



Key Performance Indicators for PAYGo PERFORM: How Far We Have Come

10 July 2019 9:00-10:00 AM EDT

WEBINAR



- 1 This is an audio broadcast. Attendee microphones will remain muted during the entire webinar session.
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- 4 The webinar recording will be emailed to all attendees and registrants.

Speakers



Nicky Khaki
CGAP



Alexander Sotiriou
CGAP



Miguel Soriano
IFC



Avi Jacobson
SunFunder



Geoff Manley
CDC Group



Wanji Ng'ang'a
GOGLA

PAYGo PERFORM Webinar: How Far We Have Come

July 10, 2019



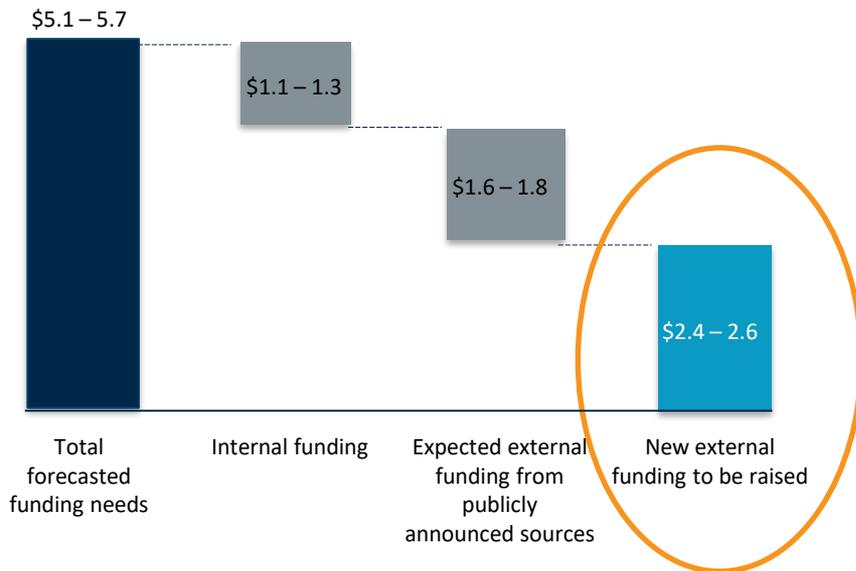
Off-Grid Solar has a \$2.5 bn Funding Gap



Miguel Soriano
IFC

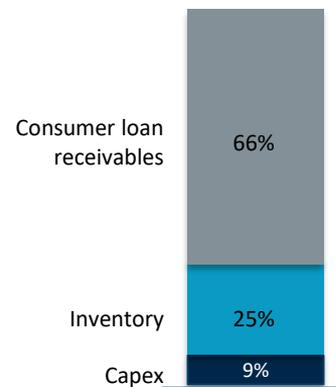
Total forecasted funding needs and expected sources of capital Billions USD (2017-2022)

Source: GOGLA 2018 Deals Database; Dalberg OGS 2017-22 Financing needs model



Forecasted use of funds by companies

% of total funding needed
(2017-22)



The OGS sector will need >USD 5 bn over the next 5 years, a substantial ~USD 2.5 bn+ funding gap relative to projected available funds; this is primarily to fund working capital needs

Why PAYGo PERFORM?



Miguel Soriano
IFC

“Transparency”

“How can I measure their operational and financial performance?”

“What is important for investors?”

“Need to attract more financing to grow”

“How can I benchmark myself?”

Investors



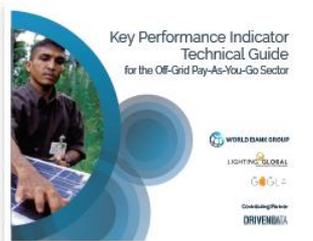
PAYGo Firms

Time for the industry to adopt common reporting standards and greater transparency to aid PAYGo firms, as well as current and potential investors

PERFORM To-Date



Miguel Soriano
IFC



2016-17: Develop Draft KPI Framework

- GOGLA and Lighting Global Convene DESCOS and Investors

2018: KPI 1.0

- **January:** Hong Kong Off-grid Solar Conference
 - Outputs: KPI Technical Guide, Taxonomy, and Data Playbook
- **April:** CGAP joins GOGLA and IFC on PAYGo PERFORM
- **June-November:** Consultations and Pilots
- **November:** Workshop @ Unlocking Solar Capital Kigali; PERFORM Introduction
- **December:** Webinar to CG Outlining PERFORM
 - Mandate from CG to Form Working Groups



