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# FINANCIAL MANAGEMENT HANDBOOK FOR OFF-GRID SOLAR COMPANIES LESSONS ON FINANCIAL MANAGEMENT FROM TAILORED SUPPORT



# BACKGROUND

Off-grid energy companies play a vital role in helping more than 600 million people without electricity gain access to energy. In reaching unconnected individuals, these companies face numerous challenges such as sporadic debt repayments from customers, high cash-burn rates, and significant overheads. To overcome these obstacles and emerging risks, off-grid energy companies' financial protocols should promote efficiency, enhance financial control, build credibility with investors, and inform senior managers' decisions with high-quality data.

USAID Power Africa and Open Capital helped 30 companies across 17 African countries to develop robust finance functions. Lasting three to six months, this tailored assistance aided the companies to evaluate, plan, and analyze their finances; manage their risks; become more investment ready; and handle transactions. Power Africa and Open Capital also helped the companies gain access to capital and enhance the skills of their finance teams.

This handbook reviews the challenges off-grid companies faced in establishing robust finance functions and offers ways for off-grid companies to improve their sustainability. The handbook discusses six lessons that emerged from the support provided to off-grid energy companies, demonstrating what companies should expect and how they should act. The handbook offers six lessons in financial management in categories A to C:

## A. Financial evaluation and management

- **Unit economics**: Solid unit economics are the foundation of a successful business.
- **Performance tracking**: Dashboards and tracking tools are the “cockpit gauges” to inform effective decision-making.
- **Internal controls**: Documented policies and controls reduce potential for losses and provide guardrails as the company scales.
- **Workforce planning**: Good talent fuels business growth.

B. **Risk management**: Planning for risk and uncertainty reduces the likelihood of crises and ensures business continuity.

## C. Investment-readiness and transaction management

- **Investor outreach and engagement**: Fundraising is a demanding process; prepare accordingly.

## D. Companies' feedback about Power Africa and Open Capital's assistance

# A. FINANCIAL EVALUATION AND MANAGEMENT

## I. Unit economics: Solid unit economics are the foundation of a successful business

### Observations from work with companies

Many businesses faced challenges in understanding how different products contributed to their bottom line, so business leaders struggled to optimize their product portfolios. Though most companies identified the unit of analysis, many could not adequately understand their unit economics because of limited data, weak data-collection systems, and insufficient expertise in analyzing unit economics.

### Solution with illustration

Companies analyze unit economics to understand profitability by evaluating the cost drivers of different products. The cost-to-revenue ratio of a single product unit indicates products' competitiveness and viability, helping the business optimize its resources based on products' returns. Without a good understanding of unit economics, some companies that have shown a path to profitability during pilot phases have subsequently failed to scale, with some closing their operations because of cashflow shortages.

Figure I shows steps to follow when analyzing unit economics.

*Figure I: Unit-economics analysis*

- 1 Determine the appropriate unit of analysis**
  - Consider business goals, data availability, and measurability when identifying units of analysis such as a product, customer, or region. If the goal is to understand the profitability of a product line, the unit of analysis is the product.
  - The unit of analysis should be defined in a way that is meaningful and consistent across the company.
- 2 Identify revenue streams and associated activities**
  - Off-grid energy companies may have multiple revenue streams. Companies should identify all revenue streams and calculate the revenue per unit of analysis.
  - Identify the chain of activities, from products' procurement/production to after-sales service, including warranty, repairs, and call-center support.
- 3 Define the associated costs**
  - Identify the different resources needed to carry out each activity
  - Determine the costs associated with each activity in a period.
  - Example: Call fees, call-center-staff salaries, call-center rent, and warranty coverage are costs incurred for the "after-sales support" activity.
- 4 Allocate and calculate unit costs**
  - Identify the activities relevant for each unit of analysis, such as a product.
  - Define the parameter to cost an activity that applies to a unit of analysis.
  - Example: # of customers is the parameter for after-sales support.
  - Calculate the cost allocated to each unit of analysis.

### Compute and evaluate profitability

- Calculate contribution, gross, and operating margins.
- Calculate the break-even point.
- Based on the calculations, identify areas where costs can be reduced, revenue can be increased, or operations can be optimized to improve profitability.

## Illustration

Company ABC is an energy company that manufactures solar home systems and would like to analyze its unit economics to price two of its pay-as-you-go products, SHS X and SHS Z, appropriately.

Table I shows the details of each product.

Table I: Product details

	SHS X	SHS Z
Pre-tax purchase price (USD)	\$2.00	\$4.50
Tax (%)	5%	5%
Units sold	2,500	1,500
Sales price	\$4.50	\$6.50
Business-to-business (B2B) sales	11,000	10,000
Unit weight per product (kilogram)	0.1 kg	0.20 kg
Total units in inventory	350	300

Using the steps listed in Figure I, the company would analyze its unit economics as follows:

1. **Determine the unit of analysis:** If Company ABC wants to price its products appropriately, the unit of analysis is the **product**.
2. **Identify revenue streams and associated activities:**
  - The company generates revenue from the sale of two products i.e., SHS X and SHS Z.
  - To generate revenue for each of the products, the company:
    - » Imports products
    - » Warehouses products
    - » Sells to businesses (B2B sales)
    - » Transports products from warehouse to distribution point
    - » Markets products
    - » Offers after-sales services
3. **Define the associated costs:** Table 2 breaks down the associated costs and cost drivers for each activity listed above.

Table 2: Associated costs and cost driver for each activity

ACTIVITY	ASSOCIATED COSTS	COST DRIVER	COGS <sup>1</sup> / OPEX <sup>2</sup>	FIXED/ VARIABLE	ANNUAL COST (USD)
Product imports	Product cost	# of units ordered	COGS	Variable	\$185,000
	Shipping cost	# of units ordered	COGS	Variable	\$7,000
Warehousing	Labor	# of warehouse employees	COGS	Fixed	\$550
B2B sales	Sales-staff salaries	# of sales staff	OPEX	Fixed	\$3,000
Product transportation	Vehicle-leasing costs	# of vehicles	OPEX	Fixed	\$5,000
Marketing	Third-party marketing service	# of contracts signed	OPEX	Fixed	\$12,000
After-sales support	Warranty/repair costs	# of customers in need of repairs	OPEX	Variable	\$200
	Call-center agents' salaries	# of call-center agents	OPEX	Fixed	\$800

4. **Allocate and calculate unit costs:** Define the parameters to consider when allocating costs for a given activity.

Table 3: Cost-allocation considerations

ACTIVITY	ASSOCIATED COSTS	COST-ALLOCATION CONSIDERATIONS/PARAMETER	SHS X	SHS Z
Product imports	Product cost	Value of purchases	\$5,000	\$6,750
	Shipping cost	Total weight per product (kg)	287 kg	285 kg
Warehousing	Labor	Total units in inventory	350	300
B2B sales	Sales-staff salaries	Value of sales	\$11,250	\$9,750
Product transportation	Vehicle-leasing costs	Value of sales	\$11,250	\$9,750
Marketing	Third-party marketing service	Value of sales	\$11,250	\$9,750
After-sales support	Warranty/repair costs	Value of sales	\$11,250	\$9,750
	Call-center agents' salaries	Value of sales	\$11,250	\$9,750

- Allocate the associated costs for the period and define the parameters to allocate costs for a given activity.

ACTIVITY	ASSOCIATED COSTS	COST-ALLOCATION CONSIDERATIONS/PARAMETER	SHS X	SHS Z
Product imports	Product cost	Value of purchases	\$5,000	\$6,750
	Shipping cost	Total weight per product (kg)	287 kg	285 kg
Warehousing	Labor	Total units in inventory	350	300
B2B sales	Sales-staff salaries	Value of sales	\$11,250	\$9,750
Product transportation	Vehicle-leasing costs	Value of sales	\$11,250	\$9,750
Marketing	Third-party marketing service	Value of sales	\$11,250	\$9,750

<sup>1</sup> Cost of goods and services.

<sup>2</sup> Operational expenditure.

ACTIVITY	ASSOCIATED COSTS	COST-ALLOCATION CONSIDERATIONS/PARAMETER	SHS X	SHS Z
After-sales support	Warranty/repair costs	Value of sales	\$11,250	\$9,750
	Call-center agents' salaries	Value of sales	\$11,250	\$9,750

- Calculate the cost allocated to each product.

