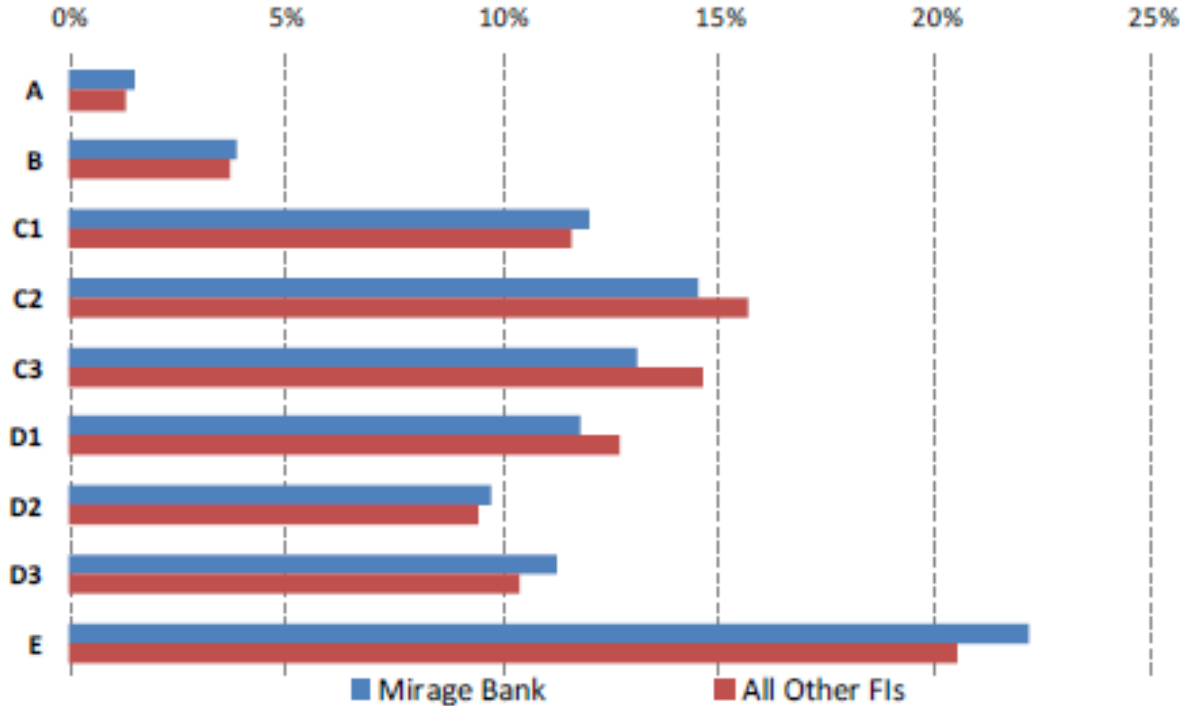


	Mirage Bank	All Other FIs
2011H1	26.3%	21.8%
2011H2	21.0%	16.4%
2012H1	16.9%	11.0%
2012H2	14.1%	12.6%
2013H1	9.9%	8.0%

- Default is defined as having a status of "Terminated In Advance Incorrectly Because Of Clients Negative Behaviour" or has a status of "Existing" and is more than 30 days past due as of the most recent snapshot date
- The Start Date of the contract is used to determine the time period.
- H1 refers to the first 6 months of a year, and H2 is for months 7 through 12.

# Benchmarking

## Risk Grades



Risk Grade	Mirage Bank	All Other FIs
A	1.5%	1.3%
B	3.9%	3.7%
C1	12.0%	11.6%
C2	14.5%	15.7%
C3	13.1%	14.6%
D1	11.8%	12.7%
D2	9.7%	9.4%
D3	11.3%	10.4%
E	22.2%	20.5%

