



# Data Platform

## User guide

June 2019



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## Security protocol

- The system is hosted on a virtual private server (VPS) on DigitalOcean company.
- The physical servers hosting the VPS are located in a datacenter in Netherlands.
- The VPS runs a Linux system, Ubuntu 16.04 LTS distribution.
- The operative system is periodically updated and maintained.
- The server is behind a DigitalOcean firewall and accessible from internet only through secure protocols: SSH and HTTPS. All other ports/services are closed (HTTP is forwarded to HTTPS).
- SSH login is only allowed with Public and Private keys. Password login is disabled.
- Technologies involved: PHP 7, Mysql 5.7, Mongo DB 3.6 and Laravel Framework 5.3 (all hosted in the same server).
- The system is only accessible through the secure protocol HTTPS.
- We use Stripe for payments, Credit Card management is PCI Compliance. We don't manage neither store Credit card numbers/information, all is managed by Stripe: <https://stripe.com/docs/security/stripe>
- User accounts are protected by the following security:
  - Periodically password update is required
  - 2nd authenticator factor
  - List of last logged in devices identified by browser and country
  - New device login notifications
  
- Server hardening.
  - Minimize installed packages footprint. Only the necessary packages should be installed.
  - SSH security:
    - Root login not allowed.
    - Non-standard port.
    - File integrity monitoring.
    - Chroot Jail SFTP access.
- Install New Relic to monitor Application and Server status.
- Improve SSL Layer Configuration  
<https://www.ssllabs.com/ssltest/analyze.html?d=www.microfinancereports.com>
- Server security maintenance plan:
  - Daily unattended security packages upgrades.
  - Monthly attended packages upgrades.
  - Distribution upgrade on end of life support for LTS distribution.
- Application Security
  - The final step in security would be to apply a Web Application Firewall (WAF) like CloudFlare/ModSecurity/Sucuri if we see it necessary.
  - Geolocation whitelisting/blacklisting.  
(<https://github.com/antonioribeiro/firewall>).
  - Malware monitoring (<https://sucuri.net/>) Scan the malware in the app.

## Data reliability

Good data quality is essential for credible decision making, but users need to find the balance in the trade-off between quality and coverage. A small and more reliable database can be preferable to a broad and less reliable database or vice versa, depending on the type of use. This flexibility is built in the Platform, open to a variety of sources with a variety of reliability degrees. A transparent reliability rating is attributed to the data at entry depending on the validation level and the APR calculation tool used (see table 6). The rating are disclosed and can improve with a more rigorous validation performed after the data entry. The users can use a smaller database of higher quality (e.g. database filtered for 3 and 2 stars) or a larger database of lower average quality (e.g. unfiltered database) case by case.

A minimum reliability is ensured at all times with the following data quality control system:

1. Ex-ante guide and training:
  - a. *A methodological guide and instruction videos* on the website in various languages for free explaining step by step how to provide data and how to get data from the Platform;
  - b. *Periodic webinars to provide APR calculation training and refreshment* for a symbolic fee to all interested data providers, allowing for instance investors to save on training for their staff.
  - c. *Deep dive APR training:* APR calculation with PAT & CA tools, consistency and accuracy checks can be provided by the Platform manager to the data providers as a service on request.
2. Ex-post validation levels:
  - a. *Consistency check* (desk) is performed for free by the platform manager in all cases: by comparing the key information received;
  - b. *Accuracy validation:* rigorous desk triangulation or on-site validation on request (loan repayment schedules, credit policies, financial statements, practices in branches review).