Table 4: Unit-cost computation

ACTIVITY	ASSOCIATED COSTS	COST-ALLOCATION CONSIDERATIONS/PARAMETER	SHS X	SHS Z
Product imports	Product cost	Product cost/unit	\$2.00	\$4.50
	Shipping cost	Shipping cost/unit	\$1.41	\$2.31
Warehousing	Labor	Warehousing labor/unit	\$0.12	\$0.17
B2B sales	Sales-staff salaries	Sales staff salaries/unit	\$0.64	\$0.93
Product transportation	Vehicle-leasing costs	Vehicle-leasing costs/unit	\$1.07	\$1.55
Marketing	Third-party marketing service	Third-party marketing service/unit	\$2.57	\$3.71
After-sales support	Warranty/repair costs	Warranty/repair costs/unit	\$0.04	\$0.06
	Call-center agents' salaries	Annual call-center agents' salaries *(product sales value/total sales value)	\$0.17	\$0.25

## 5. Compute and evaluate profitability

Table 5: Unit-profitability analysis

	SHS X	SHS Z
Price per unit sold	\$4.50	\$6.50
Product costs	\$2.00	\$4.50
Shipping costs	\$1.41	\$2.31
Contribution margin	1.09	(0.31)
Contribution margin (%)	24%	-5%
Warehouse labor	\$0.12	\$0.17
Gross margin	0.73	(0.38)
Gross margin (%)	22%	-7%
Indirect variable costs		
Warranty/repair costs	\$0.04	\$0.06
Total indirect variable costs	\$0.04	\$0.06
Unit margin	0.69	(0.45)
Unit margin (%)	16%	-7%
Fixed indirect costs		
Sales-staff salaries	\$0.64	\$0.93
Vehicle-leasing costs	\$1.07	\$1.55
Third-party marketing service fee	\$2.57	\$3.71
Call-center agents' salaries	\$0.17	\$0.25
Total fixed indirect costs	\$4.46	\$6.44

	SHS X	SHS Z
Operating margin	(3.53)	(6.98)
Operating margin (%)	-78%	-107%
Evaluation	The company should either adjust its prices to sufficiently cover the costs, or reduce its costs. To adjust the prices, the company should consider factors such as competition and customers' price sensitivity.	

## 2. Performance tracking: Dashboards and tracking tools are the “cockpit gauges” to inform effective decision-making

### Observations from work with companies

Although most companies that Power Africa and Open Capital supported were preparing management accounts, they rarely analyzed their liquidity, solvency, and unit economics to gain insights to make effective business decisions. Some also lacked the tools or systems to track their investor obligations, making them unaware of their debt-repayment capacity and, sometimes, missing repayments to debt investors, which reduced investors' confidence.

### Solution with illustration

To help management make timely and informed decisions, we recommend companies use dashboards and other tracking tools such as a funders' obligations tool, budget-variance analyses, and key performance indicators such as portfolio-at-risk (PAR 30, PAR 60, and PAR 90). GOGLA's PAYGO Perform<sup>3</sup> resource offers indicators and methodologies that can form a strong foundation for off-grid solar companies that extend credit to their customers.

Figure 2: Steps to build a management dashboard

- 1

**Identify key performance indicators (KPIs)**

  - Identify the most important financial metrics that indicate a level of performance.
  - Example: Costs items as a proportion of revenue to determine the company's largest costs.
- 2

**Identify data needs to compute the KPIs**

  - Place the most important KPIs in a separate tab to sift through information and enhance legibility.
  - Example: Pull totals instead of many items line by line.
- 3

**Create suitable presentation methods**

  - Create different types of charts and tables that summarize the KPIs in an intuitive way.
  - Example: Line graphs are best used to indicate trends, whereas column charts can illustrate proportions. Tables can elaborate items depicted in charts.

### Illustration

Company ABC sells smart mini-grids. The company's senior management would like to improve their understanding of the company's performance to make better decisions. The company's finance team puts

<sup>3</sup> “PAYGo Perform KPIs,” GOGLA, 2023, accessed June 1, 2023, <https://www.gogla.org/what-we-do/business-services-and-standards/paygo-perform-kpis/>

together monthly management accounts; however, top leadership spends significant time reviewing many details and would like to understand key performance trends in a snapshot.

The finance team proposed putting together a management dashboard and top leadership agreed this would be an effective tool. The finance team should follow the following steps to develop a management dashboard.

## 1. Identify key performance indicators

Key performance indicators (KPIs) that Company ABC should include in the dashboard are:

- **Revenue:** Main revenue drivers, revenue generated by product type, revenue contribution by product, and total revenue.
- **Cost:** Key cost drivers, total costs incurred by the company, and proportion of costs.
- **Profitability:** Overall gross profit margins, gross profit margins by product type, earnings before interest, taxes, depreciation, and amortization (EBITDA), and net profit margins.
- **Cash position:** Cash burn-rate and cash reserves.
- **Gearing:** Amount of debt, debt obligations, and debt-service coverage ratios.

## 2. Identify data needs to calculate KPIs

Based on data-collection tools available and limited budget, the finance team at Company ABC used Google Sheets or Microsoft Excel to create a summary of the three financial statements and the most important performance ratios (shown below).

Table 6: Summary of KPIs in a management dashboard

SUMMARY FINANCIALS					
PROFIT-AND-LOSS STATEMENT	2018	2019	2020	2021	2022
Revenue	3 302 880	5 681 636	10 771 144	14 072 562	14 505 400
COGS	(1 647 102)	(2 814 790)	(5 346 530)	(6 986 394)	(7 204 982)
<b>Gross profit</b>	<b>1 655 778</b>	<b>2 866 846</b>	<b>5 424 614</b>	<b>7 086 168</b>	<b>7 300 418</b>
GP margin	50%	50%	50%	50%	50%
Operating expenses	(717 179)	(782 141)	(890 465)	(929 358)	(949 760)
<b>EBITDA</b>	<b>938 599</b>	<b>2 084 705</b>	<b>4 534 149</b>	<b>6 156 810</b>	<b>6 350 658</b>
EBITDA margin	28%	37%	42%	44%	44%
Depreciation	(336)	(329)	(323)	(316)	(310)
<b>EBIT</b>	<b>938 264</b>	<b>2 084 376</b>	<b>4 533 827</b>	<b>6 156 494</b>	<b>6 350 348</b>
Operating margin	28%	37%	42%	44%	44%
Interest expense	0	0	0	0	0
Grant income	0	0	0	0	0
<b>EBT</b>	<b>938 264</b>	<b>2 084 376</b>	<b>4 533 827</b>	<b>6 156 494</b>	<b>6 350 348</b>
Income tax	(178 270)	(469 583)	(819 397)	(1 169 733)	(1 206 566)
<b>Net profit</b>	<b>759 994</b>	<b>1 614 793</b>	<b>3 714 430</b>	<b>4 986 760</b>	<b>5 143 782</b>
Net profit margin	23%	28%	34%	35%	35%
SUMMARY FINANCIALS					
STATEMENT OF FINANCIAL POSITION	2018	2019	2020	2021	2022
Current assets	735 887	3 070 922	7 681 555	13 725 855	18 979 137
Non-current assets	16 605	16 276	15 953	15 637	15 327
<b>Total assets</b>	<b>752 492</b>	<b>3 087 198</b>	<b>7 697 508</b>	<b>13 741 492</b>	<b>18 994 464</b>



Current liabilities	699 661	1 419 574	2 315 455	3 372 679	3 481 869
Non-current liabilities	0	0	0	0	0
<b>Total liabilities</b>	<b>699 661</b>	<b>1 419 574</b>	<b>2 315 455</b>	<b>3 372 679</b>	<b>3 481 869</b>
Total equity	52 831	1 667 624	5 382 053	10 368 813	15 512 595
<b>Total equity and liabilities</b>	<b>752 492</b>	<b>3 087 198</b>	<b>7 697 508</b>	<b>13 741 492</b>	<b>18 994 464</b>
<b>SUMMARY FINANCIALS</b>					
<b>STATEMENT OF CASHFLOWS</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Cash flows from operations	1 635 508	2 722 765	5 184 948	7 474 173	7 385 825
Cash flows form investment	0	0	0	0	0
Cash flows from financing	30 000	0	0	0	0
<b>Net changes in cash flows</b>	<b>1 665 508</b>	<b>2 722 765</b>	<b>5 184 948</b>	<b>7 474 173</b>	<b>7 385 825</b>
Opening cash balance	(749 260)	916 248	3 639 014	8 823 961	16 298 134
<b>Closing cash balance</b>	<b>916 248</b>	<b>3 639 014</b>	<b>8 823 961</b>	<b>16 298 134</b>	<b>23 683 958</b>
<b>SUMMARY FINANCIALS</b>					
<b>TOTAL REVENUE BY PRODUCT LINE</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Product 1 revenue	113 700	1 046 200	1 569 300	2 092 400	1 908 700
Product 2 revenue	114 676	1 052 056	1 578 084	1 976 774	1 919 436
Product 3 revenue	2 113 628	2 113 628	4 741 132	6 340 884	6 948 760
Product 4 revenue	508 876	1 017 752	1 526 628	2 035 504	2 035 504
Product 5 revenue	452 000	452 000	1 356 000	1 627 000	1 693 000
<b>Total revenue</b>	<b>3 302 880</b>	<b>5 681 636</b>	<b>10 771 144</b>	<b>14 072 562</b>	<b>14 505 400</b>
Revenue growth	30%	72%	90%	31%	3%
<b>TOTAL REVENUE BY PRODUCT LINE</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Product 1 revenue	3%	18%	15%	15%	13%
Product 2 revenue	3%	19%	15%	14%	13%
Product 3 revenue	64%	37%	44%	45%	48%
Product 4 revenue	15%	18%	14%	14%	14%
Product 5 revenue	14%	8%	13%	12%	12%
Check	100%	100%	100%	100%	100%
<b>COSTS AS A % OF REVENUE</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Direct costs (COGS)	50%	50%	50%	50%	50%
Operating expenses	22%	14%	8%	7%	7%
Debt ratio	0,93x	0,46x	0,30x	0,25x	0,18x
Debt-to-equity ratio	13,24x	0,85x	0,43x	0,33x	0,22x
Debt service coverage ratio	N/A	N/A	N/A	N/A	N/A
Interest coverage	0	0	0	0	0
Debt-to-EBITDA	0,75x	0,68x	0,51x	0,55x	0,55x
Working-capital ratio	1,05x	2,16x	3,32x	4,07x	5,45x

### 3. Create suitable presentation methods

To provide a snapshot of Company ABC's performance, the company created charts for revenue, profitability, and cash balances. These are the items Company ABC's top leadership reviews most frequently.