2019: Progress on KPI 2.0

- **January-March:** Structure Working Groups (Overall KPIs, Portfolio Quality, Unit Economics)
- **March-June:** Working Groups Meet, Deliberate, and Make Recommendations
- **June:** Workshop @ GOGLA AGM Amsterdam
 - Progress Update
 - Gather Feedback for Pilot



Working Groups – Leadership



Wanji Ng'ang'a
SG Coordinator

GOGLA



João Magalhães
Head of Strategy and Business Planning
Co-chair KPI Working Group

Solaris Offgrid



Avi Jacobson
Global Investment Officer
Co-chair KPI Working Group

Sunfunder



Siten Mandalia
CEO and co-founder
Co-chair KPI Working Group

Solaris Offgrid



Nicky Khaki
SG Coordinator

CGAP



Anish Thakkar
Co-founder
Co-chair PQ Working Group

Greenlight Planet



Fabio Eucalpto
CFO
Co-chair PQ Working Group

Persistent



Tobias Ruckstuhl
Principal
Co-chair PQ Working Group

Persistent



Miguel Soriano
SG Coordinator

IFC



Geoff Manley
Investment Director
Co-chair UE Working Group

CDC Group



Shagun Jain
Head Strategic Partnerships
Co-chair UE Working Group

Rural Spark



Miguel Soriano
IFC

Consultative Group
Comprised of all Stakeholders

Recommends formation of Technical Working Group(s) (TWG)

Steering Group
IFC, GOGLA, CGAP

Accepts CG's request and constitutes a TWG; coordinates groups & participants; and sets expectations in terms of time, resources, budgets, etc.

Technical Working Group(s)
Made of members from CG & Experts as appropriate; co-chaired by company & investor representatives

Researches and deliberates
(drawing resources from SG)

Consultative Group

Opportunity for additional diligence and input (drawing resources from SG) before making final recommendation to the Steering Group

Steering Group

Considers CG recommendation with necessary support and implements

Agenda

1. Progress Update Working Groups

- KPI WG
- Unit Economics WG
- Portfolio Quality WG

2. Timeline and Next Steps

3. Mini Debate on Key Issues

4. Q&A

5. Closing and Appreciation



Miguel Soriano
IFC

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Avi Jacobson
SunFunder

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Avi Jacobson
SunFunder

Three Categories of Indicators



Avi Jacobson
SunFunder

Company Indicators

- Publicly available information
- Not sensitive
- Helps to understand the context of a company



Operational Indicators

- Operational benchmarking
- Proposed to be a set of standardized indicators to be used internally only
- Not (yet) to be reported against

Financial Indicators

- PQ and UE KPIs

Company KPIs 2.0 – Overview and Calculations



KPI Name	 Definition	 Calculation	 Status
<div style="background-color: #003366; color: white; padding: 5px; text-align: center; font-weight: bold;">Sales Model</div>	Pick all that apply: <ul style="list-style-type: none"> Sales Model: <input type="checkbox"/> PAYGo <input type="checkbox"/> Cash Distribution Model: <input type="checkbox"/> Direct PAYGo Sales <input type="checkbox"/> PAYGo Via Partners <input type="checkbox"/> B2B <input type="checkbox"/> B2C <input type="checkbox"/> Other (explanation to be requested in a comment). 	<ul style="list-style-type: none"> Scale of 0-100% for each response based on a revenue share from the sales model(s) and the related distribution model(s). 	
<div style="background-color: #003366; color: white; padding: 5px; text-align: center; font-weight: bold;">Geographical Area</div>	<ul style="list-style-type: none"> In which geographical areas are you serving customers? (more than 1 answer possible) <input type="checkbox"/> East Africa <input type="checkbox"/> West Africa <input type="checkbox"/> Southern Africa <input type="checkbox"/> South Asia (except India) <input type="checkbox"/> India <input type="checkbox"/> Southeast Asia <input type="checkbox"/> South/Central America <input type="checkbox"/> Other 	<ul style="list-style-type: none"> Answer provided on a scale of 0-100% based on revenue share from the selected regions. 	
<div style="background-color: #003366; color: white; padding: 5px; text-align: center; font-weight: bold;">Total Net Sales</div>	<ul style="list-style-type: none"> Net total number of units sold from the business's start of operations 	<ul style="list-style-type: none"> All sales units discounted by returns & repossessions measured from the business's start of operations 	
<div style="background-color: #003366; color: white; padding: 5px; text-align: center; font-weight: bold;">Portfolio Size</div>	<ul style="list-style-type: none"> Total number of customers in portfolio an/or total USD value of the accounts receivable from PAYGo contracts. 	<ul style="list-style-type: none"> # of active [Contracts]/Reported Accounts Receivables Value. 	