Data Reliability		Reporting entity			Type of validation			APR tool used		
ID	Symbol	Organization Reported by the org. to which the data refer to	Third party Validated by a different org. than the org. to which the data refer to	Independent Validated by an org. with no ownership, membership, or investment relations	Consistency check	Off-site accuracy validation	On-site accuracy validation (≥4 days, ≥2 branches, training <sup>1</sup> )	SPI4 APR Estimation Tool	Calculating Transparent Pricing Tool	Pricing Analysis tool
4	★★★★★			✓	●		●			✓
			✓		●		●			✓
		✓			●		●			✓
3	★★★★			✓	●		●		✓ or	✓
				✓	●		●		✓ or	✓
			✓		●	●			✓ or	✓
		✓			●	●			✓ or	✓
2	★★			✓	●				✓ or	✓
			✓		●	●		✓ or	✓ or	✓
		✓ <sup>2</sup>			●	●		✓ or	✓ or	✓
1	★		✓		●			✓ or	✓ or	✓
		✓			●	●		✓ or	✓ or	✓
		✓			●			✓ or	✓ or	✓
0	☆	✓			●					

<sup>1</sup> Deep dive APR training. <sup>2</sup> Internal qualified auditor

● Consistency check / accuracy validation passed. ● Until consistent check and accuracy validation findings are solved.

## Consistency check

Consistency check is performed automatically.

### Consistency check

- APR should be > portfolio yield;
- if mandatory saving, then APR deposit component should be >0 (applicable with PAT);
- if mandatory insurance, then APR insurance component should be >0 (applicable with PAT)

## Accuracy validation

Accuracy validation is performed on demand, for a fee.

### Off-site accuracy validation

- Review loan repayment schedule<sup>1</sup>, contract<sup>2</sup>, product features, profit and loss statement (with breakdown of financial income and operational income), and credit policy. Review at least the repayment schedule and loan contract (two most important documents) prior to discussions with the FSP.
  - Repayment schedule, contract, product features, credit policy: Check for consistency between the loan amount, loan term, nominal interest rate, principal/interest payments, fees, insurance, grace period, repayment frequency, mandatory savings. Enter the repayment schedule into the Exact Pricing sheet of the CTPT and compare the APR result with submitted calculations.
  - Profit and Loss statement: Verify the portfolio yield.
- Check to make sure that information filled in looks realistic, to ensure the FSP has not misunderstood any fields. Follow-up on any unrealistic aspects, e.g. a fee that adds more than 20% to APR, interest only APR increment of less than 10%, etc.
- Check for outlier calculations and follow-up with the FSP if a certain calculation has significantly different pricing than others.
- Check consistency with historical prices already submitted to the Data Platform. Follow-up with the FSP in case of large deviations or significantly differing price components or loan characteristics.
- Call with credit manager and, in case of doubts, with a LO if possible.
- PAT-specific checks:
  - Verify that all parameters (price components and loan characteristics) of each calculation entered in Step 3 are within the ranges indicated in Step 1 product design information.

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<sup>1</sup> Preferably scanned copies or FSP print-outs of “real” repayment schedules (i.e. representing a loan actually received by a client). If “real” schedules are not available, in exceptional cases “hypothetical” repayment schedules can also be accepted (i.e. generated from MIS or in Excel). Repayment schedules should include the disbursement amount, disbursement date, and principal/interest repayment amounts and dates. The disbursement date should be no older than two months from the present date, to ensure the pricing on the schedule is up to date.

<sup>2</sup> Preferably a scan of a “real” loan contract (i.e. representing a loan actually received by a client, complete with client signature, issued within the past two months). If real contracts are unavailable, in exceptional cases template contracts for a typical loan can also be accepted – but only if it contains complete pricing information (actual figures written or typed in for interest, fees, and compulsory deposit).

- If there is a range in any pricing component, ensure the FSP has provided a sufficient explanation in Step 1. The explanation must be sufficient enough to apply a precise fee to a particular calculation (e.g. not simply, “varies based on loan amount,” but more specific “loans 100 USD and below: 1%, loans above 100 USD: 2%). Check that these variations were properly applied in Step 3.
- If there are grace periods, verify a grace period was entered in Step 3 calculations for the correct percentage of calculations.
- Check that the sampling in Step 2 was done in an appropriate way based on the most common amount/term combinations, and that Step 3 amount/terms actually used are in-line with those combinations.