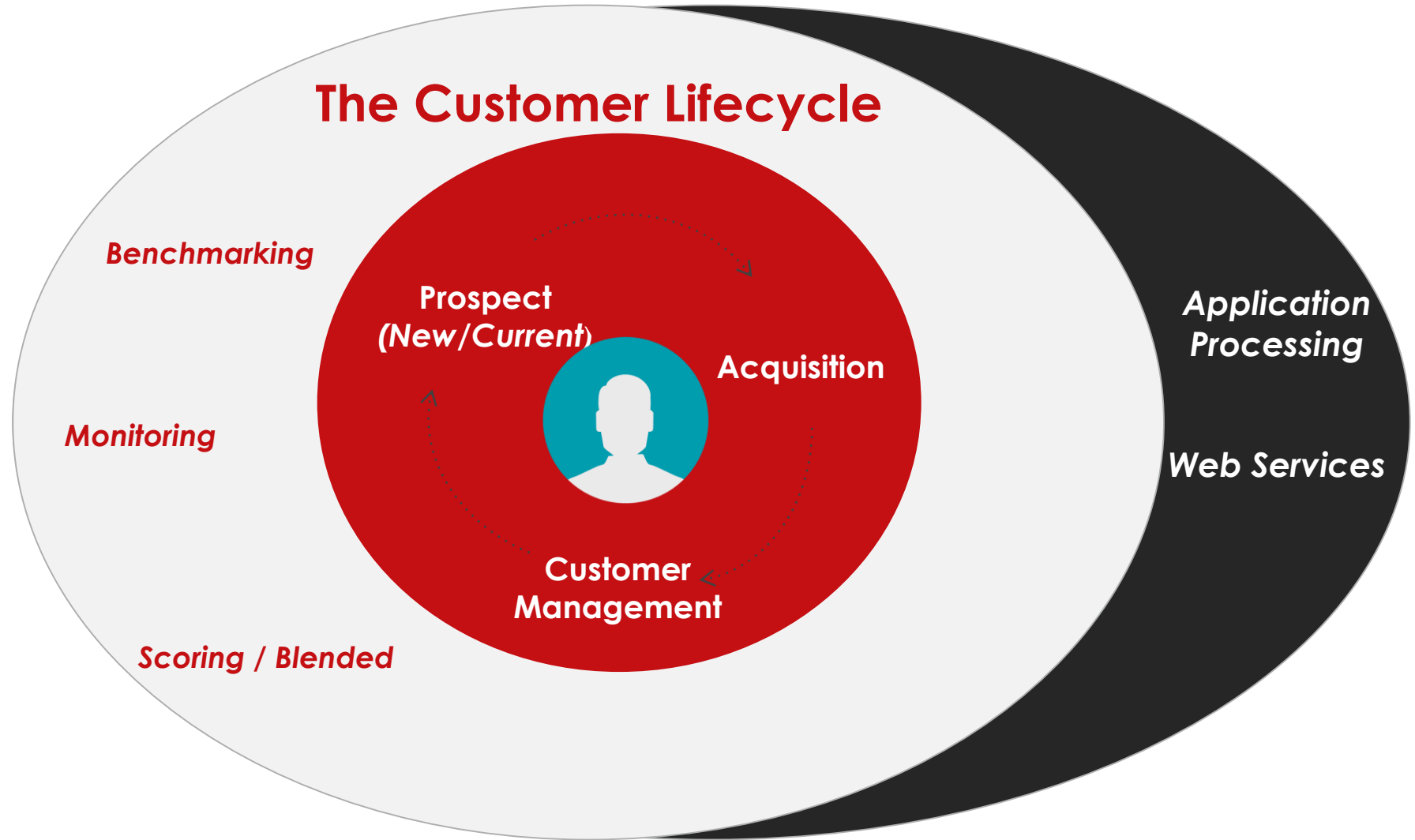
# Real Example: Portfolio distribution split by risk grades

MFI "ABC"			Other MFIs			
Risk grade	Default rate, % of number of loans	Active portfolio - distribution, % of number of loans	Risk grade	Active portfolio - distribution, % of number of loans	Default rate, % of number of loans	Risk grade
A	6.1%	23%	A	45%	5.4%	A
B	8.3%	27%	B	34%	7.9%	B
C	12.2%	21%	C	11%	12.3%	C
D	25.6%	12%	D	7%	24.7%	D
E	27.8%	17%	E	3%	30.2%	E

“ABC” has much higher concentration of the portfolio in the high risk grade, while other MFIs are focusing on the low risk customers.

