

Benchmarking KPIs for Last Mile Distributors

2024

HYSTRA
hybrid strategies consulting

**Practical
ACTION**

**bop
inc**

Funded by



Transforming
Energy
Access

Published by Global Distributors Collective (GDC) 2024.

The GDC is a joint initiative from Practical Action and Bopinc.



This material has been funded by UK aid from the UK government via the Transforming Energy Access platform; however, the views expressed do not necessarily reflect the UK government’s official policies.



Authors

Chitraksh Sharma, Hystra
Lucie Bévierre, Hystra
Lucie Klarsfeld McGrath, Hystra

Contributors

Davinia Cogan, GDC
François Lepicard, Hystra
Russell Lyseight, GDC
Alice Magand, Hystra
Charlie Miller, GDC
Emile Schmitz, GDC

Acknowledgements

Kat Harrison, 60 Decibels
Stefan Zelazny, A2EI
Thomas Duveau, A2EI
Sarah Bieber, Acumen
Philippe Baudez, AF
Alexandre Coster, Baobab Plus
Rocio Perez-Ochoa, Bidhaa Sasa
Jonathan Clowes, Carbon Trust
Gavriel Landau, Charm Impact
Ronan Ferguson, Clean Cooking Alliance
Colm Fay, Clean Cooking Alliance
Kathryn Farley, Corus International

Nick Fusso, D-Prize
Alexandre Tourre, Easy Solar
Philip Wilson, Ecofiltro
Guillaume Cruyt, EDFI
Ahissou Prudence, Feu Vert Benin
Fonahanmi Idris, FONBOL
Ajaita Shah, Frontier Markets
John Tkacik, GIZ
Drew Corbyn, GOGLA
Oliver Reynolds, GOGLA
Koen Peters, GOGLA
Sileshi Abebe, Grean World
Samy Chaliér, HERi
Jeanetta Craigwell-Graham, Independent Consultant
Alem Gebru, Modify Electromechanical
Grace Njiru, Mwangaza Light
Jodie Wu, Offgrid Box
Alexander Galicier, PayGo Labs
Dan Murphy, PayGo Labs
Willem Nolens, PayGo Labs
Zain Saleem, SIMA
Esther Altorfer, Sistema.bio
Emma Colenbrander, Spring Impact
Mikayla Czajkowski, SunCulture
Hack Stiernblad, SunCulture
Jonatan Ala-Mutka, Vitalite Zambia
Dan Waithaka, Wisdom Energy

About the Global Distributors Collective

The Global Distributors Collective is a network of over 200 last mile distribution organisations operating in more than 60 countries. Our members sell beneficial products like solar lights, clean cookstoves and water filters. We support distributors to reach underserved customers, and represent and develop the wider last mile distribution sector.

globaldistributorscollective.org

About Hystra

Hystra is a global impact consulting firm that works with business and social sector pioneers to design and implement inclusive business approaches that are profitable, scalable and eradicate social and environmental problems. We support corporates, social enterprises, donors, and impact investors all along their inclusive business journey.

hystra.com

Contents

INTRODUCTION	5	SALES & MARKETING	27	BACKEND INFRASTRUCTURE & OVERHEADS	52
VALUE PROPOSITION	7	Minimise untargeted marketing	28	Reduce after sales servicing costs	53
Get customer feedback	8	KPI 8: Above-the-line marketing		KPI 17: Product servicing rate	
KPI 1: Net Promoter Score®		Reach every customer	30	Minimise inventory losses	55
Beat the competition	10	KPI 9: Market penetration		KPI 18: Stock loss	
KPI 2: Unique selling proposition		Improve performance	32	Manage overheads	57
Diversify your customers base	12	KPI 10: Revenue per sales agent		KPI 19: Overhead ratio	
KPI 3: Number of market segments		Attract the best sales agents	35	Leverage digital solutions	60
Diversify your revenues	14	KPI 11: Sales agent compensation		KPI 20: Digitalisation indicator	
KPI 4: Revenue streams		Offer the right compensation	38	Diversify CEO support	63
Cover your costs	16	KPI 12: Sales agent cost ratio		KPI 21: CEO support system	
KPI 5: Gross margin		Retain sales agents	40	Convert inventory to cash	65
Be inclusive	18	KPI 13: Sales agent churn		KPI 22: Cash conversion cycle	
KPI 6: Inclusivity ratio		Provide effective supervision	44	Reduce grant dependency	69
Select and onboard credit clients	22	KPI 14: Sales agents per manager		KPI 23: Grant contribution	
KPI 7: Product utilisation rate		Cover field force costs	47	GLOSSARY	73
		KPI 15: Cost of field force		All terms in italics are defined here	
		Optimise sales agents' time	49	REFERENCES	76
		KPI 16: Sales agent time efficiency			

Introduction

This publication is primarily for people who run *last mile distribution* companies.

We explain 23 *key performance indicators* (KPIs) that you can use to assess the performance of your business. The KPIs cover three broad areas:

- Value proposition
- Sales and marketing
- Backend infrastructure and overheads

Each KPI is explained in simple terms along with important caveats and clarifications on applying them to your company. Perhaps most usefully, we have provided benchmark values for each indicator, specifically for last mile distributors. This means you can assess how well your company is doing relative to other distributors in the sector.

You may already be measuring some or all of these metrics – in which case you may want to jump straight to the best practice guidance for each to get ideas on how you can make improvements.

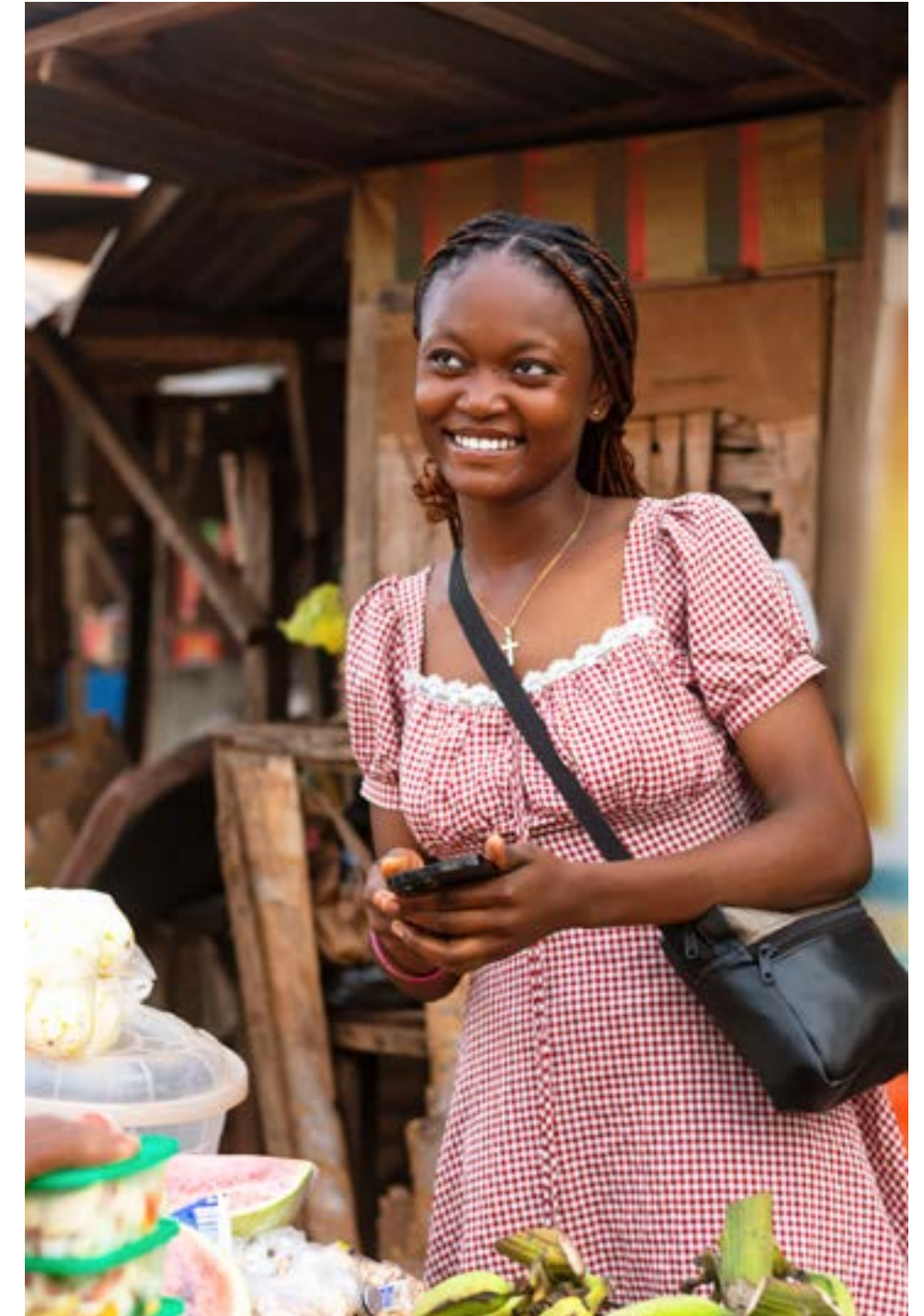
Of course, not every KPI or benchmark value will be relevant or useful for every company. Your business model, strategic objectives, size and the context in which you operate will inform which metrics are the most valuable to your operations.

Our hope is that by using this resource you will not only improve your business performance, but also be better able to demonstrate your current performance to others

– particularly potential investors. We know that access to finance is the biggest challenge most last mile distributors face. The aim of this publication is to bridge the technical gap between what information investors need to make informed investment decisions and what distributors can provide.