Operational KPIs 2.0 – Overview and Calculations



KPI Name	 Definition	 Calculation	 Status
Average Selling Price	<ul style="list-style-type: none"> Mean price of all systems sold for each of the sales models adopted (PAYGo and Cash sales). 	<ul style="list-style-type: none"> Sum of sales revenue/ # systems sold. 	
Sales per distribution channel	<ul style="list-style-type: none"> Sales per distribution channel represented as a percentage of the total units sold. Agents (___%), Wholesalers (___%), Shops (___%) and/or Other (___%) 	<ul style="list-style-type: none"> For each individual distribution channel: Number of units sold (in that distribution channel) / Total number of units sold 	
Sales point churn rate	<ul style="list-style-type: none"> Fraction of sales points that have gone inactive over the previous 90 days, grouped by sales distribution channel. Agents (___%), Wholesalers (___%), Shops (___%) and/or Other (___%) 	<ul style="list-style-type: none"> For each individual distribution channel: Sum of sales points that have gone inactive (in that distribution channel) / average # sales points (in that distribution channel) 	
Warranty Cost	<ul style="list-style-type: none"> Warranty cost represented as a percentage of the sales revenue. 	<ul style="list-style-type: none"> Total warranty costs / Total sales revenue Alternatives are Total warranty costs/ total number unit lost Total installed warranty costs all time/total collections of all time (might be difficult to calculate) 	
Net Promotor Score	<ul style="list-style-type: none"> Measure the loyalty that exists between a provider and a consumer. 	<ul style="list-style-type: none"> How likely is it that you would recommend our company/product/service to a friend or colleague? The scoring for this answer is most often based on a 0 to 10 scale. 	

Next Steps for the KPI WG



Avi Jacobson
SunFunder

- Gather feedback from consultative group on set of PQ indicators and KPIs as a whole:
 - Completeness,
 - Explanatory power,
 - Gaps / Loopholes,
 - Ease of calculation, and
 - Willingness to report and feedback on proposal to not report externally on Operational Performance indicators
- Finalize formulae by selecting headline periods of evaluation and thresholds
 - To be informed by empirical data and insights provided by working group participants, consultative group, and, eventually, through the pilot
 - Further develop beyond headlines to relevant variations / cohorts

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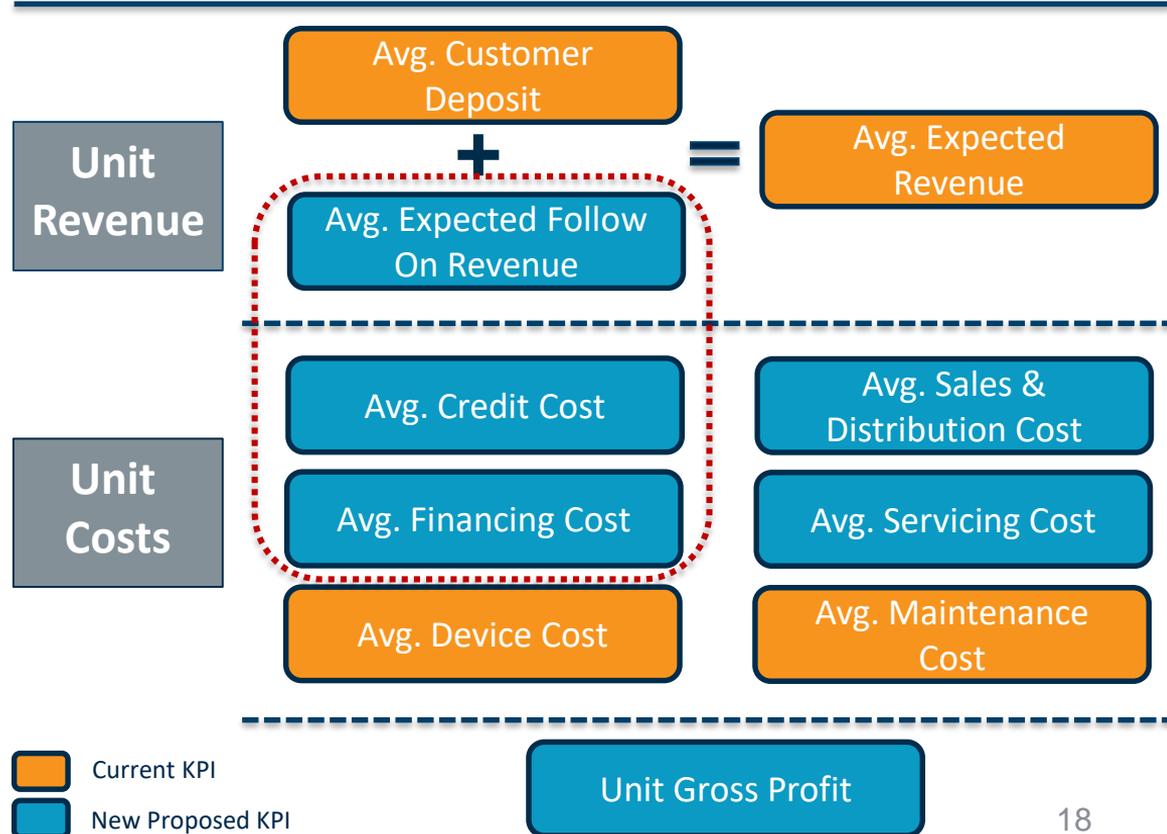
The Evolution of KPI 1.0 to a Unified Framework