The screenshot below illustrates the charts.

Figure 3: Charts for a management dashboard



### 3. Internal controls: Documented policies and controls reduce potential for losses and provide guardrails as the company scales

#### Observations from work with companies

Companies rarely had a well-articulated set of financial policies and procedures, and often required support to develop policies and procedures to strengthen their internal controls and finance functions. When standardized policies were absent, companies were less in control of operational processes and omitted important checks and balances. For example, without a policy to check cash collected by sales agents from customers against the inventory sold, pay-as-you-go companies experienced significant revenue loss.

#### Solution with illustration

Strong internal controls help companies protect funds generated and assure investors that the company can control its financial resources, attributes which build trust with investors.

Policies and procedures on bookkeeping, procurement, petty cash, payment processing, account reconciliation, working-capital management, and financial reporting are critical to strengthen controls and separate duties. Splitting financial duties avoids a scenario in which one person handles both invoices and payments. Developing checks and balances within the financial department to verify the accuracy of invoices, cash collected, refunds, and pending bills, protects a company against reputational risk. Companies should regularly document, communicate, and review internal controls and procedures to reduce the likelihood of unexpected financial losses.

Figure 4: Steps to document financial policies and procedures

- 1**  
**Map the company's current financial processes in a matrix**

  - Outline all financial processes and sub-activities, frequency of the process, level of priority, and persons responsible.
- 2**  
**Document each process in prose**

  - In prose, describe the financial processes in the document to be used as a guide.

## Illustration

Company ABC has had high turnover in its finance department, with people responsible for different tasks leaving knowledge gaps as they exit the organization. To mitigate such disruptions, we recommend that the Finance Director develop a document detailing financial policies and procedures to clarify the different functions of the Finance Department.

To create the manual for financial policies and procedures, the finance team should:

1. **Map the company's current financial processes in a matrix:** Outline all financial processes and sub-activities, frequency of the process, level of priority, and persons responsible.

Figure 5: Financial-processes matrix

FINANCIAL PROCESSES	ACTIVITIES	DESCRIPTION / SUB-ACTIVITIES	FREQUENCY OF THE PROCESS	PRIORITY	CURRENT SYSTEMS OR TOOLS USED	EXISTING MATERIALS	PERSON(S) IN CHARGE	INITIAL THOUGHTS
Financial planning	Annual budget	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Monthly planning	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Financial reporting	Reporting (management and statutory)	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Consolidation	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Bookkeeping	Registering payments	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Recording invoices	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Issuing payments	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Capital expenditure	Acquisition of fixed assets	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Depreciation computations	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Maintenance of fixed assets	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Office purchases	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Financial performance	Preparation of financial statements	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Cash-flow management	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Salary payment	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Payroll	Processing paychecks	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Handling payroll taxes	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Employee reimbursements	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Policies and procedures	Writing accounting policy and procedure manual	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
	Updating the manual	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here
Forecasting or financial modeling	Preparing the financial model	Fill here	Fill here	Choose value	Fill here	Fill here	Fill here	Fill here

2. **Document each financial process:** In prose, describe the financial processes in the document to be used as a guide.

Figure 6: Financial-process manual

## Accounting procedures for Company ABC's operations

### I. Bookkeeping

The bookkeeping within Company ABC is done using the Google Sheets file, "[BJ] Accounting Record." This process covers three main activities: (1) ordering kits, (2) paying invoices, and (3) updating balances.

#### Ordering kits

Deadline: Before the end of each month

<b>Process initiator</b>	Stock Manager
<b>Reviewed and validated by</b>	Finance Manager
<b>Supervised by</b>	Country Director

#### Steps to follow

- At the end of each month, the company's Stock Manager analyzes the stock file using the template saved here [add location] and determines the number of kits to order for the next month.
- The Stock Manager sends this analysis to the Financial Manager, who will compare the order with the quantity of stock determined at the beginning of the year in the annual budget.
- The Finance Manager consults the Country Director during the first week of the month to determine the final number of kits to order for the coming month.
- During the meeting to reconcile accounts, held every Thursday, the Country Director communicates to the Head Office the number of kits the Stock Manager has requested for the coming month.
- A discussion follows that evaluates the company's resources, the number of kits requested, and the forecasts in the annual budget.
- After agreeing on the final amount to order, ABC's procurement team buys the kits from one of the company-approved suppliers.
- After purchase, the kits are sent to their countries of destination. The procurement team also sends, by email, all the necessary documents to the local team to clear the kits. These documents include (but are not limited to) invoices, packing lists, delivery notes, and air waybill.
- The Finance Manager, after receiving these documents, requests an exemption from the country's customs.
- These documents are also sent by email to a forwarder who will follow up on the kits until they are delivered to the company.
- After delivery, the forwarder sends a pro-forma invoice to Company ABC.
- After receiving the invoice, the Finance Manager prepares a check and shares it with the Country Director, who confirms the transaction.
- The Finance Manager sends the check to the freight forwarder.
- The Finance Manager then records the transaction on Google Sheets in the "[BJ] Accounting Record" file to justify the bank payment. The file should specify the amount, date, nature, and user or recipient of the transaction.

All the financial processes outlined in prose culminate in a document whose contents are listed below. The table of contents can also be used as a checklist of all the areas companies should cover.

*Figure 7: Table of contents for a manual detailing financial procedure*

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## 4. Workforce planning: Good talent fuels business growth

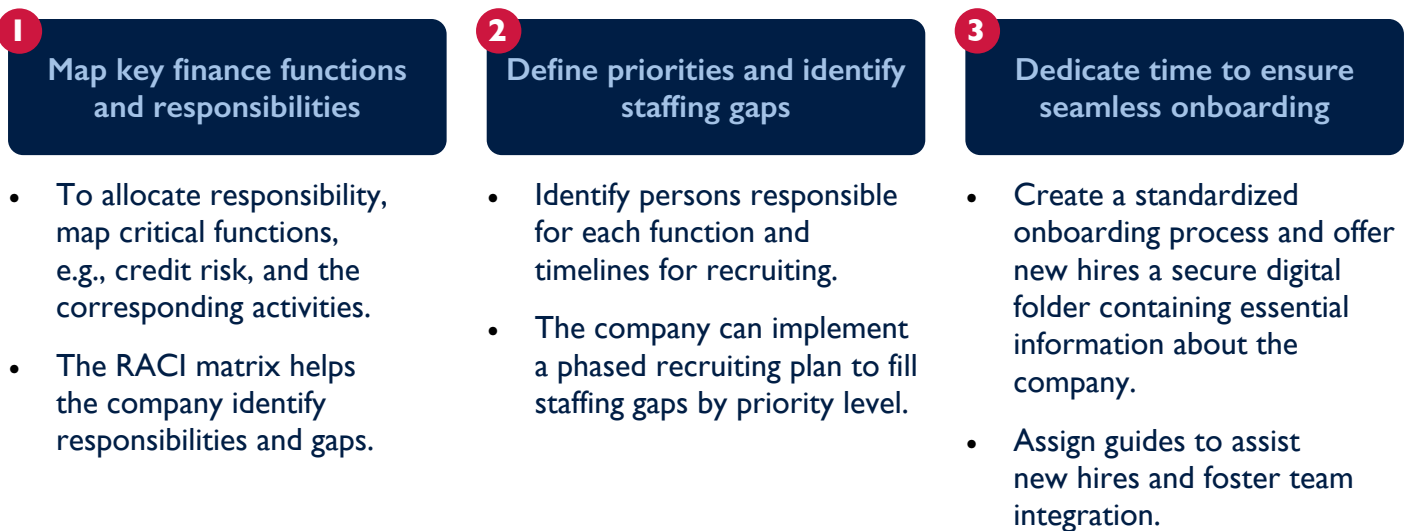
### Observations from work with companies

We identified that many early-stage companies either lacked or struggled to retain a capable Finance Manager, leaving the CEO to manage the company's finances and limiting the CEO's ability to contribute to other aspects of the business.

### Solution with illustration

Planning how a company's workforce will be composed is critical to improve financial management and performance. A workflow chart such as the one outlined below helps companies manage their talent.

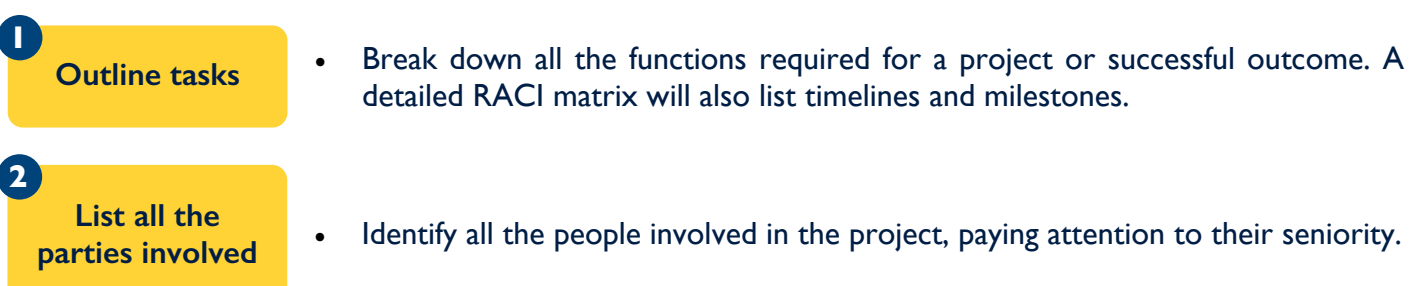
Figure 8: Steps for workforce planning



A “RACI matrix”—short for responsible, accountable, consulted, and informed—describes the responsibilities of individuals in completing tasks for a particular function.