We have set out what we consider to be the most important operational KPIs for last mile distributors, with the aim of establishing a longer term, transparent, sector-wide standard. And we want the wider sector, including investors, donors, technical assistance providers and researchers, to engage with these KPIs and use them when engaging with distributors. For example, funders can use them to get a better sense of the key operational parameters that can make or break the success of a last mile distributor. Technical assistance providers can use them to identify areas of focus.

Looking at the bigger picture, the development, professionalisation and growth of the last mile distribution sector is also a necessary step towards achieving a number of the sustainable development goals. Last mile distributors get beneficial products – like solar systems, water filters and clean cookstoves – to people who would otherwise not be able to access them. In many countries the public sector (and the voluntary sector) does not have the resources or technical expertise to bridge this access gap, and nor are they best placed to solve it. Last mile distribution companies – private enterprises – fill this gap. And better performing distributors have lower costs and broader reach, making beneficial products more widely available and more affordable, to some of the world’s poorest people.



Data sources

The benchmark values and best practices proposed in each of the indicators come from analysing data from last mile distributors. The companies surveyed distribute a variety of products including solar lighting, productive use appliances, clean cookstoves, clean water products, agro-assets, and health, hygiene and nutrition products. And they operate in numerous countries across West Africa, East Africa, South Asia, Southeast Asia and Latin America.

More specifically, we have used these sources:

- Data collected by Hystra from over 70 last mile distribution companies, including 63 they have worked with since 2013, and 10 leading last mile distributors interviewed in 2023 specifically for this publication
- Data from 109 last mile distributors collected via the Global Distributors Collective member survey in 2021
- Benchmark data from PAYGo Labs on credit-related indicators

In addition, the PAYGo PERFORM Technical Guide (2021) inspired the format and layout of this resource.

How we selected the KPIs and benchmarks

This resource builds on previous work by Hystra and in particular their reports on 'Marketing Innovative Devices for the Base of Pyramid' and 'Marketing Nutrition for the Base of Pyramid'.

All KPIs have been tested with leading last mile distributors, as well as industry experts, to confirm their relevance and the appropriate benchmark values.

KPIs that were too sector-or product-dependent to allow for an industry-wide benchmarking value were not included. While we are confident that these KPIs form a solid base for last mile distributors looking to benchmark their performance, we recognise other, additional KPIs may also be necessary to fully assess particular sectors or circumstances of some distributors.

In terms of the benchmark values, the 'best practice' values were the best seen across last mile distributors who participated in this project. 'Good' corresponds to values that have proved to be sufficient to allow a last mile distributor to become sustainable. The 'can be improved' category is defined as below the level at which the benchmarked distributors had managed to stabilise their operations toward sustainability.

In short, these KPIs and their benchmark values are the ones that last mile distributors should prioritise if they want to run a profitable, sustainable business.

Disclaimer

This is the first edition of this public resource and certainly can't solve every challenge at the last mile. And as more data becomes available and the sector matures, this report will undoubtedly need to be improved and updated.

We have tried to define the KPIs that are most relevant to distributors that sell a range of products, in a range of locations in low- and middle-income countries. Given the diversity of geographies, products sold and business models, this generalisation might not cover all cases and some indicators might not be applicable to all companies.

In particular circumstances, such as local or global crises, this benchmark data may become irrelevant, or the good or best practice categories impossible to achieve. All indicators should be considered as guides and inspiration for improving performance, not strict tests that are set in stone.

Smaller last mile distributors, particularly those that have just started, are unlikely to be able to measure all these KPIs, let alone to perform at best practice level.

Finally, it should be noted that some graphs providing additional benchmark values are limited to a subset of companies for which we had consistent data.



Value Proposition

Get customer feedback

KPI 1: Net Promoter Score®

Measure: Twice-yearly

Net Promoter Score (NPS®)¹ is a globally recognised measure of customer satisfaction that is used across many industries. By gathering feedback from existing customers you can discover what people think about your products and services – and how loyal they are to your brand.

By calculating your NPS you can find out how likely your customers are to purchase from you again, and whether they would recommend you to others. Achieving high scores in this KPI suggests a strong connection between your customers and your company – and should help lower your acquisition costs.

1. Net Promoter®, NPS®, NPS Prism®, and the NPS-related emoticons are registered trademarks of Bain & Company, Inc., NICE Systems, Inc., and Fred Reichheld. Net Promoter ScoreSM and Net Promoter SystemSM are service marks of Bain & Company, Inc., NICE Systems, Inc., and Fred Reichheld.

Calculation



Net Promoter Score = (Promoters (%) – Detractors (%)) x 100

To calculate a net promoter score you'll need to survey some of your customers. Aim for at least 10% of your active customers base - the more you get, the more accurate your score.

This is the question you want to ask:
On a scale of 0 to 10, how likely are you to recommend [your product or service] to a friend or family member, where 0 is not at all likely, and 10 is extremely likely?

Once you've collected your responses, calculate the percentage of customers who rated their likelihood to recommend your product or service as 9 or 10. These customers are known as *promoters*. Next calculate the percentage of customers who rated their likelihood to recommend your product or service as 6 or less. These customers are known as *detractors*. To calculate your NPS, subtract your detractors from your promoters. This will result in a score between -100 and +100.

Caveats and clarifications

- Scores vary across industries. 60 Decibels, an impact measurement company, have published median NPS benchmarks for different sectors, including agriculture (41), education (56) and off-grid energy (43).
- Scores vary across products. 60 Decibels found that in the off-grid energy sector, solar lanterns had a score of 64, while appliances scored 18.
- An NPS lower than 40 typically puts a company at risk because detractors or negative word of mouth may discourage new sales prospects.
- Research by Hystra has shown that a score higher than 60 is achievable, across different continents and sectors.

Benchmark values

Can be improved

Not measured or below 40

Good

40 – 60

Best practice

60 – 100

Best practice

Track NPS for different products

To understand which of your products or services have the highest and lowest levels of customer satisfaction, create different surveys for each.

Track NPS for customer-facing staff

Ask customers how likely they would be to recommend customer-facing staff (e.g the salesperson who sold them the product; the technician who came to install it; etc). This will allow you to uncover early on any ill-adapted behaviours from your staff.

Go deeper

For more detailed responses, you could add an open-ended question to your survey asking customers to explain their answer. If a product or service gets a bad score, conduct further in-depth customer interviews to find out how to improve your offer.

Follow up with detractors

Immediately follow up with detractors to limit negative word of mouth and understand potential issues in your offering or customer service.

Align NPS with staff incentives

Tie customer-facing staff compensation to net promoter scores to encourage a great customer experience.

Related KPIs

KPI 2: Unique selling proposition

Customer pain points may be the reason some customers are dissatisfied and become detractors.

KPI 7: Product utilisation rate

A satisfied customer is more likely to pay on time. Providing financing can increase your NPS, but customer over-indebtedness can reduce your score.

KPI 9: Market penetration

Satisfied or dissatisfied customers will affect your company brand and reputation in the market – and your ability to improve local penetration.

Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI.

Beat the competition

KPI 2: Unique selling proposition

Measure: Yearly

Your unique selling proposition (USP) is what makes your products or services different or better than your competitors'. Knowing this is the first step towards building a well-rounded value proposition. It helps you understand why some people buy your products and why some don't.

You can use this KPI to evaluate the competitive landscape and find out how well your company performs relative to alternative products and services offered by other businesses.

Calculation

For this KPI you'll need to survey people who have bought your products or services – and people who haven't. To better understand your customer value proposition you'll need to ask open-ended, qualitative questions.

For each product or service, aim to survey 10 to 50 customers and 10 to 50 non-customers. Surveys can be done informally, by asking sales agents to speak to customers and non-customers, or centrally by phone, SMS or your company website. You could also include these surveys in existing calls to customers (e.g. calls to track your NPS).

Ask your customers: What makes our [product/service] better than our competitors? Then list and analyse the responses to understand the USP of each of your products and services.

Ask non-customers: Why have you not purchased our [product/service]? Their responses can help you to better understand what prevents people buying your product or service.

Caveats and clarifications

- A USP describes what makes your business better than your competitors and why customers should buy from you. Examples of USPs include the lowest price (although this is a highly vulnerable USP), highest quality, fastest delivery, location, level of innovation, warranty period, or after-sales service quality.
- When your company is operating under business-as-usual conditions, this KPI can be assessed yearly. But if you face a critical challenge (e.g. you have suffered a large volume of product failures) and you are in *course-correct mode* you should monitor this more regularly.
- Include surveys as part of your annual planning - many businesses forget to regularly update their understanding of customers and barriers to purchase after the initial competitive landscape research phase.

Benchmark values



Can be improved

We don't conduct surveys to validate our USP among customers or understand barriers for non-customers. Or, we do conduct surveys but have not done so in the past 24 months.



Good

We have conducted a survey to validate our USP among customers or understand barriers for non-customers within the past 12 to 24 months.



Best practice

We have conducted a survey to validate our USP among customers and understand barriers for non-customers within the last 12 months.

Best practice

Segment your customers and non-customers

For customers, segmentation could be based on the alternative products they were previously using. For non-customers it could be the products they currently use. Another option is to segment based on characteristics that might explain why they have different usage and preferences, such as location, gender or income level.

Understand customer choices

For customers who buy your products, try to understand not simply why they like your product, but more specifically why they chose your product over competing options.

Discover barriers to purchase

For non-customers, ask them about product features they like and dislike, their product knowledge, access to your product, the risks they see in switching to your products, and pricing. Their answers might lead you to change your approach to marketing or distribution. The most common barriers to purchase are affordability, too much or too little information, bad customer experience, and poor brand perception.