Geoff Manley
CDC Group

Unit Economics Unified Framework

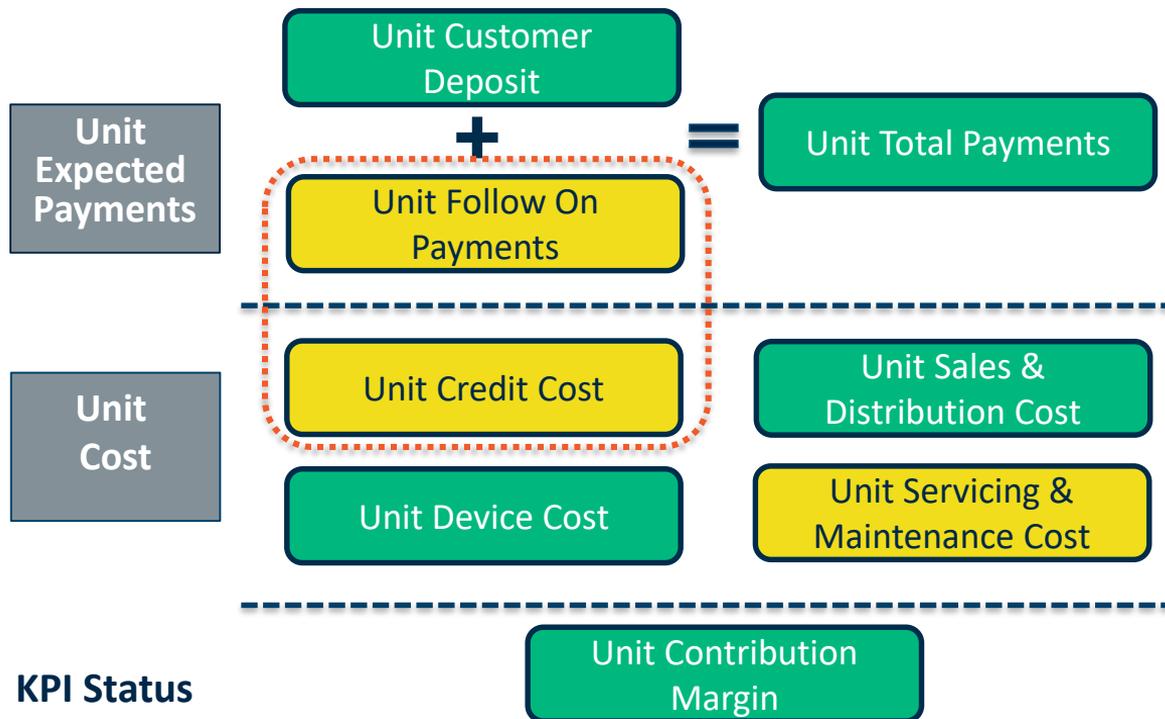
KPI 1.0 Mapped to Unit Economics
ARPU
Average Total Expected Revenue
Average Unit Cost
Average Customer Deposit as a Proportion of Unit Cost
Average Maintenance Cost



Refinement of Unified Framework to Achieve KPI 2.0



Geoff
Manley
CDC Group



KPI Status

- Agreed and Final
- Subject to Discussion

Naming Convention

- “Revenue” modified to “Contractual Payments”
- “Unit Gross Profit” modified to “Unit Contribution Margin”

Key Characteristics

- KPIs only address **variable costs**
- KPIs are mainly **forward-looking** and based on expected **cash flows**
- Useful to analyze **unit profitability by product**; do not provide significant value when looking at unit profitability of portfolio of products for entire PAYGo firm