#### On-site accuracy validation

- Following the off-site accuracy validation methodology above, review loan repayment schedule, contract, product features, profit and loss statement (with breakdown of financial income and operational income), and credit policy.
- Interview credit manager, LO and cashier;
- Interact with a client at the branch and ask what components she was charged;
- Review posters, pamphlets, etc. in branches containing pricing information to cross-check with calculations;
- Review all actual loan documentation received by a client in the branch and compare for consistency to documentation received off-site

## Peer groups

COUNTRY	REGION ID	SUBREGION	SUBREGION ID	Country ID	Currency ID
Afghanistan	SSEA	South Asia	SAS	AFG	AFN
Albania	ECA	East Europe	EEU	ALB	ALL
Algeria	MENA	North Africa	NAF	DZA	DZD
American Samoa	SSEA	South East Asia	SEA	ASM	USD
Andorra	ECA	West Europe	WEU	AND	EUR
Angola	SSA	Central Africa	CAF	AGO	AOA
Antigua and Barbuda	LAC	Central America	CAM	ATG	XCD
Argentina	LAC	South America	SAM	ARG	ARS
Armenia	ECA	Central Asia	CAS	ARM	AMD
Aruba	LAC	Central America	CAM	ABW	AWG
Australia	SSEA	South East Asia	SEA	AUS	AUD
Austria	ECA	West Europe	WEU	AUT	EUR
Azerbaijan	ECA	Central Asia	CAS	AZE	AZN
Bahamas, The	LAC	Central America	CAM	BHS	BSD
Bahrain	MENA	Middle East	ME	BHR	BHD
Bangladesh	SSEA	South Asia	SAS	BGD	BDT
Barbados	LAC	Central America	CAM	BRB	BBD
Belarus	ECA	East Europe	EEU	BLR	BYR
Belgium	ECA	West Europe	WEU	BEL	EUR
Belize	LAC	Central America	CAM	BLZ	BZD
Benin	SSA	West Africa	WAF	BEN	XOF
Bermuda	LAC	Central America	CAM	BMU	BMD
Bhutan	SSEA	South Asia	SAS	BTN	BTN
Bolivia	LAC	South America	SAM	BOL	BOB
Bosnia and Herzegovina	ECA	East Europe	EEU	BIH	BAM
Botswana	SSA	South Africa	SAF	BWA	BWP
Brazil	LAC	South America	SAM	BRA	BRL
Brunei Darussalam	SSEA	South East Asia	SEA	BRN	BND
Bulgaria	ECA	East Europe	EEU	BGR	BGN
Burkina Faso	SSA	West Africa	WAF	BFA	XOF
Burundi	SSA	East Africa	EAF	BDI	BIF
Cambodia	SSEA	South East Asia	SEA	KHM	CVE
Cameroon	SSA	Central Africa	CAF	CMR	KHR
Canada	NA	North America	NAM	CAN	XAF
Cape Verde	SSA	West Africa	WAF	CPV	CAD
Cayman Islands	LAC	Central America	CAM	CYM	KYD
Central African Republic	SSA	Central Africa	CAF	CAF	XAF
Chad	SSA	Central Africa	CAF	TCD	XAF
Chile	LAC	South America	SAM	CHL	CLP
China	SSEA	South East Asia	SEA	CHN	CNY
Colombia	LAC	South America	SAM	COL	COP
Comoros	SSA	East africa	EAF	COM	KMF
Congo, Dem. Rep.	SSA	Central Africa	CAF	COD	CDF