Research competitors

Conduct a yearly competitor mapping exercise to analyse your competitors' product or service offerings, price, geographic coverage, and after-sales service. Pay particular attention to your competitors' offerings compared to your company's USP, along with other factors (e.g. pricing, geographic coverage).

Adapt your offering

Use your survey results to inform and continuously adapt your offering. Balance the one-time and on-going costs of modifying your offer, versus the value you can generate from this potential change.

Related KPIs

KPI 1: Net Promoter Score

Understanding the strengths and weaknesses of your offer can help *course-correct* and improve overall customer satisfaction.

KPI 5: Gross margin

Customers may be willing to pay a higher price for a product they value over cheaper alternatives.

Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI.

Diversify your customer base

KPI 3: Number of market segments

Measure: Yearly

Before you attempt to serve more than one segment, you'll need to establish *positive unit economics* (i.e. the margin from one unit covers the direct costs related to that unit).

Splitting your target market into different groups and adapting your offering to each of them can help maximise profits and reduce risk – but only if you have positive unit economics first.

Market segmentation is the process of dividing your customers into different groups based on things like location, age, gender, income or behaviour. Segmenting your market makes it easier to adapt your products or marketing to suit certain customers.

Serving a range of market segments, along with geographic diversification, can be an indicator of resilience in the face of adverse events.

Calculation

The purpose of this KPI is to understand how many different market segments your company serves.

List the different types of independent segments your company serves with products or services (e.g. households, companies, government, etc). Then count the total number of different market segments.

Caveats and clarifications

- Market segments typically come about from selling similar products to a range of customers (e.g. B2B, B2C, B2G) using different sales channels.
- Not all market segments are equal – they will vary based on market size, different levels of cost, and complexity.
- Younger companies that are still refining the unit economics of their core market segment should avoid increasing segments prematurely to ensure efficient use of limited resources.

Benchmark values

Refining or still proving unit economics

2 or more




1

Proven unit economics

1

2

3 or more

-  Can be improved
-  Good
-  Best practice

Best practice

Clarify existing segments

Before targeting new segments, clarify your existing market segments. Beyond purely geographic, demographic and income differences, segments can also be defined based on customer pain points. People who use alternative products to the ones you offer may experience pain points with that product - pain points that your product might or might not address well. For example, an improved cookstove using less charcoal than alternatives will be a great value proposition for the segment of traditional charcoal stove users ("reduce your expenses and smoke"). But the same improved cookstove will be a much less straightforward value proposition for open fire users ("reduce the time spent gathering wood, reduce outdoor smoke, but spend money on charcoal").

Maximise existing products

Each market segment does not necessarily require unique products. For example, the same solar fridge can address the pain points of both pharmacies (e.g. their inability to store vaccines without a stable cold chain) and small shops (e.g. the cost of running fridges on a generator to sell cold drinks). Creating dedicated marketing materials and sales channels for each segment can be effective when selling the same products to two segments.

Prioritise segments

Not all market segments are worth serving. Prioritise the ones that best enable you to reach your business, strategic and impact goals. For example, the segment with the largest number of customers, highest impact opportunity or lowest cost to serve.

Related KPIs

KPI 6: Inclusivity ratio

Understanding the different pain points faced by lower income or women customers compared to higher income or male customers can help unlock new market opportunities.

Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI..

Diversify your revenues

KPI 4: Revenue streams

Measure: Yearly

Once your company has established *positive unit economics*, diversifying your sources of revenue can reduce risk and maximise revenue.

New revenue streams can be generated from the by-products of core activities or by adding complementary services. For example, providing fee-paying repair or recycling services to customers.

This KPI helps measure the resilience of your business and whether you are fully maximising revenue opportunities.

Calculation

List the independent revenue streams of your company excluding sales to your core customer segment. For example, results-based financing, carbon finance, consulting and services. Then count the number of independent revenue streams.

Caveats and clarifications

- Additional revenue streams typically come about by monetising by-products of the core business, for different segments of payers (e.g. *result-based financing*, consulting services, customer insights, marketing services, etc.)
- Businesses can generate what economists call *positive externalities* and find ways to monetise them. For example, the clean cooking sector has enjoyed a sudden acceleration as cookstove distributors leverage carbon credits to generate an additional revenue stream for (mostly) the same work. Carbon credits are a way to earn money from the positive carbon impact attributed to clean cooking in comparison to more traditional cooking practices.

Benchmark values



- Good
- Best practice

Best practice

Map revenue streams and costs

To assess all possible revenue streams from your existing assets, start by mapping all stakeholders who benefit directly or indirectly from your activities. Next assess the potential for these benefits to generate revenue over time. Then assess cost and feasibility, and finally confirm that these revenue streams have a strategic fit with your existing activities.

Find synergies

Synergies between different activities are the key to success. Do not engage in an activity that will not bring value to the company's core activity and deprive core activities of key resources.

Related KPIs

KPI 5: Gross margin

Alternative revenue streams linked to your products may increase gross margin, making room for price reductions or improved profitability. The sale of services, such as data and consulting, to third parties may similarly lower the gross margin required for profitability.

Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI.

Cover your costs

KPI 5: Gross margin

Measure: Quarterly

Calculating your gross margin can help you assess the potential profitability of your business. In simple terms, it's the amount of revenue left after you subtract product costs.

For *durable goods*, it's a good first indicator of whether your business can cover the costs of delivering products to your customers.

The gross margin should cover all downstream costs of a particular good or service, including sales, installation, after-sales service and credit. The gross margin generated from all your products and services should also cover your overhead costs. You should calculate gross margin for each of your products.



Calculation

Gross margin =

Sales revenue at end-user price + other revenues generated directly from the sale of those units
– cost of goods sold

Sales revenue at end-user price + other revenues generated directly from the sale of those units

Examples of other revenues generated directly from sales revenue include *results-based financing* and *carbon financing*.

Cost of goods sold (COGS) include materials and components, direct labour, shipping and warehousing, and import duties.

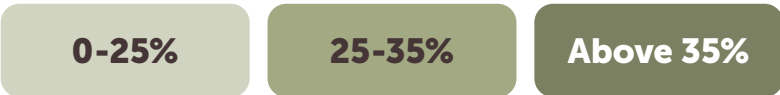
If your business sells through retailers or sales agents, you should calculate sales revenue based on the end-user price – not the wholesale price at which you sell the product to retailers or sales agents.

Caveats and clarifications

- This indicator is for durable goods only. For *fast-moving consumer goods* the gross margins needed depend heavily on the type of product, geography, sales channel used, etc.
- Unlike in manufacturing where the cost to produce each product typically reduces as production increases, last mile distribution companies have limited operational economies of scale. Depending on the geographic spread of the market and the community-level marketing required, high volumes may not compensate for low gross margins.
- Currently, PAYGo companies tend to have higher margins (60% or more) to account for expected losses on repayment.




Benchmark values

Not providing financing



Providing financing



-  Can be improved
-  Good
-  Best practice

Best practice

Build resilience

High gross margins build resilience into your business model and prepare you to endure economic shocks – something that low-income countries may be more likely to experience.

Adapt margin to loan tenures

If you provide credit to customers, longer loan tenures should be accompanied by higher gross margins to compensate for the cost of providing credit over a longer period.

Related KPIs

KPI 15: Cost of field force & KPI 19: Overhead ratio

The gross margin should be high enough to cover both the costs of the field force and overheads, and any additional costs not included in those (e.g. marketing costs) for the company to be profitable.

Be inclusive

KPI 6: Inclusivity ratio

Measure: Yearly

Some customers may need a product but for various reasons they can't access it. The product may not be sold where they live or the price could be unaffordable. Last mile distributors with a high level of inclusivity aim to ensure that beneficial products and services are more widely affordable and available to people.

An inclusivity ratio tells you how inclusive your business is, based on a particular customer characteristic, such as income level or gender.

Targeting women or customers on lower incomes may require different sales and marketing strategies or service offerings. This KPI helps demonstrate the social impact of your business and is important to know when preparing to raise capital from impact investors.



Calculation

$$\text{Income inclusivity} = \frac{\text{Number of customers living under \$3.20/day}}{\text{Total number of customers}}$$

$$\text{Gender inclusivity} = \frac{\text{Number of women customers}}{\text{Total number of customers}}$$

While here the measure of poverty is defined as \$3.20/day, you should adapt the poverty line to the countries and areas that you serve.

If you don't know the income levels of your customers, look at other things that might give you an indication, such as where they live and the things they own or don't own (e.g. a smartphone).

Caveats and clarifications

- This KPI is dependent on your company strategy and mission, geography, product type and industry.
- There is no good or bad inclusivity value as long as it aligns with your company strategy and activities.
- Inclusivity ratios may only be relevant for businesses with a social enterprise or impact-first business model, or in connection with impact fundraising.

Benchmark values

No set rules.

See graphs on the following pages for benchmark data from the Global Distributors Collective and 60 Decibels.

Best practice

Incentivise sales

One way to increase customer inclusivity is to incentivise sales agents to target these customers through higher commissions or bonuses. If you offer credit to customers, ensure credit assessment processes are followed.

Diversify customer base

Targeting only customers living below the poverty line may affect financial sustainability. To offset potential losses on this section of your portfolio, you may want to target other markets which are more profitable or leverage *results-based financing* programmes.

Deep dive into measures of poverty

If relevant, use tools like the *poverty probability index (PPI)* which helps organisations identify the customers who are most likely to be poor by integrating objective poverty data into their assessments and strategic decision-making.

Related KPIs

KPI 3: Number of market segments

Understanding the different pain points faced by lower income or female customers compared to higher income or male customers can help unlock new market opportunities.

