Unit Economics Working Group Meeting

PAYGO PERFORM

Geoff Manley & Shagun Jain

March 29, 2019
Logistics

• We want this and future sessions to be interactive, open to questions or points of discussion at any time, unmute and speak up at any time

• To minimize outside noise, however, your microphones have been muted on entry. Please keep yourself muted throughout the call unless you have a question

• You may ask a question or make a comment at any time during the call. To do so you can:
  a) Use the Chat box on the right-hand side of the WebEx session.
     • To ensure that your question is seen by the moderator, select “All Participants” from the drop-down menu before sending the question.
  b) Unmute yourself and ask a question remembering to re-mute yourself when done.
Agenda

1. Review of Survey Results
2. Objectives / Goals of Unit Economics KPIs
3. Sub-Committee Objectives, Tasks and Timeline
1. Review of Survey Results
General Overview of Survey Results

Overview of Survey Respondents

Breakdown by Type of Organization

- PAYGo Company: 42%
- Investor/Investment Firm: 16%
- Development Org: 16%
- Consultancy: 5%
- Other: 21%

Total Survey Participants: 19

Definition of a “Unit”

- Individual Solar Device: 79%
- Retail Branch: 10%
- Other: 11%

- Survey respondents were mostly from PAYGo companies (8), followed by Investment Firms (4)
- Other (3) refers to: rating agency, equipment manufacturer, M&E challenge fund
- The majority of survey respondents believe that a “Unit” should be defined as an individual solar device
# Summary Analysis of KPIs

## Summary of Existing KPIs

<table>
<thead>
<tr>
<th>Evaluation Parameters</th>
<th>ARPU</th>
<th>UNIT_COST</th>
<th>AVG_CUST_DEP</th>
<th>AVG_EXP_REV</th>
<th>AVG_MAINT_COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance (Crucial &amp; Important)</td>
<td>☺</td>
<td>▼</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
</tr>
<tr>
<td>Keep the KPI</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
</tr>
<tr>
<td>Agreement on Definition</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
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<tr>
<td>Relevant to All Business Models</td>
<td>☺</td>
<td>☺</td>
<td>☺</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>% of Positive Responses</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance (Crucial &amp; Important)</td>
<td>68%</td>
<td>84%</td>
<td>47%</td>
<td>74%</td>
<td>68%</td>
</tr>
<tr>
<td>Keep the KPI</td>
<td>79%</td>
<td>100%</td>
<td>63%</td>
<td>79%</td>
<td>84%</td>
</tr>
<tr>
<td>Agreement on Definition</td>
<td>47%</td>
<td>74%</td>
<td>79%</td>
<td>74%</td>
<td>58%</td>
</tr>
<tr>
<td>Relevant to All Business Models</td>
<td>79%</td>
<td>89%</td>
<td>68%</td>
<td>79%</td>
<td>74%</td>
</tr>
</tbody>
</table>

## Summary of New KPIs

<table>
<thead>
<tr>
<th>New KPI</th>
<th>% of Positive Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Gross Profit Mgn</td>
<td>89%</td>
</tr>
<tr>
<td>Customer Acq Cost</td>
<td>84%</td>
</tr>
<tr>
<td>Free Cash Flow</td>
<td>68%</td>
</tr>
<tr>
<td>Net Income</td>
<td>68%</td>
</tr>
<tr>
<td>Unit EBIT</td>
<td>68%</td>
</tr>
<tr>
<td>Interest</td>
<td>63%</td>
</tr>
</tbody>
</table>
# Key Observations / Comments on Revenue KPIs

<table>
<thead>
<tr>
<th>General Observations</th>
</tr>
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<tbody>
<tr>
<td>• Most responders view expected revenue as essential</td>
</tr>
<tr>
<td>• Incorporation of time value measure</td>
</tr>
<tr>
<td>• Distinction between Expected Revenue and Realized Revenue</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ARPU</th>
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<tbody>
<tr>
<td>• Viewed as a relevant metric and applicable to all business models</td>
</tr>
<tr>
<td>• Main issue with the way it is defined</td>
</tr>
<tr>
<td>• What to use in the denominator</td>
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<tr>
<td>• Definition of “Active”</td>
</tr>
<tr>
<td>• Expected vs. Realized</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Avg. Customer Deposit</th>
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<tbody>
<tr>
<td>• Issues regarding the relevance of the metric, and thus whether it makes sense to keep it</td>
</tr>
<tr>
<td>• Based on the way it is defined, it does not seem very relevant to revenue – therefore, need to revise definition</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Avg. Expected Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Viewed as relevant and should be kept</td>
</tr>
<tr>
<td>• However, the definition needs to be revisited – specifically, need to consider time value of money, and take into account all units (not just active ones)</td>
</tr>
</tbody>
</table>
Key Observations / Comments on Cost KPIs