COUNTRY	REGION ID	SUBREGION	SUBREGION ID	Country ID	Currency ID
Congo, Rep.	SSA	Central Africa	CAF	COG	XAF
Costa Rica	LAC	Central America	CAM	CRI	CRC
Croatia	ECA	East Europe	EEU	HRV	HRK
Cuba	LAC	Central America	CAM	CUB	CUP
Curacao	LAC	Central America	CAM	CUW	ANG
Cyprus	ECA	West Europe	WEU	CYP	EUR
Czech Republic	ECA	East Europe	EEU	CZE	CZK
Denmark	ECA	West Europe	WEU	DNK	DKK
Djibouti	SSA	East Africa	EAF	DJI	DJF
Dominica	LAC	Central America	CAM	DMA	XCD
Dominican Republic	LAC	Central America	CAM	DOM	DOP
Ecuador	LAC	South America	SAM	ECU	USD
Egypt	MENA	North Africa	NAF	EGY	EGP
El Salvador	LAC	Central America	CAM	SLV	USD
Equatorial Guinea	SSA	Central Africa	CAF	GNQ	XAF
Eritrea	SSA	East africa	EAF	ERI	ERN
Estonia	ECA	East Europe	EEU	EST	EUR
Ethiopia	SSA	East africa	EAF	ETH	ETB
Faeroe Islands	ECA	West Europe	WEU	FRO	DKK
Fiji	SSEA	South East Asia	SEA	FJI	FJD
Finland	ECA	West Europe	WEU	FIN	EUR
France	ECA	West Europe	WEU	FRA	EUR
French Polynesia	SSEA	South East Asia	SEA	PYF	XPF
Gabon	SSA	Central Africa	CAF	GAB	XAF
Gambia	SSA	West Africa	WAF	GMB	GMB
Georgia	ECA	Central Asia	CAS	GEO	GEL
Germany	ECA	West Europe	WEU	DEU	EUR
Ghana	SSA	West Africa	WAF	GHA	GHS
Greece	ECA	West Europe	WEU	GRC	EUR
Greenland	ECA	West Europe	WEU	GRL	DKK
Grenada	LAC	Central America	CAM	GRD	XCD
Guam	SSEA	South East Asia	SEA	GUM	USD
Guatemala	LAC	Central America	CAM	GTM	GTQ
Guinea	SSA	West Africa	WAF	GIN	GNF
Guinea-Bissau	SSA	West Africa	WAF	GNB	XOF
Guyana	LAC	South America	SAM	GUY	GYD
Haiti	LAC	Central America	CAM	HTI	HTG
Honduras	LAC	Central America	CAM	HND	HNL
Hong Kong	SSEA	South East Asia	SEA	HKG	HKD
Hungary	ECA	East Europe	EEU	HUN	HUF
Iceland	ECA	West Europe	WEU	ISL	ISK
India	SSEA	South Asia	SAS	IND	INR
Indonesia	SSEA	South East Asia	SEA	IDN	IDR
Iran	MENA	Middle East	ME	IRN	IRR
Iraq	MENA	Middle East	ME	IRQ	IQD
Ireland	ECA	West Europe	WEU	IRL	EUR
Israel	MENA	Middle East	ME	ISR	ILS