- **Responsible:** Parties that carry out specific tasks. For example, operational staff that carry out day-to-day activities.
- **Accountable:** Parties that make decisions and ensure high-quality work is delivered, such as supervisors.
- **Consulted:** Parties whose guidance must be sought before, during, and after tasks. Experts such as lawyers, for example, can advise tasks.
- **Informed:** Parties that must be updated of a task's progress. These parties may be program donors who may not be involved in day-to-day activities but monitor and evaluate results.

Figure 9: Steps to develop a RACI matrix



**3**  
Define roles and responsibilities of each party

- Outline the roles of each party and their competencies to understand reporting lines and when to involve them in different stages of the project.

**4**  
Assign tasks for each person using RACI

- Define timelines to complete tasks and match parties to their duties using RACI: who is **responsible** for what, who should be **accountable**, who should be **consulted**, and who must stay **informed** of different events.

**Illustration**

Company ABC is a mini-grid company that is preparing to become a full-scale commercial operation after successfully piloting its business model. The company aims to raise funds to supply electricity to households. To prepare for growth, the company plans to expand its workforce. Company ABC’s current workforce comprises the CEO and technical staff in charge of operations.

**I. Map finance functions and responsibilities**

Company ABC should illustrate the finance functions in the business and all individuals responsible.

*Table 7: Workforce planning: Finance functions and individuals responsible*

FUNCTION	DESCRIPTION	TASKS	TYPICALLY RESPONSIBLE
Financial planning	Formulate financial strategies to achieve the company’s goals	<ul style="list-style-type: none"> <li>Run business-development and financial proposals</li> <li>Price products strategically and optimize costs based on customer and product profitability models</li> <li>Oversee budgeting and growth target setting</li> </ul>	CFO
Capital raising	Manage the fundraising process, from corresponding with investors, to preparing documents, to closing deals	<ul style="list-style-type: none"> <li>Set and implement investment-readiness strategies and policies</li> <li>Manage investor relations</li> <li>Prepare investment materials</li> <li>Negotiate transactions</li> <li>Oversee shareholder reporting</li> </ul>	CFO or external transaction advisor
Financial control	Design policies and processes to ensure that the company uses its resources well and implements strategies in the financial plan	<ul style="list-style-type: none"> <li>Oversee cash management</li> <li>Oversee working-capital management (accounts payable and accounts receivable)</li> <li>Manage credit decisions (credit checks)</li> </ul>	Finance Director
Financial reporting	Produce periodic financial statements and other reports describing the organization's financial information in a particular period	<ul style="list-style-type: none"> <li>Generate financial reports from data-management systems (accounting software and internal dashboards)</li> <li>Present financial information in a standardized and compelling way for easier interpretation</li> </ul>	Internal or external accountant
Financial analysis	Assess the performance of different processes, transactions, and budgets to ensure that financial targets are met	<ul style="list-style-type: none"> <li>Provide insight into the company’s performance in liquidity, operational efficiency, solvency, and other relevant KPIs</li> <li>Generate performance projections based on targets and past trends</li> </ul>	Finance Director
Financial operations	Execute strategies and recommendations designed by the CFO and Finance Director in day-to-day activities and transactions	<ul style="list-style-type: none"> <li>Process expenses and invoices</li> <li>Monitor inventory supplies</li> <li>Collect cash payments</li> <li>Bookkeeping</li> </ul>	Finance & Administrative Assistant



FUNCTION	DESCRIPTION	TASKS	TYPICAL RESPONSIBLE
General accounting	Oversee that accurate financial data is collected, processed, and presented	<ul style="list-style-type: none"> <li>Review and adjust financial records</li> <li>Conduct bank reconciliation</li> <li>Oversee payroll</li> </ul>	Internal or external accountant
Risk and compliance	Ensure that the organization complies with local policies and industry standards	<ul style="list-style-type: none"> <li>Conduct tax filing</li> <li>Audit financials</li> <li>Design policies and controls to ensure proper financial management, accurate bookkeeping, and compliance with regulatory standards</li> </ul>	Internal or external auditor

The RACI matrix for Company ABC would appear as follows.

Figure 10: RACI matrix for Company ABC

	CEO	TECHNICAL STAFF	EXTERNAL CONSULTANT
Financial planning	R	I	C
Capital raise	R	I	C
Financial control	To be defined		
Financial reporting	C	C	R
Financial analysis	To be defined		
Financial operations	A	R	C
General accounting	C	C	R
Risk and compliance	C	I	R

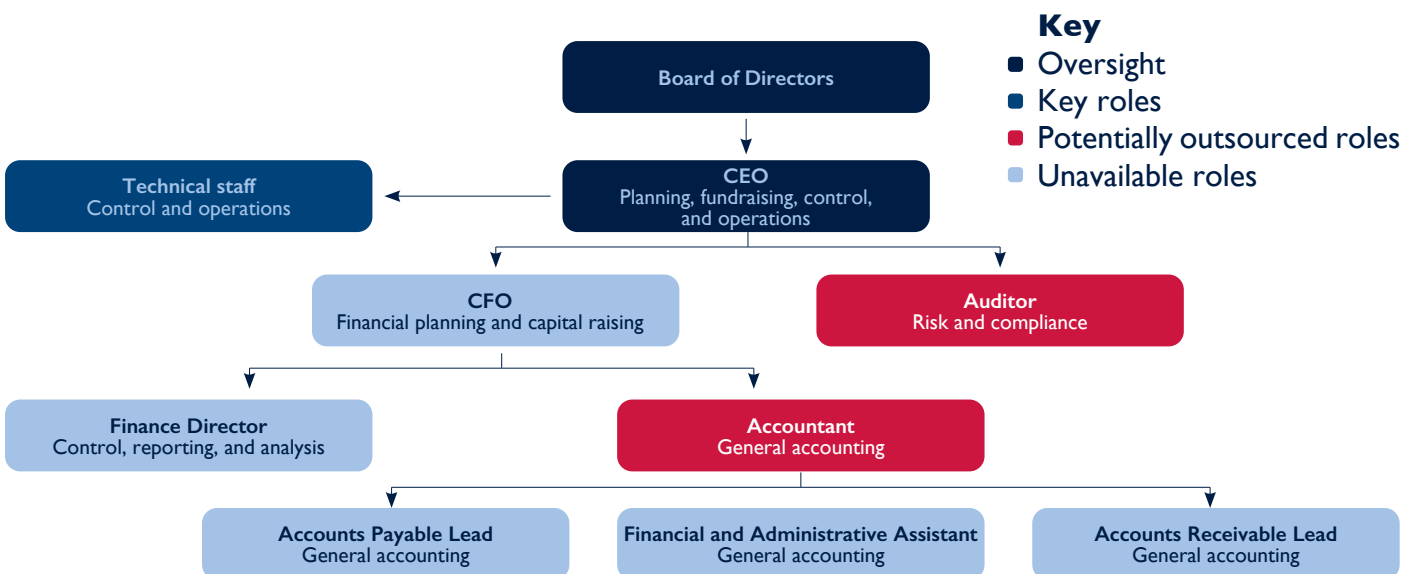
**Key**

- Responsible
- Accountable
- Consulted
- Informed

## 2. Define priorities and identify staffing gaps

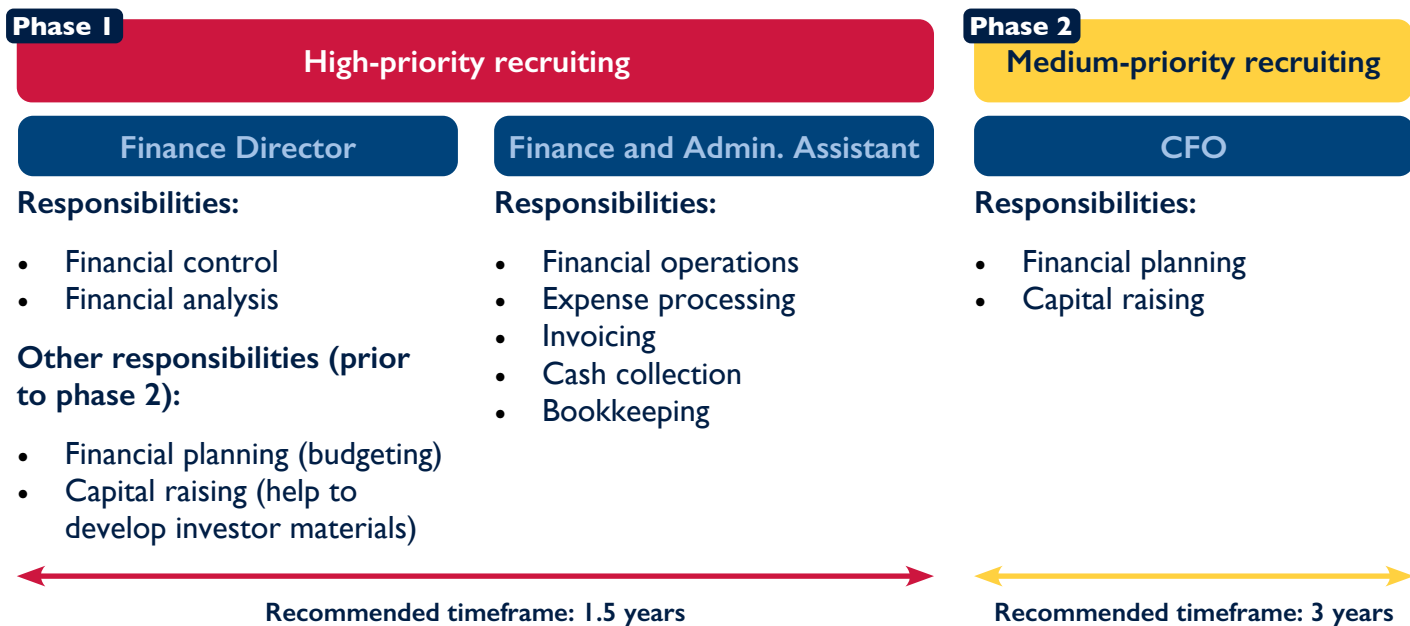
Company ABC should map its reporting lines using an organogram (a chart showing subordination). The chart below shows that the company will need to hire a Chief Financial Officer, a Finance Director, a Finance and Administrative Assistant, and managers for specific accounting functions (accounts payable and accounts receivable).