Expert Advice & Feedback from WG to Resolve Key Issues



Geoff Manley
CDC Group

Key Issue	Description	Proposed Solution
Present Value (PV) Calculation of Follow On Payments	<ul style="list-style-type: none"> To accurately reflect the cash payments to be received, a PV calculation of Follow On Payments may be required How to determine discount rate to use? 	<ul style="list-style-type: none"> TO BE DISCUSSED DURING MINI DEBATE
Financing Cost	<ul style="list-style-type: none"> Financing cost refers to the cost of financing the inventory and receivables of solar devices Since it is a fixed cost, how to allocate to a unit? 	<ul style="list-style-type: none"> Due to the complexities in allocating this cost to a solar device, it has been excluded from the Unit Economics KPIs
Credit Cost	<ul style="list-style-type: none"> How to best capture the risk of non-payment / write-off? Two approaches: (1) Write off ratio; (2) IFRS 9 Provision for Credit Cost 	<ul style="list-style-type: none"> Recommendation to use Write Off Ratio (ideally same KPI as PQ WG) approach Write Off Ratio should be by product and based on historical performance
Contractual vs. Actual Repayment Period	<ul style="list-style-type: none"> Given that some costs are periodic and over time, how to account for lower collection speed? 	<ul style="list-style-type: none"> Can be calculated by using effective credit period (nominal credit period / collection rate)

Next Steps for the UE WG

Current set of Unit Economics KPIs

- ✓ Helpful to **evaluate the profitability of individual products**
- ✓ Help companies understand what they **need to do** in order to be profitable at a unit level
- ✗ Difficult to calculate from **the blended financials** when a PAYGo company has a portfolio of products

Proposed Next Steps

1. **Augment with Firm Level KPIs** to evaluate the overall profitability of PAYGo firms
2. **Development of a manual and Excel tool** to be used by both investors and PAYGo firms **providing common language** around the unit level KPIs and firm level KPIs



Geoff Manley
CDC Group

Given the adjacencies between Unit level profitability and Firm level profitability, the process of adding and defining new Firm level KPIs should be fairly straightforward

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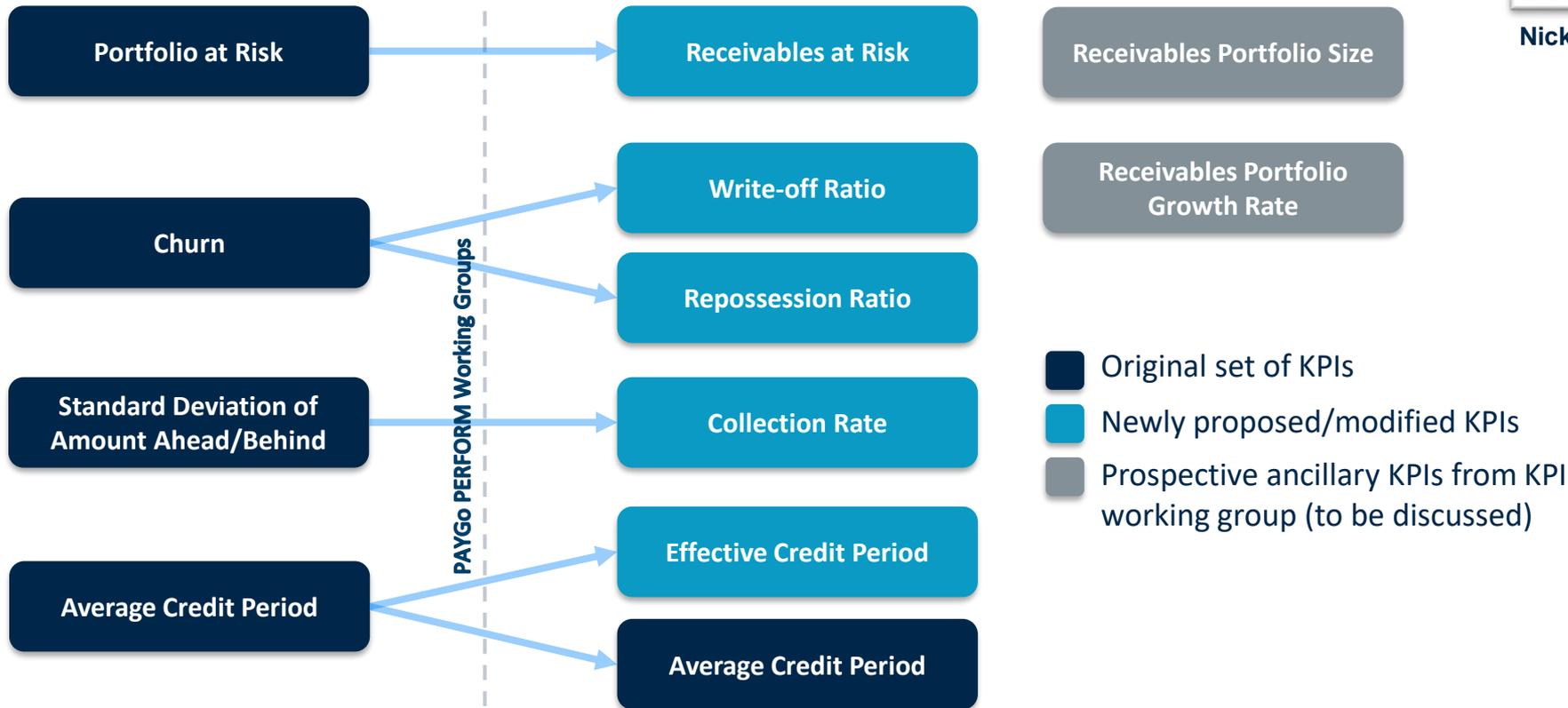