COUNTRY	REGION ID	SUBREGION	SUBREGION ID	Country ID	Currency ID
Italy	ECA	West Europe	WEU	ITA	EUR
Ivory Coast	SSA	West Africa	WAF	CIV	XOF
Jamaica	LAC	Central America	CAM	JAM	JMD
Japan	SSEA	South East Asia	SEA	JPN	JPY
Jordan	MENA	Middle East	ME	JOR	JOD
Kazakhstan	ECA	Central Asia	CAS	KAZ	KZT
Kenya	SSA	East africa	EAF	KEN	KES
Kiribati	SSEA	South East Asia	SEA	KIR	AUD
Korea, Dem. Rep.	SSEA	South East Asia	SEA	PRK	KPW
Korea, Rep.	SSEA	South East Asia	SEA	KOR	KRW
Kosovo	ECA	East Europe	EEU	KSV	EUR
Kuwait	MENA	Middle East	ME	KWT	KWD
Kyrgyz Republic	ECA	Central Asia	CAS	KGZ	KGS
Lao PDR	SSEA	South East Asia	SEA	LAO	LAK
Latvia	ECA	East Europe	EEU	LVA	LVL
Lebanon	MENA	Middle East	ME	LBN	LBP
Lesotho	SSA	South Africa	SAF	LSO	LSL
Liberia	SSA	West Africa	WAF	LBR	LRD
Libya	MENA	North Africa	NAF	LBY	LYD
Liechtenstein	ECA	West Europe	WEU	LIE	CHF
Lithuania	ECA	East Europe	EEU	LTU	LTL
Luxembourg	ECA	West Europe	WEU	LUX	EUR
Macao	SSEA	South East Asia	SEA	MAC	MOP
Macedonia, FYR	ECA	East Europe	EEU	MKD	MKD
Madagascar	SSA	South Africa	SAF	MDG	MGA
Malawi	SSA	South Africa	SAF	MWI	MWK
Malaysia	SSEA	South East Asia	SEA	MYS	MYR
Maldives	SSEA	South Asia	SAS	MDV	MVR
Mali	SSA	West Africa	WAF	MLI	XOF
Malta	ECA	West Europe	WEU	MLT	EUR
Marshall Islands	SSEA	South East Asia	SEA	MHL	USD
Mauritania	SSA	West Africa	WAF	MRT	MRO
Mauritius	SSA	East africa	EAF	MUS	MUR
Mexico	LAC	Central America	CAM	MEX	MXN
Micronesia, Fed. Sts.	SSEA	South East Asia	SEA	FSM	USD
Moldova	ECA	East Europe	EEU	MDA	MDL
Monaco	ECA	West Europe	WEU	MCO	EUR
Mongolia	ECA	Central Asia	CAS	MNG	MNT
Montenegro	ECA	East Europe	EEU	MNE	EUR
Morocco	MENA	North Africa	NAF	MAR	MAD
Mozambique	SSA	South Africa	SAF	MOZ	MZN
Myanmar	SSEA	South East Asia	SEA	MMR	MMK
Namibia	SSA	South Africa	SAF	NAM	NAD
Nepal	SSEA	South Asia	SAS	NPL	NPR
Netherlands	ECA	West Europe	WEU	NLD	EUR
New Caledonia	SSEA	South East Asia	SEA	NCL	XPF
New Zealand	SSEA	South East Asia	SEA	NZL	NZD

COUNTRY	REGION ID	SUBREGION	SUBREGION ID	Country ID	Currency ID
Nicaragua	LAC	Central America	CAM	NIC	NIO
Niger	SSA	West Africa	WAF	NER	XOF
Nigeria	SSA	West Africa	WAF	NGA	NGN
Northern Mariana Islands	SSEA	South East Asia	SEA	MNP	USD
Norway	ECA	West Europe	WEU	NOR	NOK
Oman	MENA	Middle East	ME	OMN	OMR
Pakistan	SSEA	South Asia	SAS	PAK	PKR
Palau	SSEA	South East Asia	SEA	PLW	USD
Panama	LAC	Central America	CAM	PAN	PAB
Papua New Guinea	SSEA	South East Asia	SEA	PNG	PGK
Paraguay	LAC	South America	SAM	PRY	PYG
Peru	LAC	South America	SAM	PER	PEN
Philippines	SSEA	South East Asia	SEA	PHL	PHP
Poland	ECA	East Europe	EEU	POL	PLN
Portugal	ECA	West Europe	WEU	PRT	EUR
Puerto Rico	LAC	Central America	CAM	PRI	USD
Qatar	MENA	Middle East	ME	QAT	QAR
Romania	ECA	East Europe	EEU	ROU	RON
Russian Federation	ECA	Central Asia	CAS	RUS	RUB
Rwanda	SSA	East Africa	EAF	RWA	RWF
Samoa	SSEA	South East Asia	SEA	WSM	WST
San Marino	ECA	West Europe	WEU	SMR	EUR
Sao Tome and Principe	SSA	Central Africa	CAF	STP	STD
Saudi Arabia	MENA	Middle East	ME	SAU	SAR
Senegal	SSA	West Africa	WAF	SEN	XOF
Serbia	ECA	East Europe	EEU	SRB	RSD
Seychelles	SSA	East africa	EAF	SYC	SCR
Sierra Leone	SSA	West Africa	WAF	SLE	SLL
Singapore	SSEA	South East Asia	SEA	SGP	SGD
Slovak Republic	ECA	East Europe	EEU	SVK	EUR
Slovenia	ECA	East Europe	EEU	SVN	EUR
Solomon Islands	SSEA	South East Asia	SEA	SLB	SBD
Somalia	SSA	East africa	EAF	SOM	SOS
South Africa	SSA	South Africa	SAF	ZAF	ZAR
South Sudan	SSA	East africa	EAF	SSD	SSP
Spain	ECA	West Europe	WEU	ESP	EUR
Sri Lanka	SSEA	South Asia	SAS	LKA	LKR
St. Kitts and Nevis	LAC	Central America	CAM	KNA	XCD
St. Lucia	LAC	Central America	CAM	LCA	XCD
St. Martin (Dutch part)	LAC	Central America	CAM	SXM	ANG
St. Martin (French part)	LAC	Central America	CAM	MAF	EUR
St. Vincent & Grenadines	LAC	Central America	CAM	VCT	XCD
Sudan	SSA	East africa	EAF	SDN	SDG
Suriname	LAC	South America	SAM	SUR	SRD
Swaziland	SSA	South Africa	SAF	SWZ	SZL
Sweden	ECA	West Europe	WEU	SWE	SEK