General Observations
- Costs should be broken down into multiple categories such as:
  - Device cost
  - Distribution cost
  - Servicing cost
  - Financing cost

Unit Cost
- Highly relevant and should be kept as a metric
- However, the way it is defined makes it very difficult to calculate
- Should include financing costs, marketing costs

Avg. Maintenance Cost
- Viewed as relevant and should be kept as a metric
- However, the definition is confusing – is it a cost item or a revenue item?
- Not applicable to all business models – some do not have maintenance costs
2. Objectives / Goals of Unit Economics Working Group
Objectives / Goals of Unit Economics KPIs – Unified Framework

• Construct a framework that allows companies and investors to determine the amount of profit generated by the sale of a unit (defined as a solar device) taking into account all revenues and costs that can be directly attributed to the sale of the unit.

  Unit profit = unit revenues - unit direct costs

• Two approaches to costs:
  • Allocate overheads to units based on current/projected volumes
    • Unit profit = unit revenues - direct costs - overheads/units
  • Do not allocate overheads, which then allows for a calculation of the volumes required to reach breakeven or a target level of operational profit
    • Breakeven = (unit revenues * unit sales) - (direct costs * unit sales) - total overheads or (unit profit * unit sales) - total overheads where unit sales is the variable that sets the equation equal to 0.
Unified Framework for Unit Profitability KPIs – Approach #1

Unit Revenues

- Avg. Customer Deposit
- Avg. Expected Follow on Revenue

= Avg. Expected Revenue

Unit Costs

- Avg. Device Cost
- Avg. Financing Costs
- Avg. Sales and Distribution Costs
- Avg. Maintenance Costs
- Avg. Credit Costs
- Avg. Servicing Costs

= Unit profit
Unified Framework for Unit Profitability KPIs – Approach #2

Unit Revenues

- Avg. Customer Deposit
- Avg. Expected Follow on Revenue

\[ \text{Avg. Expected Follow on Revenue} + \text{Avg. Customer Deposit} = \text{Avg. Expected Revenue} \]

Where Follow on revenue is net of expected write-offs and expressed in present value (PV), discounted at the firm’s weighted-average cost of capital (WACC).

Unit Costs

- Avg. Device Cost
- Avg. Sales and Distribution Costs
- Avg. Servicing Costs
- Avg. Maintenance Costs

\[ \text{Avg. Device Cost} = \text{Avg. Sales and Distribution Costs} + \text{Avg. Servicing Costs} + \text{Avg. Maintenance Costs} \]

Unit profit

Current KPI

New KPI endorsed by WG

New proposed KPI
Key Questions for Unified Framework

• Definitions critical for this framework to tie together properly:
  • Costs:
    • Naming and grouping of costs up for discussion, but must be comprehensive to capture all relevant costs
    • Some existing definitions might need to be modified
    • Detailed guidance notes might be needed to explain how to capture and allocate costs
  • Revenues:
    • As currently defined, average expected revenue might capture everything but could be preferable to separate deposit and “follow-on” revenue (daily top up rate * days in plan)
    • In the second example, financing costs and credit costs are dealt with by netting credit costs from revenues and calculating the PV of net revenues (financing costs)\(^1\)
    • Guidance could be provided on how to calculate a basic firm-specific WACC
• Some KPIs (e.g., costs, unit profit) could be expressed as percentage of total expected revenue.
• We would recommend focusing only on unit KPIs not firm-level ones (e.g., Net Income, Free Cash Flow)

\(^1\) For more detail on this approach, see "Business Analytics for PAYG Companies" by Persistent Energy 2018
Quick Poll for the Working Group

1. Do you agree with the Unified Framework approach?
   A. Yes
   B. No

2. Out of the two Unified Framework approaches presented, which one do you think we should adopt?
   A. Approach #1 – Separates Financing Costs and Credit Costs
   B. Approach #2 – Embeds Financing Costs and Credit Costs as part of Avg. Expected Follow On Revenue
   C. N/A – I answered No to Question #1
3. Sub-Committee Objectives, Tasks and Timeline
Sub-Committees – Overview & Structure

• To be most efficient in the development of the latest set of KPIs for Unit Economics, the Working Group will be divided into 2 Sub-Committees that will be tasked to specific areas related to Unit Profitability:
  • Revenue Sub-Committee
  • Cost Sub-Committee

• The objective of the Sub-Committees is to develop a set of KPIs for their particular area that are easy to calculate and have the most explanatory power in the least number of metrics

• All WG members are encouraged to sign up to one of the Sub-Committees – please select only one area where you want to be involved. It is essential that all WG members sign up to Sub-Committees and actively participate

• Each Sub-Committee will be headed by one of the Co-Chairs

• The Steering Group will help facilitate the Sub-Committee meetings/calls

• Consultants / experts may be engaged as needed to assist with any major issues / areas
Structure of Sub-Committees