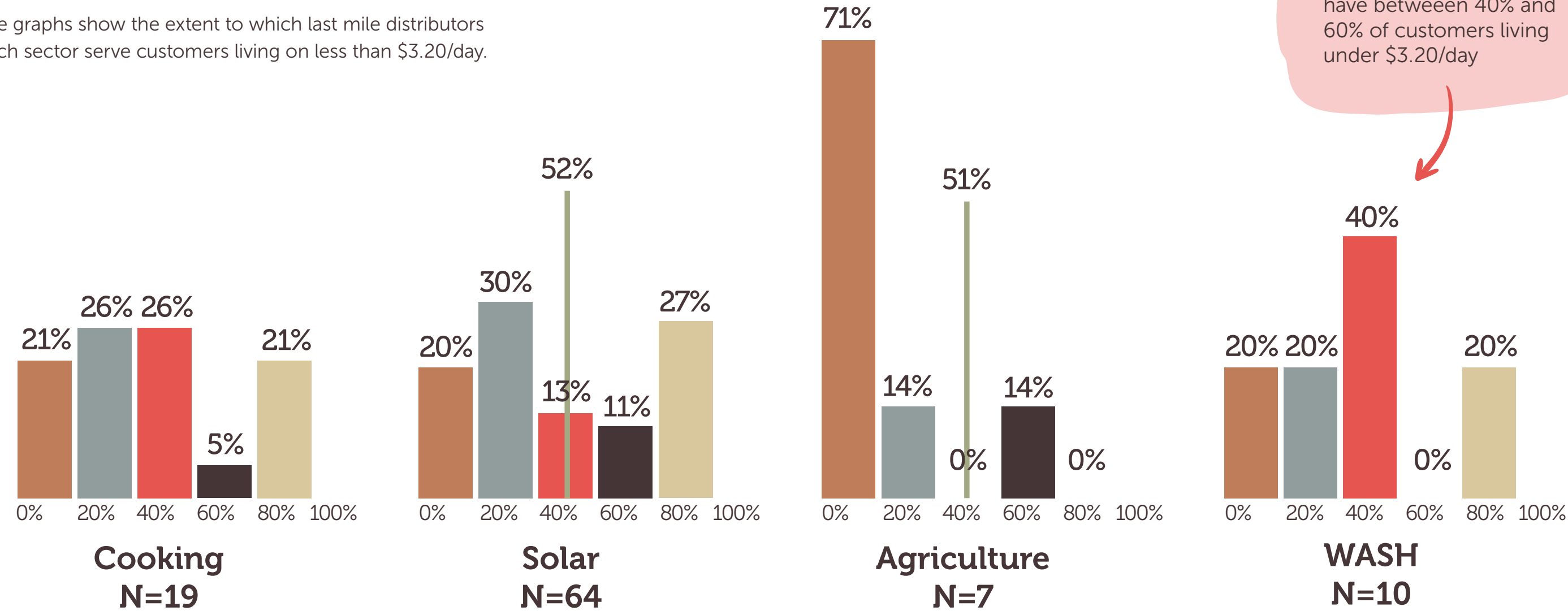
Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI.

Case study:
Income inclusivity
of last mile distributors

These graphs show the extent to which last mile distributors in each sector serve customers living on less than \$3.20/day.

How to read this graph
40% of companies selling WASH products surveyed have between 40% and 60% of customers living under \$3.20/day

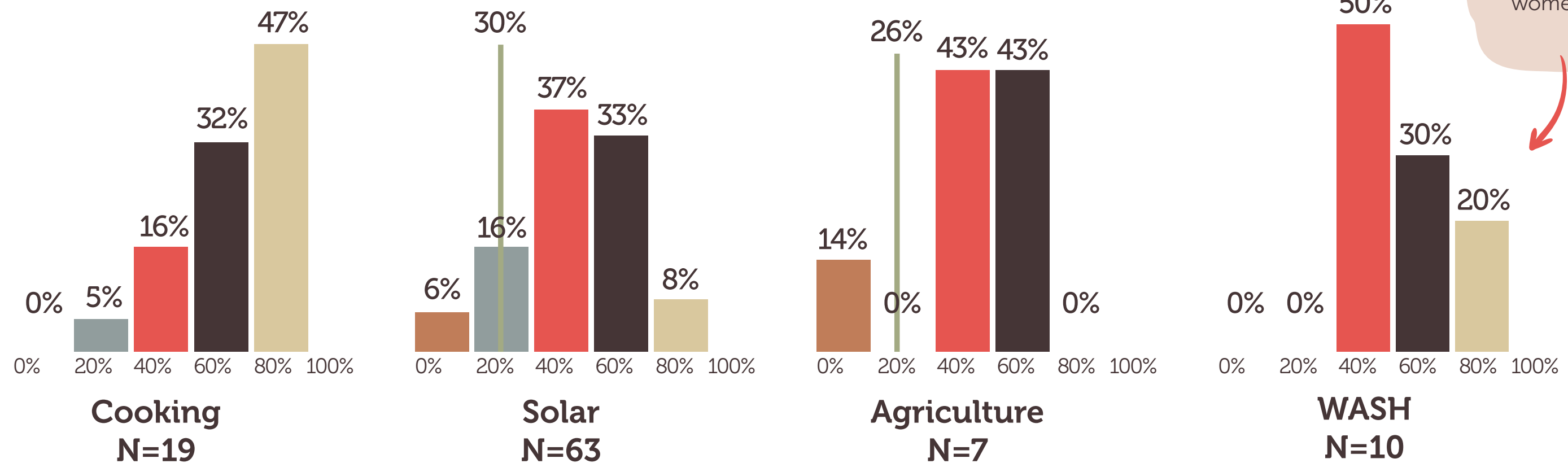


— Median of companies surveyed by 60dB

Source: Global Distributors Collective member survey, 2021; data were cleaned for companies that had inconsistent answers. 60 Decibels, 2024.

Case study: Gender inclusivity of last mile distributors

These graphs show the extent to which last mile distributors in each sector serve women.



How to read this graph

20% of GDC members selling WASH products have more than 80% women customers

Median of companies surveyed by 60dB

Source: Global Distributors Collective member survey, 2021; data were cleaned for companies that had inconsistent answers. 60 Decibels, 2024.

Select and onboard credit clients

KPI 7: Product utilisation rate

Measure: Monthly or on a rolling basis, whenever a client reaches 60 paying days

This indicator serves two purposes. First, it provides rapid feedback on the effectiveness of your company’s current credit screening and client onboarding process. Second, it has proved to be a good predictor of the future repayment trend of new customers.

If clients do not pay on time during the first two months - which leads to their PAYGo product shutting down frequently - it’s likely they did not fully understand, or are unable or unwilling to meet, their contractual obligations.

This KPI considers how many days the customer paid for their product during the first 60 days of the customer contract period, excluding any initial free days.



Calculation

Product utilisation rate

=

Total number of days customers paid for their product during the first 60 paying days

60 x number of customers that reached the 60 paying days milestone during the last six months

For the numerator in the calculation, include all customers that reached the 60 paying days milestone during the past six months.

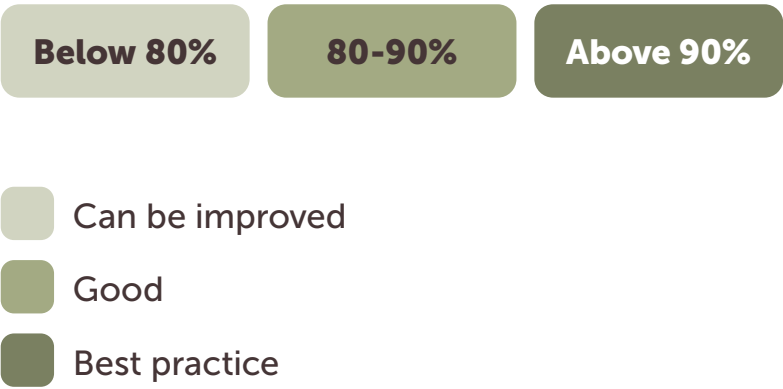
Do not include the first free days after the purchase in the 60 days when assessing how much customers pay after their initial deposit – start counting on the first paying day post-deposit.

Do not count extra days beyond the first 60 paying days that might have been paid for in advance as these can distort this metric.

Caveats and clarifications

- This indicator aims to improve on the PAYGo Perform Collection Rate KPI (also called Paid versus Planned), which is commonly used in the PAYGo sector to calculate the total amount paid by a customer compared to the total amount a customer should have paid over the period. The Collection Rate captures advance payments made by customers, which can skew the average as some customers make advanced payments resulting in a value above 100%.
- This indicator is not yet readily available in CRM systems. It can be computed manually via data extractions (e.g. in excel) or via the use of specialist software (e.g. Prospect).
- This KPI may vary at different times of the year due to the seasonality of sales. Monthly measures of this KPI should also be compared on a year-over-year basis to remove any variations in the KPI caused by seasonal factors.

Benchmark values



Source: PAYGo Lab

Best practice

- Monitor proactively**
Set up an early warning system to identify customers at risk early on and set up processes to act on those swiftly, deploying local agents only if contact via call centre and SMS is not effective.
- Explain contractual obligations**
Ensure that agents properly explain what “pay as you go” means, including how many days customers are expected to pay every month, and that they are paying to own an asset, not for energy as a service. This can be done through role play during training or by managers checking their sales agents’ sales pitch.
- Go deeper with your analysis**
If you want to go deeper with your analysis, you can also measure this indicator:
- More frequently, by measuring the 30-day utilisation rate (i.e. after the first 30 paying days)
 - At the customer level, to identify customers for whom this ratio is below 65-70%. For those customers, assess if this is due to exceptional circumstances or if this is a “bad sale” to someone who cannot afford the product or did not understand their obligations. If you identify a bad sale reimburse part of the down-payment and repossess the product as early as possible.