Figure 11: Company ABC's organogram



Company ABC created a hiring plan to factor timelines, financial resources, and priorities in expanding its workforce.

Figure 12: Hiring plan



### 3. Dedicate time to ensure seamless onboarding

To make onboarding new staff run more smoothly, create a secure place to keep confidential documents through a cloud platform such as Google Drive and DropBox. New hires can access the folder to get up to speed with the company’s financial information.

Figure 13: Secure-folder structure



Figure 14: Secure-folder guide

FOLDERS	DOCUMENT	DESCRIPTION	PRIORITY
Company and investment overview	1 Investor teaser	Introduces the investment opportunity to investors by highlighting the business model, team, strategic initiatives, and financial projections	High
	2 Investor memorandum	Explains the business model, team, operations, strategic initiatives, and financial projections (including snapshots of the three-statement financial model)	High
	3 Organization chart and structure	Shows the number of staff, hierarchy, roles, and brief job descriptions.	High
	4 Team: Management bios and CVs	Management team and board of directors’ biographies & CVs	Medium

FOLDERS		DOCUMENT	DESCRIPTION	PRIORITY
Company and investment overview	5	Business plan showing business forecast, and funding needs	Documents in detail the company's activities, business model, business strategy, value chain, team, risk management, sales channels, competitive advantage, and milestones achieved since incorporation (including social benefit, if applicable). Also include any available documentation detailing growth plans, and capital and investment returns (including investor decks)	High
	6	Management's internal report: KPIs' progress and strategy	Offers presentations by the board of directors or internal reports by management outlining the company's KPIs, progress, and strategy	Medium

Develop an onboarding system to identify individuals who will manage the onboarding process within a team. Referring to Company ABC's organogram, the General Accountant should walk the Accounts Receivable and Payable Leads through the company's finance functions and standard operating procedures.

## B. RISK-MANAGEMENT LESSONS

### 5. Risk management: Planning for risk and uncertainty reduces the likelihood of crises and ensures business continuity

#### Observations from work with companies

Many companies did not have a formal risk-management strategy in place to identify and assess key risks, develop mitigation strategies, and assign responsibilities to manage risk. Consequently, these businesses lacked a clear understanding of the types of risks they faced and their effects on their operations, reputation, and financial stability. The companies without a risk-management strategy were more vulnerable to these risks and less prepared to adopt effective measures to mitigate them.

#### Solution with illustration

Companies should develop a risk register describing risks, their effects, likelihood of occurrence, triggers, mitigation strategies, and responsible parties. The company should score each risk to prioritize the most serious ones. Companies have used a risk register such as the one below.

*Figure 15: Steps to build a risk management dashboard*

- 1 Identify and define risks**
  - Lists all the risks to which the company is exposed and briefly explain each.
  - Example: Credit risk is very relevant to pay-as-you-go (PAYGO) models.
- 2 Identify what triggers the risks**
  - Establish early warning signals and indicators of the risk.
  - Example: A notable decrease in customer payments or an increasing receivables balance signals credit risk.
- 3 Rank the risks according to impact and likelihood**
  - Determine the likelihood that the risk will occur (certain/almost certain/likely/unlikely/rare) and the effect it could have on the business (insignificant/minor/moderate/major/severe).
  - Example: Credit risk for PAYGO businesses is almost certain and have severe effects.
- 4 Assign a gross-risk score based on impact and likelihood**
  - Score the risk type based on how likely it could occur and how severe the effect would be.
  - Example: Credit risk could be scored higher than reputational risk because it is more likely to occur.
- 5 Discuss and document mitigation strategies**
  - Meet to discuss how the company can prevent or manage the risk once it occurs.
  - Example: Companies can partner with credit bureaus and investigate creditworthiness to avoid transacting with customers with low credit ratings.

## Illustration

Company ABC sells energy-saving cooking systems. The company successfully completed its pilot phase and is in its first year of commercial operations. In the first year, the company noted that its actual financial outcomes were much lower than anticipated. The Finance Manager would like to outline some of the possible causes leading to this discrepancy.

To create a risk register, the Finance Manager should:

### 1. Identify the business risks involved

- List and define all the possible risks the company is likely to face in the short term.
- Add more risks to the register for longer timeframes.

*Table 8: Business risks Company ABC faces*

COMPANY ABC RISK REGISTER		
	IMPACT PROBABILITY	RISK DESCRIPTION
	Identify the risk category	Describe the risk
1	Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers
2	End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided
3	Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions
4	Currency devaluation	This is the risk that once payments are made by customers, the economic value may have changed because of currency devaluation. For example, the company took loans in USD and gets repayments from customers in Kenyan shilling (KES). Once the dollar appreciates, the payments made in KES may not be sufficient to service the interest and principal payments
5	Travel restrictions	This is the risk that from time to time the company may be unable to reach customers to provide or service solar home systems in certain regions because of travel restrictions

### 2. Identify business-risk triggers: List indicators for each risk identified.

*Table 9: Company ABC's business-risk triggers*

COMPANY ABC RISK REGISTER			
	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS
	Identify the risk category	Describe the risk	Triggers that could result in the risk materializing (Triggers are early warning signals that risk is likely to occur)
1	Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers	Customers complain regularly about their payments through the company's call center
2	End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided	<ol style="list-style-type: none"> <li>1. A noticeable decrease in collection activity from the agents</li> <li>2. Changes in the health of accounts receivable (a significant increase of the company's receivables)</li> <li>3. A sudden and significant decline in liquidity</li> </ol>

	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS
3	Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions	<ol style="list-style-type: none"> <li>1. The grid expands in neighboring localities</li> <li>2. On-grid rates significantly lower than company's rates</li> <li>3. Intense marketing from the local utility to gain clients</li> </ol>
4	Currency devaluation	This is the risk that once payments are made by customers, the economic value may have changed because of currency devaluation. For example, the company took loans in USD and gets repayments from customers in Kenyan shilling (KES). Once the dollar appreciates, the payments made in KES may not be sufficient to service the interest and principal payments	<ol style="list-style-type: none"> <li>1. Reports from government bodies, e.g., central banks' websites</li> <li>2. A shortfall in the cash used to service loans despite meeting the customer-repayment targets</li> </ol>
5	Travel restrictions	This is the risk that from time to time the company may be unable to reach customers to provide or service solar home systems in certain regions because of travel restrictions	<ol style="list-style-type: none"> <li>1. Gazetted notices of travel restrictions within certain areas</li> <li>2. Decline in customer sales due to long waiting times to receive solar home systems</li> </ol>

3. **Rank the risks based on impact and likelihood:** Develop a risk rubric to score the risk type based on how likely the risk is to occur and how severe the effects would be.

Table 10: Company ABC's risk rubric

Scale	LIKELIHOOD OF RISK OCCURRING	SEVERITY OF EFFECT ON THE BUSINESS
1	Rare (less than 10%)	Insignificant
2	Unlikely (11–30%)	Minor
3	Likely (31–50%)	Moderate
4	Almost certain (51–70%)	Major
5	Certain (71–100%)	Severe

4. **Assign risk according to impact and likelihood:** Score the risk type based on how likely the risk is to occur and how severe the effect would be.