Therefore overall performance of “ABC” is significantly worse.

# Monitoring



**ALL  
Customers**

Who Should Banks, Retailers,  
Telcos, MFIs ,etc., Monitor?



# Customers Change Over Time

July



Credit Card

October



Car

December



Court Ruling

# Benefit to Banks, Retailers, Telco, MFI etc

**Monitoring module** automatically notifies subscribers about **events** and **critical changes** related to the **portfolio of their own clients**.



Understand the  
Customer needs



Reduce Exposure



Improve Collection



Increase Sales

# Monitoring Module

The list of **critical changes** which generate notifications

Description	Parameter which can be set
New negative status of subject has been reported	-
New negative status of contract has been reported	-
New contract of specific type has been reported	Contract type
Contract with Total Amount which is greater than defined amount has been reported	Amount in local currency (AFN)
Change of client's surname, company name or contact information has been reported	-
Number of past due instalments which has been reported is greater than defined number	Number of due instalments
Total number of open contract is greater than defined number	Number of contracts
Past Due Amount of any opened contract is greater than defined amount	Amount in local currency (AFN)



# Monitoring Module

Email notification example:

Monitoring notifications 2013-12-13, Group VIP Group 01 - Message

FILE MESSAGE

Ignore Delete Reply Reply All Forward More Meeting

BC prezentace To Manager  
Team Email Done  
Reply & Delete Create New

Quick Steps Move Move

Rules OneNote  
Actions Mark Unread Categorize Follow Up

Thu 12/12/2013 16:03

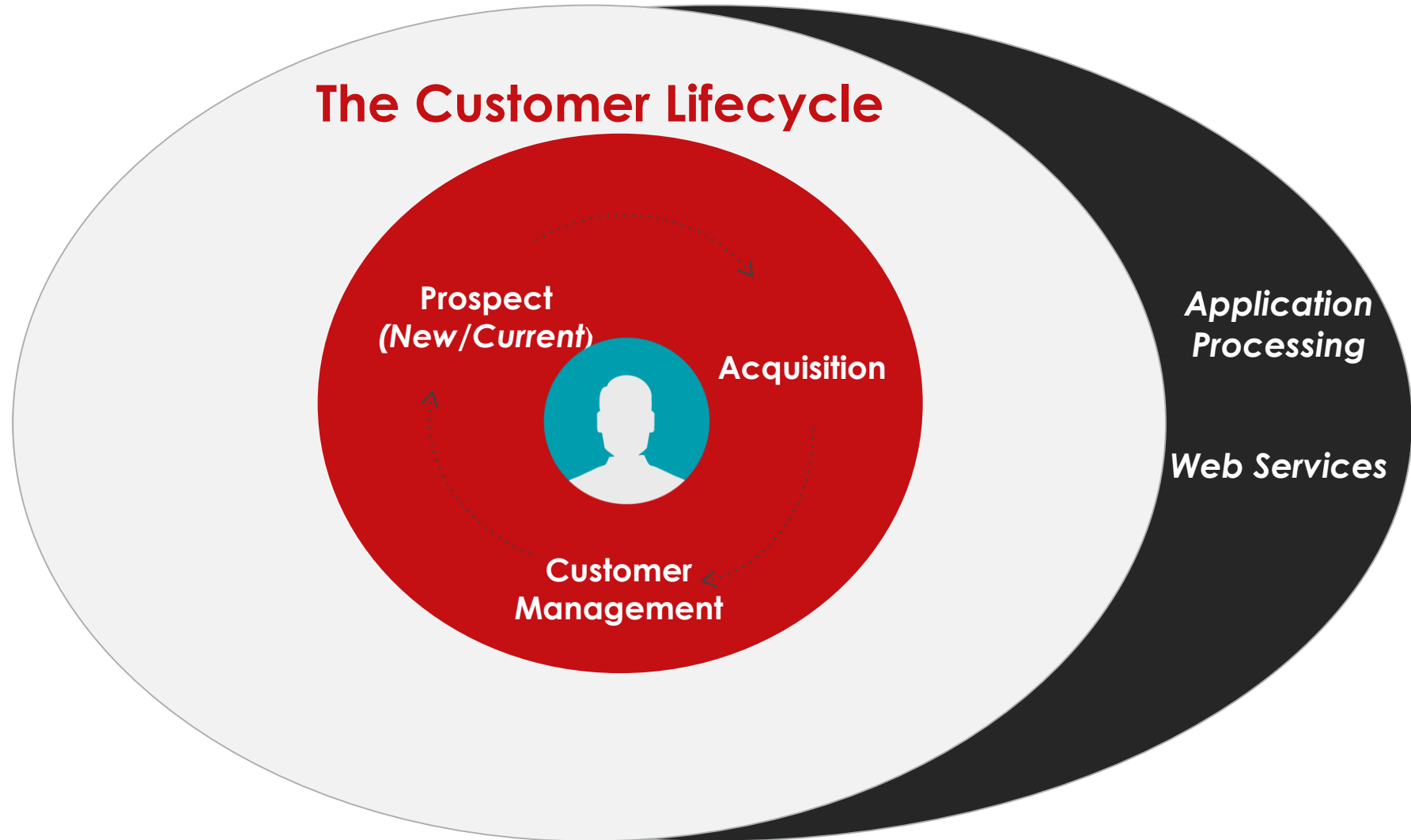
Monitoring notifications 2013-12-13, Group VIP Group 01