COUNTRY	REGION ID	SUBREGION	SUBREGION ID	Country ID	Currency ID
Switzerland	ECA	West Europe	WEU	CHE	CHF
Syria	MENA	Middle East	ME	SYR	SYP
Tajikistan	ECA	Central Asia	CAS	TJK	TJS
Tanzania	SSA	East africa	EAF	TZA	TZS
Thailand	SSEA	South East Asia	SEA	THA	THB
Timor-Leste	SSEA	South East Asia	SEA	TLS	USD
Togo	SSA	West Africa	WAF	TGO	XOF
Tonga	SSEA	South East Asia	SEA	TON	TOP
Trinidad and Tobago	LAC	Central America	CAM	TTO	TTD
Tunisia	MENA	North Africa	NAF	TUN	TND
Turkey	ECA	East Europe	EEU	TUR	TRY
Turkmenistan	ECA	Central Asia	CAS	TKM	TMM
Turks and Caicos Islands	LAC	Central America	CAM	TCA	USD
Tuvalu	SSEA	South East Asia	SEA	TUV	AUD
Uganda	SSA	East africa	EAF	UGA	UGX
Ukraine	ECA	East Europe	EEU	UKR	UAH
United Arab Emirates	MENA	Middle East	ME	ARE	AED
United Kingdom	ECA	West Europe	WEU	GBR	GBP
United States	NA	North America	NAM	USA	USD
Uruguay	LAC	South America	SAM	URY	UYU
Uzbekistan	ECA	Central Asia	CAS	UZB	UZS
Vanuatu	SSEA	South East Asia	SEA	VUT	VUV
Venezuela	LAC	South America	SAM	VEN	VEB
Vietnam	SSEA	South East Asia	SEA	VNM	VND
Virgin Islands	LAC	Central America	CAM	VIR	USD
West Bank & Gaza	MENA	Middle East	ME	PSE	ILS
Yemen	MENA	Middle East	ME	YEM	YER
Zambia	SSA	South Africa	SAF	ZMB	ZMK
Zimbabwe	SSA	South Africa	SAF	ZWE	ZWD

#### Charter type

Bank  
 Cooperative  
 Non Bank Financial Institution  
 NGO  
 Other

#### Profit status

For profit  
 Non profit

#### Regulated

Regulated  
 Not regulated

#### Services

Credit  
Deposits  
Insurance  
Payments  
Remittances  
Debit / credit card  
Leasing  
Factoring  
Other financial service  
Non financial services