Table 11: Company ABC's expanded risk rubric

COMPANY ABC RISK REGISTER					
	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS	LIKELIHOOD	IMPACT
	Identify the risk category	Describe the risk	Triggers that could result in the risk materializing (Triggers are early warning signals that risk is likely to occur)	Rate the probability of the risk materializing	Estimate the impact of the risk
I	Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers	Customers complain regularly about their payments through the company's call center	LIKELY (3)	MAJOR (4)

	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS	LIKELIHOOD	IMPACT
2	End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided	<ol style="list-style-type: none"> <li>1. A noticeable decrease in collection activity from the agents</li> <li>2. Changes in the health of accounts receivable (a significant increase of the company's receivables)</li> <li>3. A sudden and significant decline in liquidity</li> </ol>	ALMOST CERTAIN (4)	SEVERE (5)
3	Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions	<ol style="list-style-type: none"> <li>1. The grid expands in neighboring localities</li> <li>2. On-grid rates significantly lower than company's rates</li> <li>3. Intense marketing from the local utility to gain clients</li> </ol>	LIKELY (3)	MAJOR (4)
4	Currency devaluation	This is the risk that once payments are made by customers, the economic value may have changed because of currency devaluation. For example, the company took loans in USD and gets repayments from customers in Kenyan shilling (KES). Once the dollar appreciates, the payments made in KES may not be sufficient to service the interest and principal payments	<ol style="list-style-type: none"> <li>1. Reports from government bodies, e.g., central banks' websites</li> <li>2. A shortfall in the cash used to service loans despite meeting the customer-repayment targets</li> </ol>	ALMOST CERTAIN (4)	MODERATE (3)
5	Travel restrictions	This is the risk that from time to time the company may be unable to reach customers to provide or service solar home systems in certain regions because of travel restrictions	<ol style="list-style-type: none"> <li>1. Gazetted notices of travel restrictions within certain areas</li> <li>2. Decline in customer sales due to long waiting times to receive solar home systems</li> </ol>	ALMOST CERTAIN (4)	MAJOR (4)

- Develop a scoring rubric to assign the gross risk.

*Table 12: Company ABC's gross-risk score rubric*

COMPANY ABC RISK REGISTER					
	INSIGNIFICANT (1)	MINOR (2)	MODERATE (3)	MAJOR (4)	SEVERE (5)
CERTAIN (5) 71–100%	5	10	15	20	25
ALMOST CERTAIN (4) 51–70%	4	8	12	16	20
LIKELY (3) 31–50%	3	6	9	12	15
UNLIKELY (2) 11–30%	2	4	6	8	10
RARE (1) less than 10%	1	2	3	4	5

- Compute the final score, assign gross risk, and add color codes to indicate the severity of the risk (where red denotes the most severe situation and gray the least severe).

Table 13: Company ABC's application of the gross-risk-score rubric

COMPANY ABC RISK REGISTER							
	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS	LIKELIHOOD	IMPACT	SCORE	GROSS RISK
	Identify the risk category	Describe the risk	Triggers that could result in the risk materializing (Triggers are early warning signals that risk is likely to occur)	Rate the probability of the risk materializing	Estimate the impact of the risk	Overall Score	Rank the overall risk
1	Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers	Customers complain regularly about their payments through the company's call center	LIKELY (3)	MAJOR (4)	12	MAJOR
2	End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided	<ol style="list-style-type: none"> <li>1. A noticeable decrease in collection activity from the agents</li> <li>2. Changes in the health of accounts receivable (a significant increase of the company's receivables)</li> <li>3. A sudden and significant decline in liquidity</li> </ol>	ALMOST CERTAIN (4)	SEVERE (5)	20	SEVERE
3	Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions	<ol style="list-style-type: none"> <li>1. The grid expands in neighboring localities</li> <li>2. On-grid rates significantly lower than company's rates</li> <li>3. Intense marketing from the local utility to gain clients</li> </ol>	LIKELY (3)	MAJOR (4)	12	MAJOR
4	Currency devaluation	This is the risk that once payments are made by customers, the economic value may have changed because of currency devaluation. For example, the company took loans in USD and gets repayments from customers in Kenyan shilling (KES). Once the dollar appreciates, the payments made in KES may not be sufficient to service the interest and principal payments	<ol style="list-style-type: none"> <li>1. Reports from government bodies, e.g., central banks' websites</li> <li>2. A shortfall in the cash used to service loans despite meeting the customer-repayment targets</li> </ol>	ALMOST CERTAIN (4)	MODERATE (3)	12	MAJOR



	IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS	LIKELIHOOD	IMPACT	SCORE	GROSS RISK
5	Travel restrictions	This is the risk that from time to time the company may be unable to reach customers to provide or service solar homes systems in certain regions because of travel restrictions	<ol style="list-style-type: none"> <li>1. Gazetted notices of travel restrictions within certain areas</li> <li>2. Decline in customer sales due to long waiting times to receive solar home systems</li> </ol>	ALMOST CERTAIN (4)	MAJOR (4)	16	SEVERE

5. **Discuss and document mitigation strategies:** Meet to discuss ways the company can prevent or manage risks once they occur.

*Table 14: Company ABC's risk-mitigation strategies*

COMPANY ABC RISK REGISTER			
	IMPACT PROBABILITY	RISK DESCRIPTION	MITIGATION STRATEGIES
	Identify the risk category	Describe the risk	List controls and ways to mitigate the risk
1	Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers	<ol style="list-style-type: none"> <li>1. Educate clients about fraud risks and preventive measures (such as consulting the call center)</li> <li>2. Promote mobile payments to reduce money exchange between agents and clients</li> <li>3. Conduct background investigations for new employees and periodic checks for employees and third parties</li> <li>4. Conduct random transaction analysis on different agents</li> </ol>
2	End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided	<ol style="list-style-type: none"> <li>1. Check new clients' credit records before extending credit</li> <li>2. Work closely with external partners (e.g., mobile-banking companies) to review historical data and determine predictive trends for the portfolio</li> <li>3. Conduct frequent credit checks and inquiries to assess the client's ability to repay the agreed amounts</li> </ol>
3	Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions	<ol style="list-style-type: none"> <li>1. Ensure the company's rates are not expensive compared to the ones offered by the local utility</li> <li>2. Provide accompanying products and services to attract clients</li> <li>3. Provide discounts and rebate-points to reward loyal clients</li> <li>4. Increase marketing in the region covered by the grid to promote the company's services</li> </ol>

The final risk register is illustrated below.

Table 15: Company ABC's final risk register

COMPANY ABC RISK REGISTER							
IMPACT PROBABILITY	RISK DESCRIPTION	INDICATORS AND TRIGGERS	LIKELIHOOD	IMPACT	SCORE	GROSS RISK	MITIGATION STRATEGIES
Identify the risk category	Describe the risk	Triggers that could result in the risk materializing (Triggers are early warning signals that risk is likely to occur)	Rate the probability of the risk materializing	Estimate the impact of the risk	Overall Score	Rank the overall risk	List controls and ways to mitigate the risk
1 Misreporting	Given that commercial agents collect money from clients, they might not report the exact amount they obtained from customers	Customers complain regularly about their payments through the company's call center	LIKELY (3)	MAJOR (4)	12	MAJOR	<ol style="list-style-type: none"> <li>Educate clients about fraud risks and preventive measures (such as consulting the call center)</li> <li>Promote mobile payments to reduce money exchange between agents and clients</li> <li>Conduct background investigations for new employees and periodic checks for employees and third parties</li> <li>Conduct random transaction analysis on different agents</li> </ol>
2 End-user credit risk	Credit risk is the possibility of a loss resulting from a client's failure to meet the initially agreed payments for solar products provided	<ol style="list-style-type: none"> <li>A noticeable decrease in collection activity from the agents</li> <li>Changes in the health of accounts receivable (a significant increase of the company's receivables)</li> <li>A sudden and significant decline in liquidity</li> </ol>	ALMOST CERTAIN (4)	SEVERE (5)	20	SEVERE	<ol style="list-style-type: none"> <li>Check new clients' credit records before extending credit</li> <li>Work closely with external partners (e.g., mobile-banking companies) to review historical data and determine predictive trends for the portfolio</li> <li>Conduct frequent credit checks and inquiries to assess the client's ability to repay the agreed amounts</li> </ol>
3 Grid-expansion	This is the risk that clients might move to on-grid electricity once the local utility has expanded in their regions	<ol style="list-style-type: none"> <li>The grid expands in neighboring localities</li> <li>On-grid rates significantly lower than company's rates</li> <li>Intense marketing from the local utility to gain clients</li> </ol>	LIKELY (3)	MAJOR (4)	12	MAJOR	<ol style="list-style-type: none"> <li>Ensure the company's rates are not expensive compared to the ones offered by the local utility</li> <li>Provide accompanying products and services to attract clients</li> <li>Provide discounts and rebate-points to reward loyal clients</li> <li>Increase marketing in the region covered by the grid to promote the company's services</li> </ol>

## C. INVESTMENT READINESS AND TRANSACTION MANAGEMENT

### 6. Investor outreach and engagement: Fundraising is a demanding process; prepare accordingly

#### Observations from work with companies

Most companies supported underestimated the time and effort required to identify and engage potential investors. This led to some companies engaging investors who were not a good fit, resulting in a prolonged fundraising process. Many companies also lacked relevant documents that articulated their business model, growth strategy, investment needs, and use of funds. Investors value such documents when assessing an investment prospect. Companies without such supporting documents struggled to present themselves as viable investment opportunities, limiting their access to funds to grow their businesses.