To Štolec Pavol

Creditinfo ID	Created	Type of client	Name of client	ID Type	ID Number	Notification Type
333289	12. 12. 2013	Individual	Pavel Benes	Tazkira Number	KBL-34405	NUMPASTDUE; Number of past due instalments >= X
1234	12. 12. 2013	Company	Coca Cola	Tax Number	215444561	NUMPASTDUE; Number of past due instalments >= X
5468	12. 12. 2013	Individual	Radek Bittner	Tazkira Number	KBL-98744	NUMPASTDUE; Number of past due instalments >= X
56498	12. 12. 2013	Individual	Matej Hron	Tazkira Number	KBL-7894	NUMPASTDUE; Number of past due instalments >= X

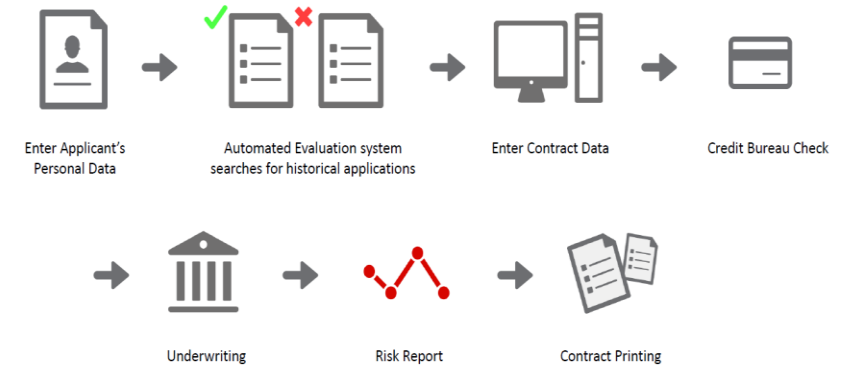
**Total number of displayed notifications: 4 of 4**

# Automation – Application Processing



# Application Processing / Integrated Solutions

- Consumer loans processed in less than 10 minutes
- On-line validation ensuring clean data
- Reduced demands on the operator to qualify application
- Removes the need to include excel sheets or paper documents (these can be supported if deemed necessary)
- Automated decision making removes objectivity in considering and representing facts
- Significantly decreases internal / external fraud
  - **DECLINE:** the application in case an open application for the same ID is found