#### **Loan products purpose**

Microenterprise  
SME  
Corporate  
Housing  
Personal  
Other

#### **Lending methodology**

Individual  
Group  
Village Banking  
Individual, Group  
Individual, Village Banking  
Individual, Group, Village Banking  
Group, Village Banking

#### **Sector**

Trade  
Services  
Agriculture  
Production  
Education  
Housing  
Consumption  
Other

#### **Deposit**

Compulsory savings  
Voluntary sight deposits  
Voluntary time deposits  
None

#### **Insurance**

Mandatory life insurance  
Voluntary life insurance

Agriculture insurance  
Health insurance  
Property insurance  
Other insurance  
None

#### **Non financial services**

Business development  
Education (financial, other)  
Health  
Women empowerment  
Other  
None

#### **Target poverty outreach**

Very poor population  
Poor population  
Low income population  
No specific poverty target

#### **Development goal**

Poverty reduction  
Women empowerment  
Growth of enterprises  
Job creation  
Rural development  
Financial access  
Other

#### **Delivery model**

Physical channels  
Digital filed applications for staff  
Mobile loan disbursement / repayment  
ATM, debit/credit cards, internet banking  
Online lending  
Mobile lending  
Other mobile financial services  
Pay as you go  
Other

#### **Main delivery model**

Physical channels  
Physical channels and digital filed applications  
Physical channels and mobile loan disbursement / repayment  
Physical channels, digital filed app, mobile loan disbursement / repayment  
Physical channels, digital filed app, mobile lending  
Online lending

Mobile lending  
 Other mobile financial services  
 Pay as you go  
 Other

#### Loan approval basis

Repayment analysis made by people  
 Algorithm mainly using financial data  
 Algorithm mainly using market data  
 Algorithm mainly using alternative data  
 Other

#### Main loan approval basis

Repayment analysis made by people  
 Algorithm mainly using financial data  
 Algorithm mainly using market data  
 Algorithm mainly using alternative data  
 Other

#### Age

Start-up	<3 years old
Young	>=3 and <8 years old
Mature	>=8 years old

#### Deposit taking

No voluntary deposits	No voluntary deposits
Low deposit taking	Voluntary deposits / Total Assets > 0 and < 20%
High deposit taking	Voluntary deposits / Total Assets >= 20%

#### Financial sustainability

Financially self sustainable	OSS>100%; if OSS not available, ROA>0%
Not financially self sustainable	OSS<100%; if OSS not available, ROA<0%

#### Size

Small size	Total assets <10M USD; if assets n/a, gross portfolio <10M USD
Medium size	Total assets >=10M and <100M USD; if assets n/a, gross portfolio >=10M and <100M USD
Large size	Total assets >= 100M USD; if assets n/a, gross portfolio >=100M USD

#### Outreach

Small outreach	Number of borrowers <10,000
Medium outreach	Number of borrowers >=10,000 and < 100,000
Large outreach	Number of borrowers >= 100,000

#### Target market

Low end microfinance target	Avg Balance per Borrower / GNIpc < 20% and Avg. Bal / Borr <150USD
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Broad microfinance target	Avg Bal / Borr /GNIpc $\geq 20\%$ and $\leq 150\%$
High end microfinance target	Avg Bal / Borr /GNIpc $> 150\%$ and $\leq 250\%$
Small enterprise target	Avg Bal / Borr /GNIpc $> 250\%$

**Area**

Rural	Rural borrowers $\geq 50\%$ ; if rural borrowers not available, rural gross portfolio $\geq 50\%$
Urban	Urban borrowers $\geq 70\%$ ; if urban borrowers not available, urban gross portfolio $\geq 70\%$
Urban-rural	Urban/rural = all the rest