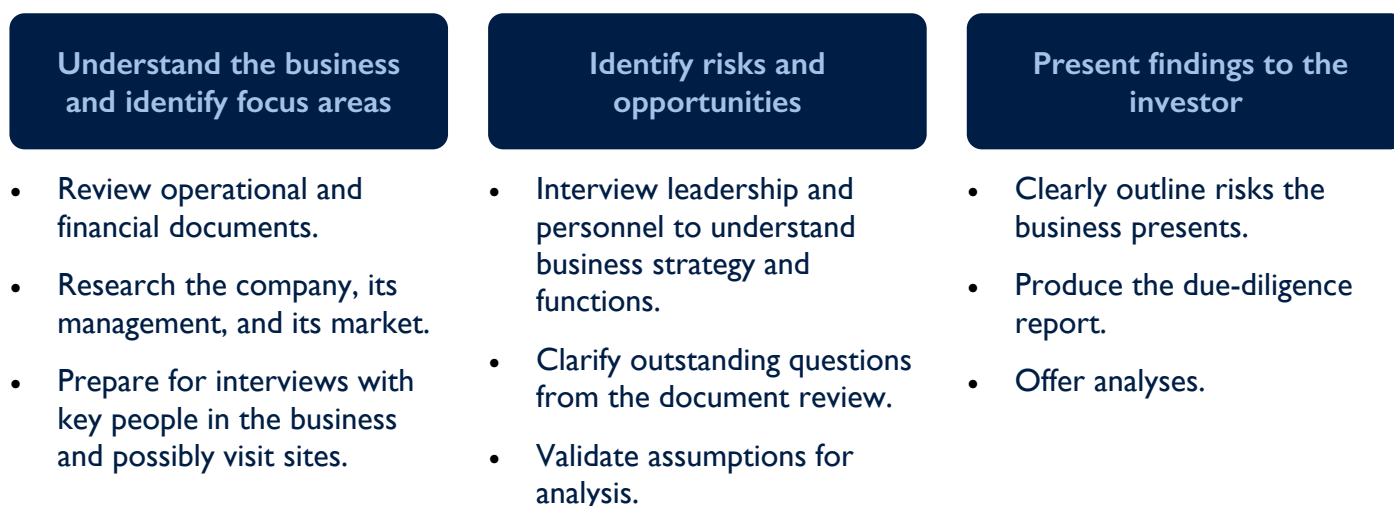
#### Solution with illustration

Companies should reach out to investors that best serve the business' growth stage. Applications to different investors must be aligned with the investors' interests to capture their attention. Once the company has identified the right investor, the investor will conduct due diligence to determine if the business is eligible to receive funds.

This section describes investors' due-diligence process and how companies can prepare to raise capital.

A due-diligence process involves the steps illustrated below.

Figure 16: Due-diligence process



**Due diligence helps the investor understand the risks and opportunities a business presents.**

Because the investment cycle takes six to 18 months, businesses should understand what due diligence requires of a company.

Figure 17: Aspects reviewed during due diligence

COMMERCIAL / OPERATIONS / BUSINESS / STRATEGY				
MARKET AND INDUSTRY	MARKETING AND SALES	OPERATIONS	BUSINESS PROFILE	TALENT
<ul style="list-style-type: none"> <li>Nature of market</li> <li>Industry characteristics</li> <li>Competitive landscape</li> <li>Regulatory issues</li> </ul>	<ul style="list-style-type: none"> <li>Customer information</li> <li>Sales forecast</li> <li>Pricing approach</li> <li>Advertising</li> <li>Sales activities</li> <li>Branding policy</li> </ul>	<ul style="list-style-type: none"> <li>Purchasing</li> <li>Quality control</li> <li>Facilities</li> <li>Operating costs</li> <li>Overheads</li> <li>Product variation</li> <li>Production</li> <li>Distribution</li> </ul>	<ul style="list-style-type: none"> <li>Company background</li> <li>Recent history</li> <li>Products and services</li> <li>Strategic perspective</li> </ul>	<ul style="list-style-type: none"> <li>General info (organizational structure)</li> <li>Unionized employees</li> <li>Compensation</li> <li>Benefits</li> <li>Other HR aspects</li> </ul>
FINANCE			COMPLIANCE AND LEGAL	
FINANCE	ACCOUNTING	REPORTING	LEGAL	
<ul style="list-style-type: none"> <li>Sales, costs, and EBITDA</li> <li>Working-capital analysis</li> <li>Capital expenditures</li> <li>Cash flows</li> <li>Debt management and structure</li> </ul>	<ul style="list-style-type: none"> <li>Policies</li> <li>Controls</li> <li>Methods</li> <li>Off-balance-sheet</li> <li>Expense allocation</li> <li>Audit status</li> </ul>	<ul style="list-style-type: none"> <li>Strategic growth plans</li> <li>Quarterly sales and operational reports</li> <li>Budgeting process</li> <li>Variance analysis</li> </ul>	<ul style="list-style-type: none"> <li>Employment rules</li> <li>Environmental impact</li> <li>Litigation issues</li> <li>Insurance information</li> <li>Tax issues and statements</li> <li>Risk management</li> </ul>	

**To identify risks and strengths across the business, a traditional commercial due-diligence framework can be followed**

For a smoother due-diligence process, businesses should have a checklist of documents that investors may request.

Table 16: Due-diligence document checklist

DOCUMENT	DEFINITION	PRIORITY
<b>Business-registration documents</b>		
Certificate of incorporation or memorandum of association	Legal documents certifying that the company is registered in the regions of operation	High
Articles of association or bylaws	Documents that form the company's constitution and define how it governs itself. Defines the company's purpose, how it will operate, the duties of its owners, the power that directors have, and how decisions are made	High
<b>Business operations</b>		
Business plan, pitch, or strategic plan	Reviews the company's subsidiaries, production process from sourcing to end-market, milestones achieved since incorporation (including social benefit, if applicable), business risks, mitigation strategies, and growth plans	High
Team bios	Management team's and directors' biographies	High
Product portfolio	Describes the company's products and services, who buys them, and how the company markets and distributes them	Medium
Supplier portfolio	Lists the company's suppliers (both domestic and international), amounts purchased from each in the past year, and the company's supply-chain process	Medium
Customer portfolio	Categorizes and lists major clients; shows the percentage they represent of overall sales; shows new customers in the pipeline (sales leads)	Medium
Organizational structure	Shows the number of staff, hierarchy, roles, and brief job descriptions	Medium

DOCUMENT	DEFINITION	PRIORITY
Compensation structure	Explains compensation in different levels of the organization. Shows compensation of the top five employees in the company over the past two years, and any compensation plans in place	Medium
Management reports	Offers presentations by the board of directors or internal reports by management outlining the company's KPIs, progress, and strategy	Medium
Process maps	Outlines production processes, if available	Low
Impact reports	Documents the company's social benefit by offering internal M&E reports	Low
<b>Financial documents</b>		
Profit-and-loss statements for last three years	Includes costs and revenues broken down according to sales channels/client types, if available, over the past three years, including any year-to-date information	High
Balance-sheet statements for last three years	Lists and values assets, liabilities, inventories held, and payments due to suppliers and from customers	High
Cash-flow statements for last three years	Shows how money moves within the business, budgets made previously vis-à-vis actuals, and the budget for the next financial period	High
Debt and liability agreements, including terms	Describes major debts and liabilities and their servicing so far	Medium
Financial model with projections	Projects revenues over five years, ideally broken down in sales channels/client types/product categories. If unavailable, share with investors projections of revenues for the next financial period and what will drive them	Medium
Budgets	Shares budgets for the last two fiscal years; compares actuals to budget and explains significant variances	Medium
Accounts-receivable reports	Lists trade accounts receivable and payable for the last two balance-sheet dates. Analyzes receivables for the last two-year end-dates	Low
Inventory reports	Analyzes inventory turnover. Details the method of accounting for inventory, including the inventory system, valuation methods, and treatment of overheads	Low
Off-balance-sheet reports	Details significant off-balance-sheet items (committed capital expenditures, guarantees, warranties, contingent liabilities, and commitments)	Low
<b>Transaction documents</b>		
Use of proceeds	Details investment need and use of proceeds	High
Investor agreements	Informs investors of the capital raise so far and any agreements made with other investors, including terms	High
Partnership or shareholder agreements and capitalization table	Defines the percentage of ownership of each partner, distribution of profits and losses, and duties and powers of each partner. Includes a capitalization table with current fully diluted, including all preferred stock, common stock, convertible debt, options, option pools, warrants, and any other securities, including all applicable exercise prices and vesting dates	High
<b>Contractual agreements</b>		
Supplier agreements	Defines the terms of engagement with the company's suppliers, e.g., times of payment, volumes, and exclusivity	Low
Customer agreements	Defines the terms of engagement with the company's customers, e.g., cash/credit terms, after-sales support agreements, and returns policy	Medium
Lease agreements	Offers the terms of engagement with any party from which the company leases land, buildings, and equipment	Low
Commercial contracts	Offers any other legally binding contracts with stakeholders in the business, e.g., distributors	Low

The company should also develop tools to help it communicate with investors. One such tool is a due-diligence log which lists questions that investors have posed and the company's answers. The company can refer to this log when responding to investors to save time. Another tool is an investor tracker which records how advanced the negotiations are with each investor and the next steps. Both tools are illustrated below.

Table 17: Due-diligence log template

DUE-DILIGENCE QUESTIONS LOG						
CATEGORY	SUB-CATEGORY	REFERENCE	QUESTIONS	MANAGEMENT RESPONSE	STATUS	INQUIRY FROM
[Insert category of question]	[Insert sub-category of question]	[Insert document being referred to]	[Insert investor question]	[Insert response]	[Insert how question was addressed]	[Insert source of question]

Table 18: Investor-tracker template

#	NAME OF FINANCIER	SECTOR	PRIORITY LEVEL	TYPE OF CAPITAL	TICKET SIZE	STAGE OF OUTREACH	CONTACT DETAILS	NEXT STEPS
	[Name of institution]	[Insert sector]	[Insert priority]	[Insert capital type]	[Insert ticket size]	[Add outreach stage]	[Insert contact details]	[Insert next steps]
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

The drop-down options listed below can make filling in the investor tracker above easier.