The screenshot shows a software interface for managing loan applications. At the top, it displays 'Afhættamat (1 - Inni) - Væðiptæmalyfjöl: 4209700139, Dags ný einkunn: 20.9.2011'. Below this is a table with columns for 'Væðiptæm...', 'Heiti', 'Flo...', 'Inn...', 'Vöktun', 'Byrjun/End...', 'Dagi fyrri en...', 'Fyrri en...', 'Ný einkunn', 'Einkunn br...', and 'Dagi ný einkunn'. The table contains several rows of data, with some cells highlighted in green or red. Below the table, there are sections for 'Litur á vörðkun' and 'Litur á vörðkun' with various input fields and buttons.

Væðiptæm...	Heiti	Flo...	Inn...	Vöktun	Byrjun/End...	Dagi fyrri en...	Fyrri en...	Ný einkunn	Einkunn br...	Dagi ný einkunn
410692799	Brædal EHF	058	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	3	2	-1	20.9.2011
420103270	Edlon ehf	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	9	8	-1	20.9.2011
430205028	Engill EHF	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	19.9.2011	7	8	1	20.9.2011
430704930	Fiskuból EHF	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	6	3	-3	20.9.2011
420806090	Geipró ehf	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	7	8	1	20.9.2011
4209700139	Blásköll - Blásköll HF	089	IF07	<input checked="" type="checkbox"/>	16.7.2011	17.9.2011	8	9	1	20.9.2011
430303240	Keel EHF	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	7	6	-1	20.9.2011
430504270	Isort Hólar EHF	063	IF08	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	9	8	-1	20.9.2011
430702190	Vestaraðstoð ehf	072	IF10	<input checked="" type="checkbox"/>	16.7.2011	17.7.2011	-1	8	9	20.9.2011

## Case Study

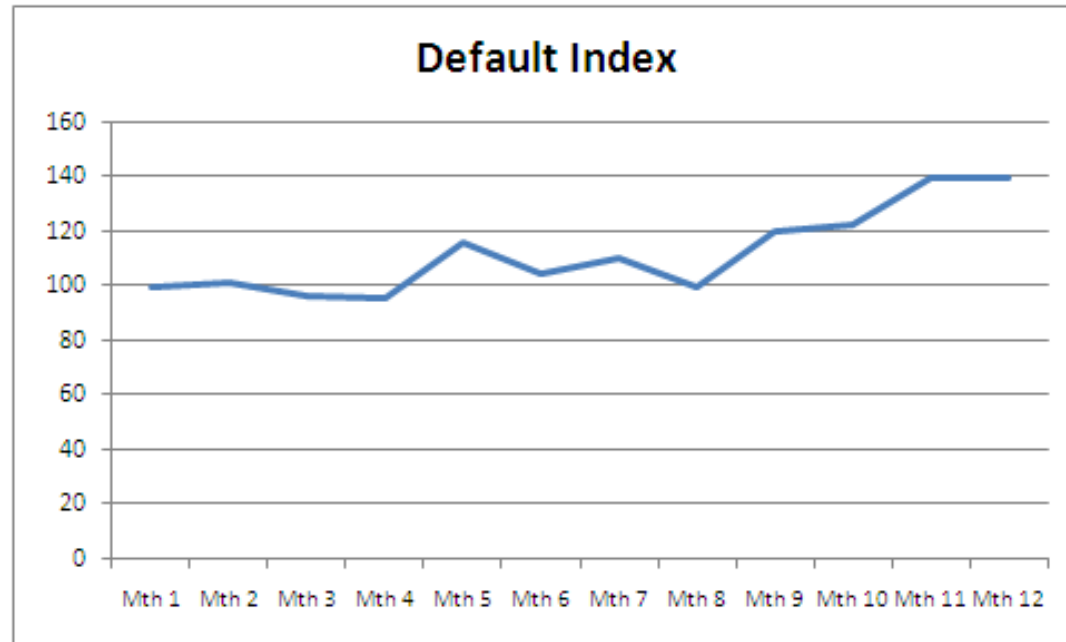
### Improving Risk Management - MCB Finance Lender