## Subscription

Subscriber		Annual subscription			One time trial 3 months		
Category	Tier	Global, €	Region, € <sup>4</sup>	Country, € <sup>4</sup>	Global, €	Region, € <sup>4</sup>	
A	DFIs	20.000	8.000 - 10.000	3.000 - 5.000	5.000	2.000 - 2.500	
B	Foundations	20.000	8.000 - 10.000	3.000 - 5.000	5.000	2.000 - 2.500	
C	Asset managers	Tier 1: € 1,000 - 2,000 AUM	15.000	6.000 - 7.500	2.300 - 3.800	3.750	1.500 - 1.875
	Tier 2: € 500M-1,000 AUM	10.500	6.800 - 8.500	2.800 - 4.700	2.625	1.700 - 2.125	
	Tier 3: € 100-500M AUM	9.000	6.400 - 8.000	2.700 - 4.500	2.250	1.600 - 2.000	
	Tier 4: € <100M	7.500	4.800 - 6.000	2.400 - 4.000	1.875	1.200 - 1.500	
D	International networks, support organizations (e.g. OI, VFI) <sup>1</sup>	Tier 1: >20M € total income	12.000	4.800 - 6.000	1.800 - 3.000	3.000	1.200 - 1.500
	Tier 2: 3-20M € total income	9.600	4.400 - 5.400	1.800 - 2.900	2.400	1.100 - 1.350	
	Tier 3: <3M € total income	7.200	3.500 - 4.400	1.600 - 2.600	1.800	875 - 1.100	
E	Standard Setters, Capacity Building	Tier 1: >5M € total income	20.000	8.000 - 10.000	3.000 - 5.000	5.000	2.000 - 2.500
	Tier 2: >2M € total income	12.000	6.400 - 8.000	2.700 - 4.500	3.000	1.600 - 2.000	
	Tier 3: 500k-2M € total income	8.000	4.500 - 5.600	2.300 - 3.900	2.000	1.125 - 1.400	
	Tier 4: <500k € total income	4.000	2.700 - 3.400	1.900 - 3.100	1.000	675 - 850	
F	Regulators <sup>2</sup>	Tier 1: Country > 100M population	12.000	8.000 - 10.000	2.400 - 4.000	3.000	2.000 - 2.500
	Tier 2: Country <100M population	6.000	5.600 - 7.000	2.200 - 3.600	1.500	1.400 - 1.750	
G	Professional associations (e.g. MFC, PMN) <sup>1</sup>	Tier 1: Regional	6.000	2.400 - 3.000	700 - 1.200	1.500	600 - 750
	Tier 2: National	3.600	2.000 - 2.400	700 - 1.100	900	500 - 600	
H	Financial Service Providers <sup>1</sup>	Tier 1: >100M € loan portfolio	6.000	2.400 - 3.000	700 - 1.200	1.500	600 - 750
	Tier 2: 10-100M € loan portfolio	3.600	2.000 - 2.400	700 - 1.100	900	500 - 600	
	Tier 3: <10M € loan portfolio	3.000	1.800 - 2.300	600 - 1.000	750	450 - 575	
I	Universities <sup>3</sup>	3.000 - 5.000	2.500 - 1.900	400 - 300			

<sup>1</sup> Data available in an anonymized manner in the country (ies) of operation

<sup>2</sup> Data available in aggregate manner in the country (ies) of operation.

<sup>3</sup> Data available in an anonymized manner. Options: Social data or Financial data or Social and Financial data.

<sup>4</sup> Depending on the size of the region or country.

### Data provision fee discount

The subscription fee can be discounted if the subscriber provides data of Financial Service Providers that are not already on the Data Platform.

Example of data that are already on the Data Platform: data of FSPs that underwent ratings, certifications and SPI4, already uploaded systematically by MFR and CERISE; other data already reported to the Data Platform.

The discount is applicable starting from data of 10 FSPs provided.

The discount amount is calculated as a proportion of the value of data provided versus value of data accessed:

$$\text{Subscription fee discount} = \frac{\text{Number, reliability and transparency of data points provided by subscriber A}}{\text{Number, reliability and transparency of data points available in subscription A}}$$

Number: number of data points;

Reliability: reliability ID of the data

Transparency: transparency ID (nominative versus anonymized)