Table 19: Drop-down options to include in an investor tracker

SECTOR	PRIORITY LEVEL	TYPE OF CAPITAL	TICKET SIZE	STAGE OF OUTREACH	CONTACT DETAILS	NEXT STEPS
Manufacturing	High	Debt	\$1,000–\$5,000	Identified company	Name of contact	Send introductory email
Finance	Medium	Equity	\$5000–\$9,999	Held introductory calls	Email address	Schedule an initial meeting
Trade	Low	Debt and equity	\$10,000–\$14,999	Held follow-up calls	Website	Schedule a follow-up meeting
Agriculture	Not important	Grant	\$15,000–\$19,999	Initial meeting	Skype ID	
Energy			\$20,000–\$24,999	Subsequent meeting		
Logistics			More than \$25,000	Site visit		
ICT				Deal initiation		
Health				Due diligence		
WASH				Deal closing		
Other						

Questions investors are often keen to ask are about the capital type and size of the investment amount. Realistic financial models and projected cashflows help businesses determine the timing and funding amounts they require. To capture investors’ interest, businesses should ensure their introductory documents—

including financial models—are well presented. For companies that lack internal expertise in financial modeling, the company can use [Power Africa’s financial-modeling toolkit](#), which is easy to use.

A good financial model is one that answers the questions below and has been reviewed thoroughly against general and financial statements. Investors notice inconsistencies during due diligence, diminishing their trust and interest in the company. Companies should thoroughly audit their financial models before submission.

Figure 18: Aspects to cover when reviewing a financial model

Section of financial model	Areas to evaluate	Questions
General checks	<ul style="list-style-type: none"> <li>• Correct spelling of terms</li> <li>• Consistency in the use of formulas within rows</li> <li>• No circular referencing</li> <li>• Realistic assumptions based on industry averages</li> </ul>	<ul style="list-style-type: none"> <li>• What are the key cost and revenue drivers?</li> <li>• When does the company break even?</li> <li>• How much cash does the company need (if raising funds)?</li> </ul>
Statement of profit and loss	<ul style="list-style-type: none"> <li>• Inclusion of all standard items, i.e., revenues, costs, and expenses</li> <li>• Correct calculations, e.g., tax, interest on loans, depreciation</li> <li>• Totals add up the correct items</li> </ul>	<ul style="list-style-type: none"> <li>• What are the company’s margins (gross profit, EBIT, EBITDA, and net profit)?</li> <li>• What is the trend in revenues and costs?</li> <li>• Which costs are fixed or variable with scale?</li> <li>• Is inflation factored into costs? (Optional)</li> </ul>
Statement of financial position	<ul style="list-style-type: none"> <li>• All end-balances of standard items, i.e., assets, liabilities, and equity</li> <li>• Correct financial ratios to financial health, e.g., working capital and gearing</li> </ul>	<ul style="list-style-type: none"> <li>• Does the balance sheet balance? (assets = equity and liabilities)</li> <li>• What are the company’s performance ratios and what do they mean for financial health?</li> </ul>
Statement of cashflow	<ul style="list-style-type: none"> <li>• All standard items, e.g., depreciation, net profit, equity, changes in assets, and cash balances</li> </ul>	<ul style="list-style-type: none"> <li>• What activities are taking money out of the business versus generating revenue?</li> <li>• How much cash does the business have?</li> </ul>

## D. COMPANIES' FEEDBACK ABOUT POWER AFRICA AND OPEN CAPITAL'S ASSISTANCE

Following Power Africa and Open Capital's work with off-grid solar companies, their evaluations of the support program revealed the value that accrues from enhanced financial management. The companies lauded how the program embedded specialists in the businesses and called for the program to be scaled.

"The program's support was essential in creating outputs critical to the fundraising process as Aptech Africa looks to build the first lithium-ion battery assembly plant in East Africa. Coupled with the coaching sessions we had with the team, we developed a deeper understanding of the financing options available and what financiers are looking for, arming us with the necessary context as we move into the fundraising cycle. We really appreciated the outputs and support received and we hope that this assistance continues to be provided to support local companies to access capital."

Laura Corcoran, Aptech Africa

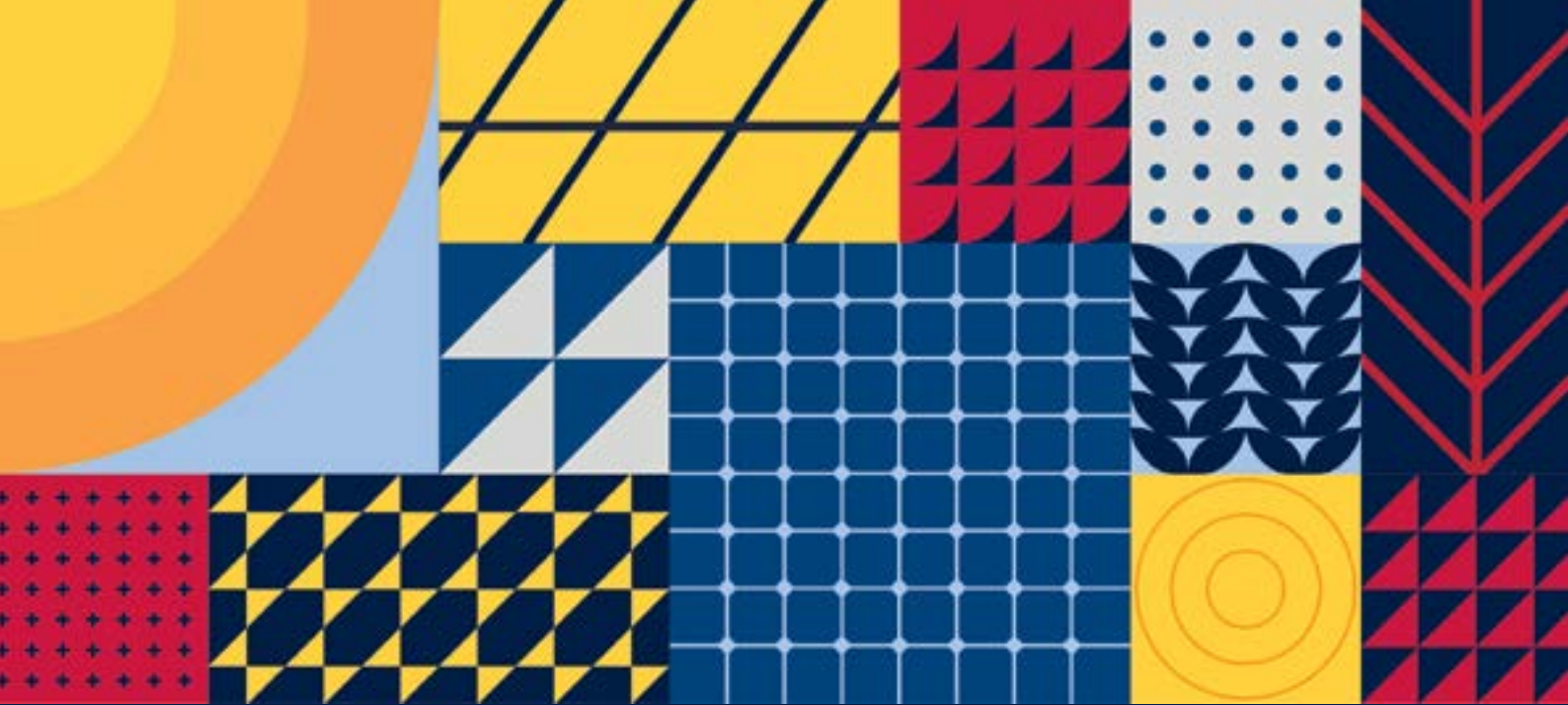
"Nate [Open Capital's consultant] and the crew went above and beyond. From day one, Nate was willing to roll-up his sleeves and take on critical tasks—he truly backfilled the CFO role—and helped us create a clear and actionable recruiting and onboarding plan to fill the CFO role. Beyond the engagement, Nate continued to support Jaza in our fundraising process, giving up his personal time to make sure we had support. This project delivered one of the best expert and support initiatives I've ever seen."

Jeff Schnurr, Jaza Energy

"In 2021, Power Africa through its program, supported HelloSolar for six months in the form of embedding an interim CFO with a dedicated mission to deliver materials in the domains: A financial budget and projection model, investment readiness, and an investment-landscape presentation [for the board]. The mission was executed by Open Capital Advisors, team consisting of Keru and Hezbon, who did a fantastic job during those six months to deliver their mission in a very professional manner and to the highest quality; this while keeping the timelines with a very flexible approach while being able to make multiple changes requested by HelloSolar. The team went above and beyond our expectations, especially compared to some other support programs we have received in the past."

Bart Minsaer, HelloSolar





*Power Africa aims to achieve 30,000 megawatts of new generated power, create 60 million new electrical connections, and reach 300 million Africans by 2030.*

 [\*\*usaid.gov/powerafrica\*\*](https://usaid.gov/powerafrica)

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