Geoff Manley
CDC Group

Portfolio Quality KPIs' Progress to 2.0



Nicky Khaki
CGAP



- Original set of KPIs
- Newly proposed/modified KPIs
- Prospective ancillary KPIs from KPI working group (to be discussed)

Portfolio Quality KPIs 2.0 – Overview and Calculations

KPI Name	 Definition	 Calculation	 Status
Receivables at Risk	<ul style="list-style-type: none"> Renamed to decouple from MFI industry. Will use empirical analysis to determine threshold for identification of risky receivables using either consecutive days of nonpayment or a sufficiently low collection rate over a given period. 	<ul style="list-style-type: none"> (Remaining Value of Outstanding Receivables Streams for Which Collection Rate is Less than [Y]% Over Period [X]) / (Value of Total Future Receivables Due) OR: (Remaining Value of Outstanding Receivables Streams which Have Not Paid Over Period [X]) / (Value of Total Future Receivables Due) 	
Write-off Ratio	<ul style="list-style-type: none"> The sum of the remaining payments of receivables streams that have been terminated over the sum of the remaining payments of the receivable streams for the entire portfolio. 	<ul style="list-style-type: none"> (Value of Receivables Payments Outstanding for Contracts Written-off Over Period [X]) / (Average Value of Total Receivables Outstanding Over Period [X]) 	
Repossession Ratio	<ul style="list-style-type: none"> Ratio of repossessed units that will be redeployed over total installed units. 	<ul style="list-style-type: none"> (Units Repossessed for Redeployment Over Period [X]) / (Average Total Installed Units Over Period [X]) 	
Collection Rate	<ul style="list-style-type: none"> Ratio of all collected receivables payments over total receivables payments due for a period (does not include deposits). 	<ul style="list-style-type: none"> (Value of Total Receivables Collected Over Period [X]) / (Total Customer Payments Due Over Period [X]) 	
Effective Credit Period	<ul style="list-style-type: none"> Nominal credit period adjusted by the collection rate. 	<ul style="list-style-type: none"> (Average Credit Period) / (Collection Rate) 	

Next Steps for the PQ WG

- Gather feedback from consultative group on set of PQ indicators and KPIs as a whole:
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Nicky Khaki
CGAP