- At cohort level, based on when the client became a customer, as an indicator of the quality of your customer selection and onboarding, and to predict future portfolio performance.

Compare with contract performance

This indicator has proven to be a very good predictor of a customer’s future repayment – but each company and even each product that a company sells will have different repayment curves¹. You can compute this KPI and draw your company’s own repayment curves at 30, 60 and 90 days, and/or at 50%, 100% and 150% of loan tenure. You can use the curves to compute the likely repayment rates from new cohorts based on their 60-day utilisation rates. Ultimately this will help you better predict the final value of your receivables.

More broadly, the following practices have proven to help improve PAYGo companies’ repayment rates.

Foster a credit culture

Make sure everyone in the organisation understands that making a sale is equivalent to lending money to the customer; and that if repayment is low, the organisation can lose money on a sale.

Ensure proper credit screening

Establish robust credit screening processes and tools to assess customer financial capacity, including third-party checks.

Decouple credit assessment and sales

A dedicated credit team member should conduct credit checks. The sales agent should not assess credit (although they can help gather data for the credit team).

Tie sales agent incentives to loan performance

Ensure sales agents understand how to pre-identify creditworthy customers and feel in charge of ensuring their clients pay on time, possibly tying a portion of variable compensation to their customers’ loan performance.

Own customer relationship

Create a customer relationship “owner” once a customer has been approved for credit provision. The owner could be the sales agent or an independent customer care officer. The owner should be incentivised to monitor repayments and provide excellent customer experience.

Increase down-payment

Include a high enough down-payment to validate the customer’s capacity to repay their loan. Low down-payments often increase the likelihood of customer default.

Understand reasons for default

Systematically collect data on the reasons for late payments and/or repossession (e.g. faulty product, affordability, over indebtedness). Identify if and where the process failed to enhance sales, credit assessment and customer care processes.

¹ Repayment curves show time along the x-axis (typically by month) and the product utilisation rate or collection rate on the y-axis

Related KPIs

KPI 10 Revenue per sales agent

Ideally the turnover per sales agent should only account for cash sales and receivables likely to be collected – which this indicator can help compute. A low percentage of used days during the first 60 days is an indicator that a customer will be at risk of non-payment.

KPI 20 Digitalisation indicator

Digitalising payment collection can increase collection rates.

Additional resources

Please refer to the additional resources at the end of this section (page 26) for supplementary readings on this KPI.

Case study

A customer purchased a new solar home system with a downpayment of \$10 paid on day 1. After an initial “free” period of 14 days, the customer must make weekly payments of \$5 for 52 weeks. The first “new” payment should thus be on day 15, and the first 60 paying days will be from day 15 to day 74 post purchase.

The customer’s next ten payments are due on day 15, 22, 29, 36, 43, 50, 57, 64, 71 and 78.

The customer actually paid:

Day 15: \$5 paid on time

Day 22: \$5 paid on time

Day 30: \$5 payment made with a one-day delay (on day 30 instead of day 29), meaning they had one day where they could not use the product on day 29. Their payment on day 30 will provide usage up to and including day 36.

Day 38: \$5 payment made with a one-day delay; the customer was unable to use the product on day 37. Their payment on day 38 will provide usage up to and including day 44.

Day 45: The customer makes an advance payment of \$25 for the next 5 weeks; this covers usage up to and including day 79. Their next payment will be due on day 80, which is the 66th paying day.

During the first 60 paying days, the customer did not pay for the product on two days. This client’s utilisation rate after 60 paying days (measured at day 74) is:

Utilisation rate = 58 days ÷ 60 days = 97%

Note that if we calculated the collection rate on day 74, it would have been over 100% as the client made a large payment in advance.

Additional resources

VALUE PROPOSITION

KPI 1: Net Promoter Score®

[60 Decibels Impact Performance Benchmarks](#),
60 Decibels, 2023

[Sistema.bio India increases their customer satisfaction by almost 40 percent](#),
60 Decibels, 2023

[Introducing the Net Promoter System](#),
Bain & Company, 2011

[LMD business diagnostic webinar](#),
GDC and Hystra, 2023

[Marketing Innovative Devices for the BoP](#),
Hystra, 2013

[PAYGo PERFORM Technical Guide](#),
CGAP, 2021

KPI 2: Unique selling proposition

[LMD business diagnostic webinar](#),
GDC and Hystra, 2023

[Mapping Customer Pains to Value Proposition](#),
Stanford, 2012

[Scaling irrigation for small-scale producers](#),
Hystra, 2024 (p 49)

KPI 3: Market segments

[Creating Inclusive Business “Unicorns”](#),
Hystra, 2021

KPI 4: Revenue streams

[Creating Inclusive Business “Unicorns”](#),
Hystra, 2021

KPI 6: Inclusivity ratio

[60 Decibels Impact Performance Benchmarks](#),
60 Decibels, 2024

[LMD business diagnostic webinar](#),
GDC, 2023

[Poverty Probability Index](#),
IPA, 2023

[Supporting last-mile women energy entrepreneurs: What works and what does not](#),
Energia, 2012

KPI 7: Product utilisation rate

[Helping Off-grid Companies Enhance Credit-Risk Management Practices: From PAYGo 1.0 to PAYGo 2.0](#),
USAID, 2023

[Consumer Protection Code](#), GOGLA

About Prospect, [introduction article](#) and [presentation](#), Access to energy institute, 2024

[PAYGo PERFORM](#), Data collection pilot, MFR, 2021

[PAYGo PERFORM Technical Guide](#), GOGLA, 2021

[Getting Repaid in Asset Finance](#), CGAP, 2021

[Simple and efficient metrics for pay-as-you-go companies](#),
EDFI, 2023

Sales & Marketing



Minimise untargeted marketing

KPI 8: Above-the-line marketing

Measure: Yearly

For last mile distributors, putting more of your marketing budget into targeted, localised activities is likely to produce better results than untargeted, mass media.

That’s because low-income customers often need to see the product for themselves to be convinced of its benefits. Investing in local marketing – such as demonstrations and door-to-door sales – is typically more effective when it comes to creating trust for risk-averse customers and thus generating sales. These types of targeted activities are called *below-the-line* marketing.

Conversely, *above-the-line* marketing is untargeted and primarily aims to raise brand awareness through use of channels such as national TV and radio, print media and outdoor advertising. Whilst useful for raising the profile of your business and products, it does not necessarily increase trust.

This KPI measures the amount of budget spent on above-the-line marketing costs as a proportion of sales revenue.



Calculation

Above-the-line marketing as a proportion of sales

=

Total above-the-line marketing costs during a year

Sales revenue from product sales in the same year + other revenues generated directly from the sale of those units

Caveats and clarifications

- The costs of below-the-line marketing and social media campaigns should not be included in the calculation.
- Other revenues include results-based financing and carbon financing.

Benchmark values



- Can be improved
- Good
- Best practice

Best practice

Limit above-the-line spend

Limit above-the-line marketing campaigns to local radio adverts, which can be particularly useful in helping potential customers understand where and when they can purchase a product that they have already seen during a demonstration or heard about from customers within their community.

Invest in below-the-line marketing

Below-the-line marketing such as demonstrations allow potential customers to verify the quality and benefits of the product for themselves, which is especially important for customers with little experience with the product or technology. In countries where social media are widely used by your target customers, leverage those as targeted marketing channels as well.

Identify key marketing channels

Identify not only the motivations for purchase (e.g. saving money, saving time, better customer service) but also the reasons for non-purchase (e.g. opposition from a family member, complexity of transporting the product home) and tailor marketing messages and channels to address these.

Identifying those barriers and preferred channels can be done via yearly surveys of customers and non-customers, possibly as part of those suggested in KPI 2: Unique selling proposition.

Related KPIs

KPI 2: Unique selling proposition

Marketing messages and channels should ideally be based on a good understanding of both unique selling points and barriers to purchase.

KPI 9: Market penetration

Above-the-line marketing campaigns might help increase adoption at a national level over the short-term but will do little to encourage group sales that deepen local penetration over time.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Reach every customer

KPI 9: Market penetration

Measure: Quarterly

The most difficult and costly sales are generally the first ones in a community because no one knows your company or products. So once you've got those first customers you should prioritise maximising sales in that same location before you expand into a new – and more costly – area.

Good marketers leverage early adopters to increase local penetration before moving to the next location. The market penetration KPI measures whether your company has maximised penetration in its core geographic areas. If you haven't, then it may be more cost effective to invest in generating sales where you operate now, rather than expand further afield.



Calculation

$$\text{Market penetration} = \frac{\text{Number of customers in your operating areas after two years}}{\text{Total number of eligible customers in operating areas}}$$

Operating areas are specific geographic locations where your sales agents work (e.g. villages).

Eligible customers are those who fit within your target customer criteria.

Caveats and clarifications

This KPI is suitable for sales of *durable goods* but not for *fast moving consumer goods (FMCG)*. It's also less relevant in more mature markets where competitors might have captured some of the market, making high penetration harder to achieve for a single company.

Benchmark values

Product price below \$20

Do not know
or under 30%

30-40%

Above 40%

Product price between \$20 and \$100

Do not know
or under 10%

10-30%




Above 30%

Product price above \$100

Do not know
or under 10%

10-20%

Above 20%

-  Can be improved
-  Good
-  Best practice

Benchmark values for marketing penetration depend on the level of competition your company faces in a location. The benchmark values shown here are for areas where you face lower levels of competition, and so market penetration levels should be higher.