<table>
<thead>
<tr>
<th>Potential KPIs to Evaluate by Sub-Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue Sub-Committee</strong></td>
</tr>
<tr>
<td>Average Expected Revenue</td>
</tr>
<tr>
<td>ARPU</td>
</tr>
<tr>
<td>Average Customer Deposit</td>
</tr>
<tr>
<td>[Average Expected Follow On Revenue]</td>
</tr>
<tr>
<td>[Others]</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

KPIs above are Suggested; Sub-Committees will define the right KPIs

Key Activities
- Develop a list of proposed KPIs for each sub-committee
- Review each proposed KPI to determine:
  - Do we keep it or replace?
  - Do we agree on the definition? If not, how to change it
  - Is it applicable to all business models?
- Suggest additional KPIs and how to define them
- Address related issues to Revenue and Costs
Revenue Sub-Committee

• Co-Chair Lead: Shagun Jain

• Objectives
  • Develop a set of KPIs that measure the total revenue (received and expected) for a unit

• Tasks
  • Review and refine definition of ARPU; Determine if it is really needed
  • Review and refine definition of Average Expected Revenue
  • Determine whether Avg. Customer Deposit will be kept; If so, refine the definition
  • Define any additional revenue related KPIs
  • Address key issues related to Revenue: (1) Revenue Recognition, and (2) Cash vs. Accrual basis

• Timeline
  • Accomplish all tasks (or as much as possible) by end of April 2019 – provide update / present findings at next Working Group call
Cost Sub-Committee

• Co-Chair Lead: Geoff Manley

• Objectives
  • Develop a set of KPIs that measure the total cost for a unit

• Tasks
  • Review definition of Unit Cost – determine what is the best way to break into different KPIs and define them
    • Device Cost
    • Sales & Distribution Costs
    • Servicing Costs
    • Financing Costs
  • Address key issues related to Cost: (1) Financing Costs / Cost of Capital, (2) Allocation of Overhead Costs

• Timeline
  • Accomplish all tasks (or as much as possible) by end of April 2019 – provide update / present findings at next Working Group call
Sample KPI (Abridged) Output

<table>
<thead>
<tr>
<th></th>
<th>DEFINITION. A concise explanation for what the indicator represents.</th>
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</thead>
<tbody>
<tr>
<td>?</td>
<td>WHY DOES IT MATTER? Analytical insights of each indicator that make each indicator, as defined here for standardized reporting, useful for analysis by companies and investors.</td>
</tr>
<tr>
<td>+</td>
<td>CALCULATION. How to generate the indicator from data inputs.</td>
</tr>
<tr>
<td>✍️</td>
<td>NOTES. Considerations for using each indicator, including commentary on what is included in the definition and calculation, as well as practical considerations for use with real data</td>
</tr>
<tr>
<td>🌐</td>
<td>Considerations by BUSINESS MODEL.</td>
</tr>
<tr>
<td>⚙️</td>
<td>WORKING GROUP. (i. Which Technical WG is it allocated to and ii. Status of being discussed across the WG (i.e. feedback consolidated across KPI WG)</td>
</tr>
<tr>
<td>🟢</td>
<td>STATUS. Is it agreed and final or subject to discussion? (red/amber/green)</td>
</tr>
</tbody>
</table>
Quick Poll for the Working Group

1. Which Sub-Committee do you want to join?
   A. Revenue Sub-Committee
   B. Cost Sub-Committee
   C. Not interested in joining a Sub-Committee

2. Please provide your information:
   A. Name (First Name and Last Name)
   B. Email Address
Sub-Committees – Potential Timeline

**Weeks 1 & 2**
- Agree on list of KPIs and basic definitions for each KPI

**Week 3**
- Address issues relevant to each sub-committee – Engage consultants / experts if needed
- Determine any new KPIs and/or analytical tools

**Week 4**
- Consensus within WG on KPIs
Working Group Timeline

March - April
- Recommend Revenue and Cost KPIs and gather feedback
- Identify and define any additional KPIs

April - May
- Finalize Revenue and Cost KPIs
- Recommend additional KPIs and gather feedback
- Resolve any outstanding issues related to Revenue and Cost

May - June
- Present to broader set of WGs and gather feedback
- Finalize Unit Economics KPIs

June AGM & July Webinar
- Share progress with peers at AGM, workshop outstanding issues
- Share v1.X KPIs with CG via webinar – get feedback, “What else is needed for V2.0?”
Next Steps

• Finalize Sub-Committees
  • Please indicate your preference if you have not already and share with others that could help us

• Email early next week from Sub-Committee Leads indicating next meeting and any homework/reading ahead

• Email from PERFORM sometime later with next Unit Economics WG call date
  • Will be around the end of April 2019

Additional Questions? Feedback?
Thank You!

To learn more, please visit
https://www.findevgateway.org/organization/paygo-perform