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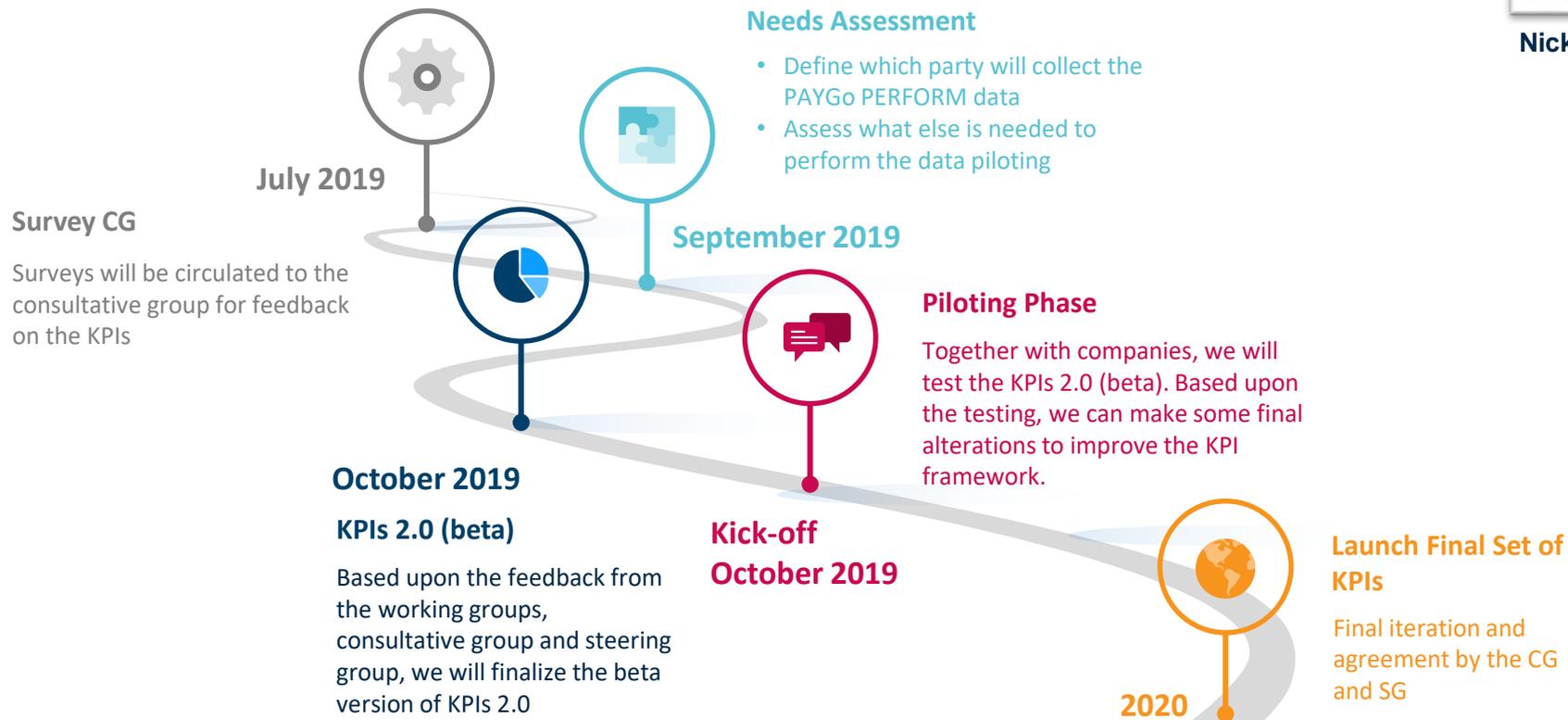


Nicky Khaki
CGAP

What's Next for PERFORM



Nicky Khaki
CGAP



Piloting Phase: Testing the KPI Framework with Real Time Data



Nicky Khaki
CGAP



- The pilot will kick off October 2019 and will be testing the KPI framework over a period of 6 months.
- The Steering Group Coordinators will provide Technical Assistance
- We invite you to participate to the piloting phase by sending an email to paygoperform@gogla.org.

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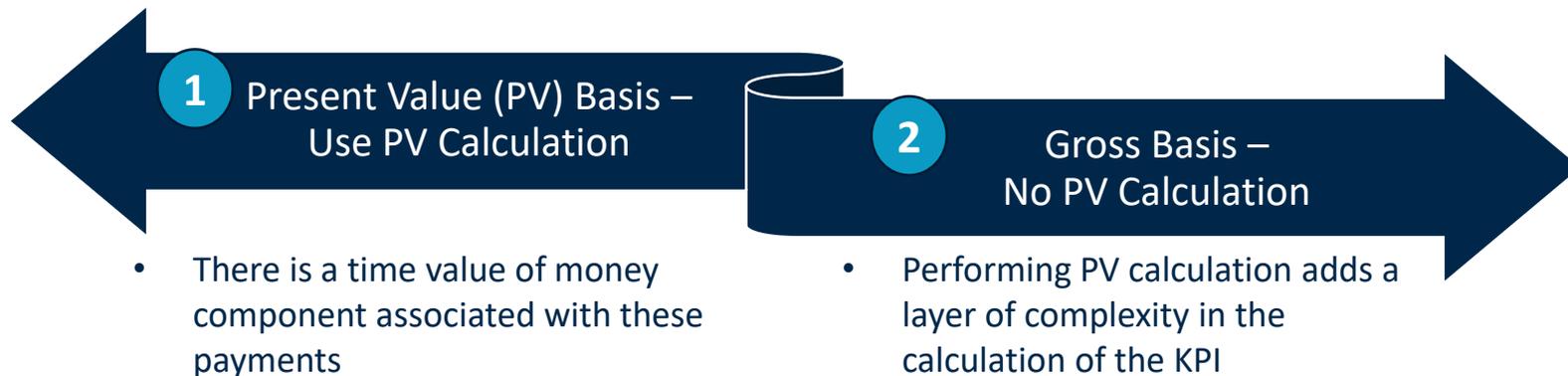
Nicky Khaki
CGAP

KPI Issue – Calculation of Unit Follow-On Payments



Nicky Khaki
CGAP

- In a PAYGo business model, customers typically pay a periodic (daily, weekly or monthly) amount for a solar device during a contract length that can range between 12 months to 36 months
 - **Unit Follow-On Payments** = KPI defined to capture the expected contractual payments beyond the initial down payment. **Represents the largest cash inflow for a PAYGo firm**
- **Key Question:** How do you accurately account for the expected cash payments that you will receive for a solar device?