Best practice

Leverage existing customers

Existing customers can be incentivised to become lead generators and identify groups of potential customers. In some instances they may collect payments on behalf of sales agents. Lead generators typically receive financial incentives of 2-3% of the end-user price.

Group sales

Where possible, sales agents should bring together groups of potential customers in one location (e.g. for demonstrations). Aggregating potential sales can unlock some economies of scale on sales agents' time and costs before expanding to new locations.

Support agents to increase penetration

Training, incentivising and supporting agents to return to a location a few weeks after selling to their first few customers helps to leverage word of mouth and attract the next wave of customers before competitors arrive.

Utilise client relationship management software

Investing in back-end infrastructure, such as client relationship management (CRM) software or a customer service team to identify and support lead generators, can bring additional sales through referrals or cross-selling.

Connect to the field

Ensure senior management spends time in the field each month so that they remain connected to the sales process and competitors. As a result, ideally, management should know where they stand on this benchmark value.

Related KPIs

KPI 1: Net Promoter Score

Satisfied or dissatisfied customers generate a positive or negative word of mouth that can impact local penetration.

KPI 8: Above-the-line marketing

Above-the-line marketing campaigns might help increase adoption at a national level over the short term, but they are unlikely to encourage group sales that deepen local penetration over time.

KPI 10: Revenue per sales agent

Agents grouping local sales are typically able to sell more in one go - thereby increasing the revenue per agent.

KPI 13: Sales agent churn

A long-standing agent can regularly go back to villages and increase penetration.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Improve performance

KPI 10: Revenue per sales agent

Measure: Quarterly

The job of a sales agent is to sell, and they must generate enough sales revenue to justify their compensation and cover overheads and other field-based costs. It's important to measure and compare how much revenue your agents generate individually and collectively.



Calculation

Revenue per full-time sales agent =

$$\frac{\text{Annual revenue from full-time sales agents}}{\text{Average number of full-time sales agents over the year}}$$

Revenue per part-time sales agent =

$$\frac{\text{Annual revenue from part-time sales agents} \div \text{Average number of part-time sales agents over the year}}{\text{Average proportion of workweek worked by part-time agents}}$$

Annual revenue from sales agents should include both sales and revenue generated directly from the sale of those units (e.g. *results-based financing* or carbon financing).

To calculate the average number of agents over the year, sum the number of agents who have been actively canvassing for leads or sales for each month of the year, and then divide this sum total by 12.

The average proportion of the workweek worked by part-time agents is relative to full-time agents. For example, if full-time agents work five days and part-time agents average two days per week, then the average proportion of the workweek worked by part-time agents will be 0.4 (i.e. $2 \div 5 = 0.4$).

Caveats and clarifications

- If your company sells products to independent entrepreneurs or retailers who then sell products on commission, use the end-user price to calculate yearly sales.
- When offering credit to customers, it is important to track the agents' portfolio quality alongside sales to ensure they are selling to credit-worthy customers.
- For business sustainability, it is important not to be overly reliant on subsidies such as results-based financing and carbon financing, which may not be reliable over the medium to long term.

Benchmark values

A last mile distributor of durable goods with a full-time sales force

Less than
\$15,000

\$15,000 to
\$20,000

Greater than
\$20,000

A last mile distributor with a part-time sales force or selling fast-moving consumer goods

Less than
\$3,000

\$3,000 to
10,000

Greater than
\$10,000

Can be improved

Good

Best practice

Best practice

Give candidates a taste of the job

Focus on recruiting only high potential sales agents. Run an efficient, good quality recruitment process that emphasises - and ideally enables candidates to test - the working conditions of the job (e.g. walking for 10 minutes outside with a backpack containing the products at a hot time of day). Include a requirement for new recruits to shadow high performing agents so that they understand the role and their responsibilities.

Review individual performance

Once you have calculated this KPI, analyse which individual agents are well above (by 25% or more) or well below (by 25% or more) the KPI set for your company. For those who are constantly more than 25% below average, consider whether they are worth the management costs they generate independently of sales.

Assess agent techniques

Regularly assess the sales techniques and routines of your best sales agents and encourage them to share their tips or write it down for others to learn from.

Utilise technology for training

Use a mobile application such as Beedeez or Edume to train agents. These apps use a gaming style for learning that help agents gain new skills whilst optimising their time.

Set agent-led sales targets

Help agents set their own sales targets based on how much they want to earn. Work backwards from this amount to calculate how many leads they will need to develop and what marketing efforts are needed to realise these targets.

Related KPIs

KPI 7: Product utilisation rate

Companies providing credit should always look at sales together with expected repayment to ensure agents are selecting credit-worthy customers.

KPI 11: Sales agent compensation

Strong sales performance should yield higher compensation for agents.

KPI 12: Sales agent cost ratio

The higher the sales per sales agent, the lower proportion of sales agent cost (assuming mostly fixed costs).

KPI 13: Sales agent churn

Sales agents who generate less revenue may become demotivated and leave.

KPI 14: Sales agent time efficiency

High revenue per agent tends to correlate with a high proportion of agent time spent interacting with customers.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Attract the best sales agents

KPI 11: Sales agent compensation

Measure: Yearly

If you want to retain your sales agents you'll need to pay them well, or you risk losing them to another business.

This KPI measures the competitiveness of the compensation you offer by calculating what the average sales agent receives in compensation each year.



Calculation

Average yearly full-time sales agent compensation

=

$$\frac{\text{Total annual compensation for all full-time agents}}{\text{Average number of full-time agents over the year}}$$

Average yearly part-time sales agent compensation
(in full-time equivalent)

=

$$\frac{\text{Total annual compensation for all part-time agents} \div \text{Average number of part-time agents over the year}}{\text{Average proportion of the workweek worked by part-time agents}}$$

Compensation should include fixed salary, commission-based salary, stipends (e.g. for transportation or communications) and the cost of non-financial compensation (e.g. health insurance).

The average proportion of the workweek worked by part-time agents is relative to full-time agents. For example, if full-time agents work five days and part-time agents average two days per week, then the average proportion of the workweek worked by part-time agents will be 0.4 (i.e. $2 \div 5 = 0.4$).

Caveats and clarifications

- The compensation levels indicated in the benchmark reflect what is generally needed to minimise agent churn - but compensation can vary widely between countries.
- Beyond the benchmark values, compare agent compensation with your competitors and non-competitors, as well as against the cost of living, to understand how competitive it is locally.




Benchmark values

Full-time sales force and durable goods



Part-time sales force or fast-moving consumer goods



-  Can be improved
-  Good
-  Best practice

Best practice

Set effective compensation

Compensation can take different forms and be linked to different objectives. In any case, four rules apply for designing a cost-effective incentive plan:

1. Assess the compensation offered by your competitors – particularly ones you have lost agents to
2. Set criteria for variable financial incentives that match the company’s long-term targets
3. Make it simple and transparent enough for sales agents to understand their compensation
4. Look for non-financial or in-kind incentives that cost the company less than their value to agents (e.g. airtime, health insurance) or support the selling process (e.g. branded t-shirts, caps, umbrellas)

Related KPIs

KPI 12: Sales agent cost ratio

The amount of compensation, irrespective of whether it is within recommended benchmarks, should still represent a sustainable percentage of the revenues an agent generates.

KPI 13: Sales agent churn

Low agent compensation can be a key reason for churn.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Link compensation to objectives

The table below presents examples of sales agent objectives and possible incentives.

Objective		Possible sales force incentive
Ensure your sales force performs well beyond sales	Ensure custmer satisfaction	Index part of sales force commission to Net Promoter Score
	Perform consistently	Index part of sales force commission to consistency of sales over several months
	Stay for at least a year	Index part of sales force commission to completion of year (resulting in an end-of-year bonus)
	Give credit to customers with capacity to pay	Index part of sales force commission to early on-time repayment rates
Overcome learning curve with low sales		Provide fixed salary for the first few months, equal to commissions on minimum sales required to be hired (then replace fixed salary by commissions)
Overcome attendance issues		Provide a (small) daily stipend to contribute to food, transport etc. against proof that agent is working e.g. geolocalisation at place of customers, photo of demonstration event, etc.
Overcome long-term retention issues		Provide different levels of incentives for different volumes of sales (e.g. bronze, silver, gold levels) potentially combined with good performance on other KPIs (e.g. customer satisfaction or consistent on-time reporting of sales)

Offer the right compensation

KPI 12: Sales agent cost ratio

Measure: Yearly

Every sales agent needs to generate enough revenue to cover their compensation and support the profitability and development of the organisation.

Compensation should be a proportion of the revenue generated by each sales agent but getting it right can be tricky.

Compensation that's too high will be unsustainable and your company may struggle to stay profitable. But if it is too low your sales agents may not be incentivised to meet targets – and ultimately may quit for higher paying roles elsewhere.

This KPI can be used to verify that the compensation plan you have designed does not eat up too much of your gross margin and leaves enough space for you to cover other costs.



Calculation

$$\text{Sales agent cost ratio} = \frac{\text{Average agent compensation per year}}{\text{Average revenue generated per agent per year}}$$

Compensation should include fixed salary, variable/ commission-based salary, stipends (e.g. for transportation or communication) and the cost of non-financial compensation (e.g. health insurance).

Average revenue from sales agents should include both sales and revenue generated directly from the sale of those units (e.g. results-based financing or carbon financing).

Caveats and clarifications

This KPI should be analysed together with the related KPIs.

Benchmark values

Durable goods



Fast-moving consumer goods



- Can be improved
- Good
- Best practice

Best practice

Focus on related KPIs

The sales agent cost ratio KPI is made up of two other KPIs: sales agent compensation and revenue per sales agent. To improve on this KPI, you should focus on the best practice under each of them.