#### Situation Overview

An internet small value loan provider initial rapid growth

Experienced 40% Increase in Defaults

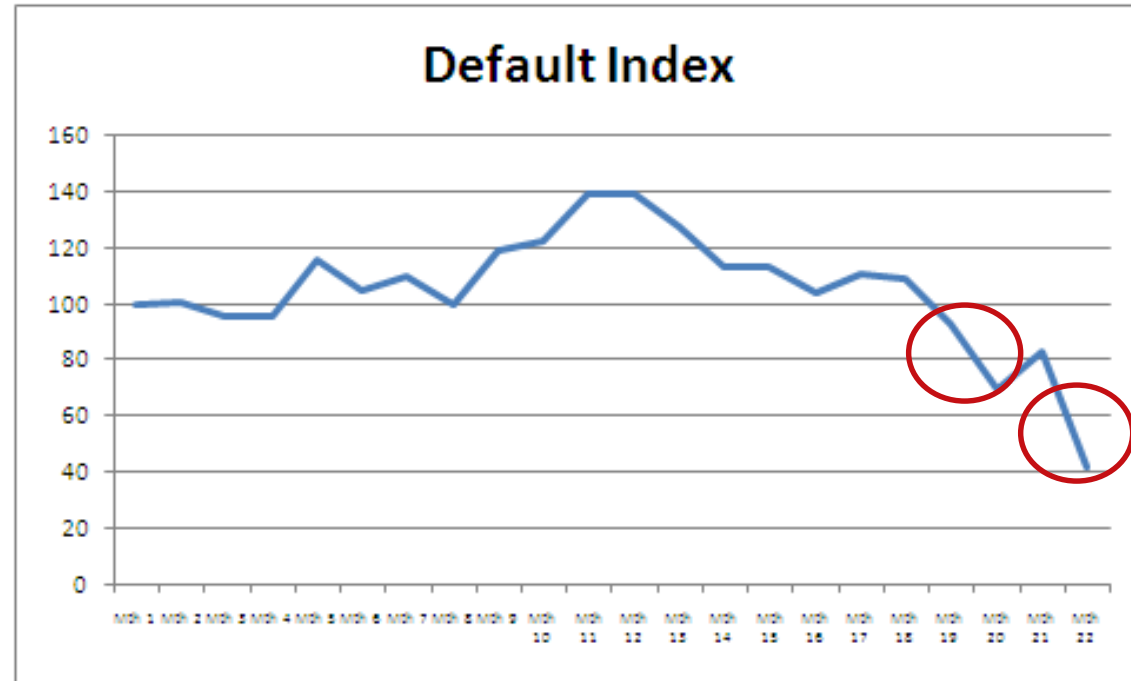
Requested Support from Creditinfo



Note: Default rate Indexed to the value in Month 1 of the time period.

- Immediate quick wins from:
  - additional data,
  - Generic Scorecard Predictor
  - change to Policy Rules
- Changes to reporting provided greater transparency
- New scorecards and allocation of limits ;
  - reduced delinquency by 50% and
  - reduced manual referrals by 30%

## Results



Implementation of new rules and data

Implementation of new scorecard and limit assignment

Note: Default rate Indexed to the value in Month 1 of the time period.

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# Summary

# What Credit Bureaus mean for Financial Inclusion

- Credit Scorecards are the solution for the financial institutions for the excluded and low income groups.
  - Financial Innovation – new products reaching low level of the pyramid require new tools, technology and data analytics.
  - Credit Scorecards are an answer to the Question: How Banks and other FIs can grow and increase profitability by being more inclusive?
  - Credit Scoring makes credit worthiness of the low income groups possible.
  - Credit Bureau Solutions improve holistic credit risk management
  - Credit Bureaus are integral part of the solution for the inclusion of low income.
-

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Thank You



### Contact **Information**

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Skype: agatacreditinfo



### Contact **Information**

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Skype: sammiwhite