Option #1 – PV Basis



Alexander Sotiriou
CGAP

- By performing the PV calculation, we have a **more accurate view of the expected cash payments** that will be received since it considers the issue related to the time value of money.
- Consider the products offered by three different PAYGo companies:

	Company A	Company B	Company C
Gross value of payments	\$100	\$100	\$100
Contract term	N/A	10 Years	10 Years
Payment terms	Cash Sale (\$100 Upfront)	Equal payments (\$2.50 every 3-Months)	Bullet (\$100 at end of year 10)
Present Value (@r = 20%)	\$100	\$42.90	\$16.15

- Assuming each company has sold 100,000 units, which one is in a better position? Using only a gross figure, you would have no way of differentiating between the three.
- But how do you calculate the discount rate? For the sake of comparison, we can pick an arbitrary figure like 20%

Option #2 – Gross Basis (No PV Calculation)

- Using the gross amount would be **simple and straightforward**, making it **easier to calculate the KPIs and report accordingly**. The gross amount could be used to do the sensitivity analysis for e.g. foreign currency risk and credit risk
- **Calculation of PV of expected payments is necessary**, however, this **exercise should be done by the investor** since there might be some assumptions in the discount rate that the investor doesn't agree with and will have to redo the calculation in any case
- Defining an **industry standard for the discount rate would be challenging**, since it is highly dependent on the PAYGo firm
- Ultimately, the goal is to have KPIs which are simple to calculate and define, while at the same time provide an accurate representation of the unit profitability of a PAYGo firm



Miguel Soriano
IFC

Vote for your preferred option



Nicky Khaki
CGAP

Which method of calculating "Unit Follow-On Payments" should we adopt as part of KPIs 2.0?

- A. Option 1, "PV": Using Present value to discount future cash flows
- B. Option 2, "GROSS": Taking the simple sum of future cash flows
- C. Neither, I think a different approach would be better than either of the ones proposed
- D. What's a cashflow?

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Nicky Khaki
CGAP

Give your feedback



Nicky Khaki
CGAP

Looking at the collective set of KPIs, the progress is:

- A. On track with some relatively minor adjustments that need to be made before the pilot
- B. Moving in the right direction, but with some moderate adjustments to be made before the pilot
- C. Not moving in the right direction – there are some major issues or gaps to address before the pilot

How do you feel about the number of KPIs currently proposed?

- A. The proposed KPIs are all / almost all important and manageable
- B. There are a handful that should be dropped, but otherwise OK
- C. There are far too many and we need to significantly pare down the list
- D. We need more KPIs to adequately capture necessary information

Any Questions?

1

For questions, please use the Chat box on the right-hand side of the Webex session.

2

To ensure your question is seen by the moderator, select “**All Participants**” from the drop-down menu when sending the question.



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Wanji Ng'ang'a
GOGLA

A Big Thank You!



Alexander Brummeler
Azuri



Wanji Ng'ang'a
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Head Strategic Partnerships
Co-chair UE Working Group
Rural Spark

And all Participating Organizations that Supported this Process!

PAYGo Firms



Investors



Foundations / Development Organizations



Advisory/Consulting firms



Feedback



Wanji Ng'ang'a
GOGLA

We would like to hear from you and invite you to send your feedback to paygoperform@gogla.org:

- What remaining questions or feedback do you have on the KPI framework?
- Any ideas and suggestions that you think would be helpful to address that we haven't covered during the session?
- Overall opinion of this webinar

POLL



Please take a moment to respond to the poll questions on the right-hand side of your screen.

What's next:

- 1 We will email you when the webinar recording, and related materials become available on the FinDev Gateway website.
- 2 Visit the PAYGo PERFORM Community of Practice on FinDev Gateway:
www.FinDevGateway.org/organization/paygo-perform
- 3 For more resources on financial inclusion, visit
www.FinDevGateway.org



PAYGo PERFORM



Thank you

www.FinDevGateway.org



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