Related KPIs

KPI 11: Sales agent compensation

Optimise sales agent compensation to keep it both competitive and financially sustainable for your organisation.

KPI 10: Revenue per sales agent

Maximise sales per full-time equivalent sales agent (i.e. maximise sales productivity).

KPI 15: Cost of field force

Your agent costs should be the largest share of your field costs.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Retain sales agents

KPI 13: Sales agent churn

Measure: Yearly

Recruiting new sales agents costs your company valuable time and money. Plus, every day you have a vacant role you're missing out on potential sales revenue. That's why retaining high quality sales agents is essential to a successful company.

Sales agent churn captures the proportion of sales agents who leave your company per year.

Measuring this KPI is essential because high churn typically results in high – and not always fully accounted for – HR, recruitment and training costs. And as a result, this might affect your strategic growth plans.

You can avoid high churn through improved recruitment, hiring and training processes, as well as setting the right level of compensation.



Calculation

$$\text{Sales agent churn} = \frac{\text{Number of sales agents who left the company during the year}}{\text{Average number of active sales agents during the year}}$$

To calculate the average number of agents over the year, sum the number of active agents (i.e. who made at least one sale) for each month of the year, and then divide the total by 12.

Caveats and clarifications

Losing agents because of poor performance shortly after recruitment, and before the company has invested too much in training them, can be viewed as a positive outcome but creates an artificially high churn. Ideally, only count sales agents that have been active for a few months and have completed training. And of course, don't forget to review your recruitment processes.

Benchmark values



- Can be improved
- Good
- Best practice

Best practice

- Adjust compensation for different products**
Provide competitive compensation with a partly fixed salary if selling complex or expensive products (e.g. solar water pumps).
- Provide effective management**
Maintain close agent groups. (See KPI 14)
- Introduce non-monetary rewards**
Non-monetary aspects such as team culture, career progression opportunities, awards and recognition can also contribute to retention. Keep in mind that non-monetary awards are less effective at minimising churn compared to competitive compensation and effective management.
- Do exit interviews**
Conduct exit interviews to understand why people leave your company. Take note of when agents leave because this can help inform you of which strategy to use to reduce churn.
- Collect agent Net Promoter Scores**
Conduct a survey of your agents and ask them if they would recommend being an agent to their peers.

Related KPIs

- KPI 9: Market penetration**
Long-standing agents can regularly go back to the same locations and increase penetration.
- KPI 11: Sales agent compensation**
Low agent compensation can be a reason for high churn.
- KPI 14: Sales agent per manager**
Too little support from managers is another reason for high churn.
- KPI 15: Cost of field force**
High churn results in high management costs and low agents sales (as new recruits barely get through their learning curve before they leave) and will typically increase significantly the cost of the field force as a percentage of revenues.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

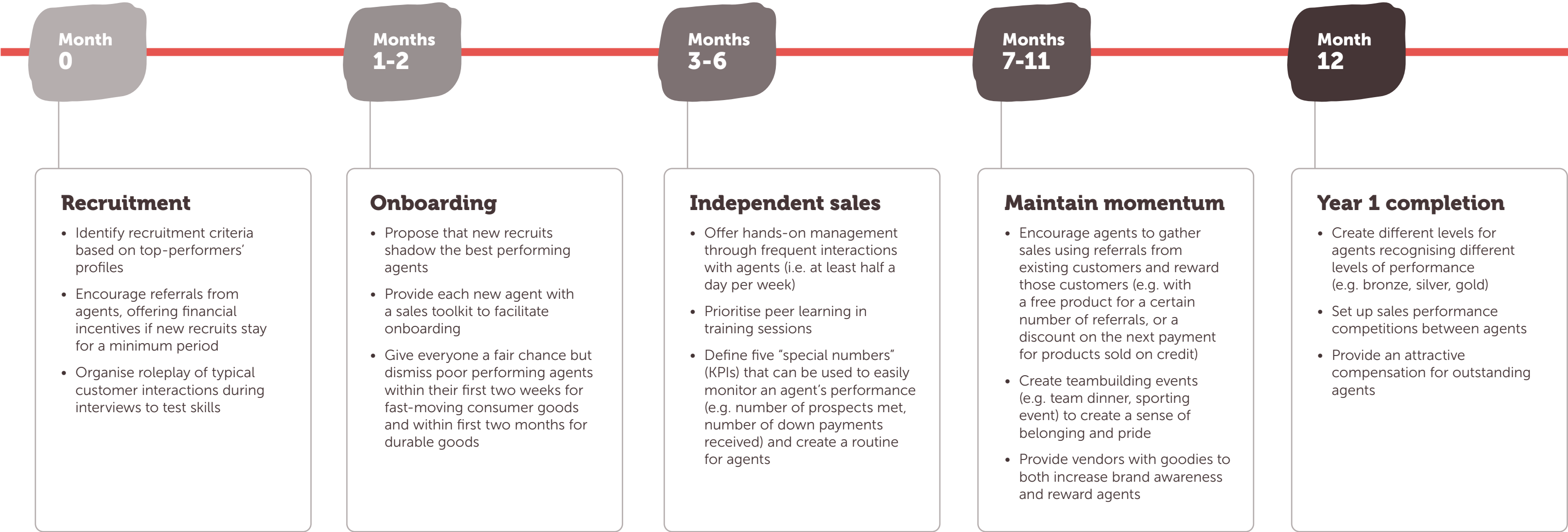
Links between sales agent churn and company policy

	Compenstation					
	Competitive*	Partially fixed	Close mgmt	Career oppotunities	Awards and events	Field sales force yearly churn**
Company 1	✓	✓	✓	✓	✓	<div></div> 7%
Company 2	✓	✓	✓	✗	✗	<div></div> 8%
Company 3	✓	✓	✓	✓	✗	<div></div> 10%
Company 4	✓	✗	✓	✓	✓	<div></div> 20%
Company 5	✓	✗	✓	✗	✗	<div></div> 25%
Company 6	✓	✗	✓	✓	✓	<div></div> 30%
Company 7	✓	✗	✗	✓	✓	<div></div> 30%
Company 8	✓	✗	✓	✓	✓	<div></div> 40%
Company 9	✓	✗	✓	✓	✓	<div></div> 40%
Company 10	✗	✗	✗	✗	✗	<div></div> 60%
Company 11	✗	✗	✗	✓	✓	<div></div> 60%
Company 12	✓	✗	✓	✓	✓	<div></div> 80%

*Competitive compensation compared to other local opportunities; **Churn does not include management.
Source: Hystra analysis

Strategies to reduce agent churn

The diagram below sets out good practices to implement depending on when most of the churn occurs:



Sources: Hystra analysis; *Sell Well, Do Good: DQ Selling for Social Enterprises* by Roy Whitten and Scott Roy

Provide effective supervision

KPI 14: Sales agents per manager

Measure: Yearly

What is the right number of managers for the size of your sales force? Getting the balance right is a crucial part of your sales strategy.

If you have too many managers your fixed sales costs may become unsustainable. Conversely, with too few managers per sales agent, your sales force will not get the support and supervision needed.

This KPI measures the average number of sales agents per manager across your sales team.



Calculation

$$\text{Sales agents per manager} = \frac{\text{Average number of active agents during the year}}{\text{Average number of managers in the same year}}$$

To calculate the average number of agents over the year, sum the number of agents who have been actively canvassing for leads or sales for each month of the year, and then divide this sum total by 12.

Caveats and clarifications

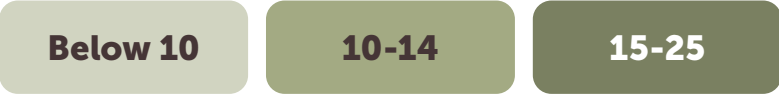
- A resident or super-customer that aggregates sales for an agent does not count as a sales agent. A sales agent can have as many aggregators as they like.
- Using a part-time sales force does not increase the benchmark value because agents still need the same support to be as effective as possible.
- If you have senior or very experienced sales agents, you could justify having more agents per manager.

Benchmark values

Durable goods



Fast-moving consumer goods



- Can be improved
- Good
- Best practice

Best practice

Adjust by product

If your company sells durable goods, then eight to 10 sales agents per manager ensures that managers can spend up to half a day each week with each agent. Sales agents that sell *fast-moving consumer goods* typically need less support in selling and can be seen fortnightly by their manager.

Mandate weekly meetings

A weekly meeting between a manager and their sales team (either to start or end the week) can really help create positive group dynamics. Ideally taking place in person, these meetings can build collective accountability for sales targets, good customer service and adherence to important processes and procedures.

Standardise manager routine

Standardising the routine the sales managers should follow can help them deliver structured support to their team.

Related KPIs

KPI 13: Sales agent churn

Too little support from managers is a key reason for high churn.

KPI 15: Cost of field force

The support provided by managers to sales agents must offset their cost in the field force.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Example of a sales manager’s daily routine

Time	Action
8.30am	Calls to some agents
9am – 12pm	Spend half day with an agent, including 1-2-1 training
12pm – 1pm	Lunch
1pm – 1.30pm	WhatsApp check on agents’ progress
1.30pm – 4.30pm	Spend half day with an agent, including 1-2-1 training
4.30pm – 5pm	End-of-day call with all agents

Cover field force costs

KPI 15: Cost of field force

Measure: Monthly

Sales agents rarely work alone. They are usually part of a wider team of staff – known as a *field force* – that have interactions with customers and don't usually work at a head office location. The field force includes technicians, sales agents, sales force managers and regional sales managers. It may also include call centre staff if they interact directly with customers.

Understanding the costs of your entire field force – beyond just your sales agents – is an important step in making sure your gross margin is high enough to cover at least your operational costs. Ideally these field force costs should be much lower than your gross margin so that the remaining margin can be used to cover other local costs and overheads.

Like all expenses you'll want to keep the cost of your field force low, but the important thing is to measure this cost compared to the revenue brought in by your active sales agents.



Calculation

Cost of field force =

Average monthly compensation of sales agents, sales managers and all other field force staff

Average monthly revenues generated by all active sales agents

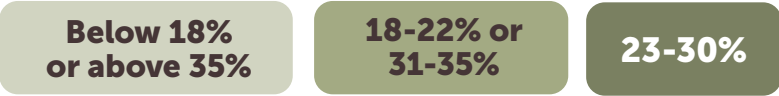
For ease of calculation, you can also compute this KPI by dividing the 'total compensation of all field force staff for the year' by 'sales revenue at end-user price + other revenues generated directly from the sale of those units (including results-based financing and carbon financing)'.

Benchmark values

Durable goods



Fast-moving consumer goods



- Can be improved
- Good
- Best practice

Best practice

Build a professional sales force

A professional sales force is one that can deliver high sales per agent and has a low churn rate. One of the best ways to achieve this (particularly for companies that sell complex products or products with long lead times) is to have a full-time, closely managed sales force, and for those selling products with long lead times, with a partly fixed stipend as well. This usually results in lower overall field force costs compared to companies with a part-time, loosely managed sales force working on commission only.

Related KPIs

KPI 11: Sales agent compensation

Sales agent compensation is used in calculating the cost of field force.

KPI12: Sales agent cost ratio

This related KPI tracks similar data but only includes sales agents’ costs. By comparing the two KPIs you can get a better understanding of your costs.

KPI 14: Sales agents per manager

If you have too many managers then this will result in a higher field force cost. The support provided by managers to sales agents must offset their cost in the field. Conversely, if you have too few managers, this may result in agents selling too little to cover their and their manager’s costs.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Optimise sales agents' time

KPI 16: Sales agent time efficiency

Measure: Quarterly

The more time your sales agents spend with customers, the more leads and sales they are likely to generate. But this can only be achieved if they can reduce the time they spend travelling between customers and doing administrative tasks.

Understanding how your sales agents spend their time is a good indicator of how focused an individual agent is and how efficiently they use their time.

Of course, the best use of sale agents' time is not just on generating sales. Training and team building activities can contribute to a higher performing sales force. And time spent with customers on after-sales service can build trust for future purchases.



Calculation

Sales agent time efficiency =

Total hours per week spent on lead generation, sales, after-sales service, training and team building

Total hours worked per week by a sales agent

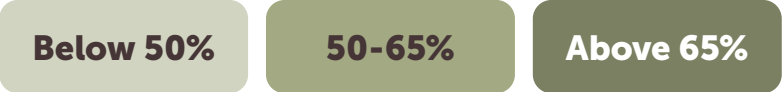
Hours spent on sales should not include time spent on administrative tasks or transportation.

Caveats and clarifications

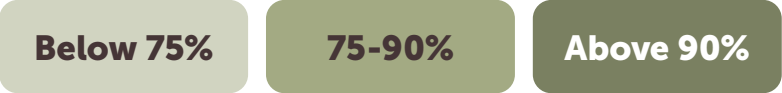
This KPI depends on whether sales agents are part-time or full-time. Full-time agents typically need to travel more to find customers (as they saturate their area) and as such will spend a lesser share of their working time in front of their customers. Part-time agents tend to sell in their communities and spend less time travelling.

Benchmark values

Full-time sales agents



Part-time sales agents



- Can be improved
- Good
- Best practice

Best practice

Develop agent routines

Support agents to define their daily routines and transport routes to optimise customer-facing time.

Leverage current customers

Leveraging existing customers to become lead generators can be a cost-effective way to generate more sales. But you'll need to invest in an adequate backend to support them (e.g. register customer phone numbers for the call centre to reach them).

Simplify agent KPIs

Simplify sales agents' reports to five daily KPIs covering both inputs (e.g. number of people met) and outputs (e.g. number of firm leads, number of sales closed, cash collected).

Improve logistics and operational tools

Provide incentives to support faster travel. For example, consider facilitating loans to your best agents so they can purchase a vehicle, or provide shared vehicles to agents who have pre-booked large volumes of sales. Also, providing operational tools such as a task management system can reduce time spent on admin tasks.

Related KPIs

KPI 10: Revenue per sales agent

The more time sales agents spend on customer facing activities, the more sales they are likely to generate.

KPI 20: Digitalisation indicator

Digitalisation of certain administration tasks can optimise sales agents' time spent on customer-facing activities.

Additional resources

Please refer to the additional resources at the end of this section (page 51) for supplementary readings on this KPI.

Additional resources

SALES & MARKETING

KPI 8: Above-the-line marketing

[Marketing Innovative Devices for the BoP](#), Hystra, 2013

KPI 9: Market penetration

[Creating Sustainable Last-Mile Distribution for Beneficial Products: Two Network Archetypes \(and How They Can Scale Up\)](#), Hystra via NextBillion, 2021

[Marketing Innovative Devices for the BoP](#), Hystra, 2013

KPI 10: Revenue per sales agent

[Sell Well Do Good](#), Roy Whitten and Scott Roy, 2021

[Leveraging direct sales forces for impact at the last 100 meters](#), Hystra, 2022

[Creating Sustainable Last-Mile Distribution for Beneficial Products: Two Network Archetypes \(and How They Can Scale Up\)](#), Hystra via NextBillion, 2021

[Last Mile Solutions for Low-Income Customers](#), Shell Foundation, 2018

KPI 11: Sales agent compensation

[Sell Well Do Good](#), Roy Whitten and Scott Roy, 2021

[Leveraging direct sales forces for impact at the last 100 meters](#), Hystra, 2022

KPI 12: Sales agent cost ratio

[Leveraging direct sales force for impact at the last 100 meters](#), Hystra, 2022

[Women sales force: an impactful channel for health-related products?](#), Hystra, 2022

[Agent Models and Management: The Key to Good Consumer Protection and Credit Risk Management](#), GOGLA, 2023

KPI 13: Sales agent churn

[Leveraging direct sales forces for impact at the last 100 meter](#), Hystra, 2022

[Best Practices for BoP Door-to-Door Distribution](#), MIT Practical Impact Alliance, 2015

[Marketing Innovative Devices for the BoP](#), Hystra, 2013

[Sell Well Do Good](#), Roy Whitten and Scott Roy, 2021

[Agent Models and Management: The Key to Good Consumer Protection and Credit Risk Management](#), GOGLA, 2023

KPI 14: Sales agents per manager

[Marketing Innovative Devices for the BoP](#), Hystra, 2013

[Sell Well Do Good](#), Roy Whitten and Scott Roy, 2021

[Agent Models and Management: The Key to Good Consumer Protection and Credit Risk Management](#), GOGLA, 2023

KPI 15: Cost of field force

[Leveraging Direct Sales Force for Impact at the Last 100 Meters](#), Hystra, 2022

KPI 16: Sales agent time efficiency

[Marketing Innovative Devices for the BoP](#), Hystra, 2013

[Sell Well Do Good](#), Roy Whitten and Scott Roy, 2021



Backend Infrastructure & Overheads

Reduce after-sales servicing costs

KPI 17: Product servicing rate

Measure: Quarterly

Responding to customers queries, dealing with product defects, and performing repairs under warranty all add to your costs. Tracking each of these individual after-sales costs can help your company understand where you need to make improvements.

Some changes may be more obvious than others. Poor quality products may have common defects or components that simply don't last as long. Other times it may be that customers don't know how to use the product properly or replace simple consumables like batteries or fuses.

The product servicing rate KPI measures the number of servicing issues your company deals with, compared to the number of products you sell. It is a good indicator of the quality of the products sold, how well sales agents have explained how to use the product, and how expensive it will be to provide after-sales service.



Calculation

Product servicing rate =

Number of products under warranty that required maintenance or after-sales service over past two years

Number of products sold that currently have outstanding warranty periods

Include any contact by a customer on any matter requiring customer support or after-sales service.

Caveats and clarifications

- Different product types will require different levels of after-sales service. Benchmark values need to be based on product type.
- This KPI focuses on identifying technical faults within the warranty period. 60 Decibels, an impact measurement organisation, uses a metric called the customer challenge rate to capture data on customers that have experienced a challenge. It covers four main categories: technical fault, mismatched expectations, misuse, and external factors. If you have access to 60 Decibels services, you may wish to use their metric in place of this KPI.

Benchmark values

- Not measured
- Dependent on product type
- Can be improved
- Best practice

Best practice

Track issue type

Develop a log to track the type and cause of issue reported by customers, such as:

- Product defect: Record the percentage of defective products so you can negotiate additional stocks with the manufacturer and ensure they resolve the defect.
- Improper usage: Consider developing training materials for sales agents to demonstrate to their customers how to use the product.
- Basic maintenance: Consider conducting customer group demonstrations on how to “self-repair” the most common issues.

Be proactive

For large or complex products which may require more customer support, ensure customers can use the product correctly from the start. Set up a proactive after-sales service to answer any further questions (e.g. include three after-sales support calls or visits in the price of the product; conduct calls proactively - don’t wait for your customers to declare an issue).

Related KPIs

KPI 1: Net Promoter Score

Generally, the more servicing a product needs, the less happy your customers will be.

KPI 16: Sales agent time efficiency

Training agents on how to explain to customers the use, functionality and maintenance of a product helps reduce the need for after-sales service.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Minimise inventory losses

KPI 18: Stock loss

Measure: Quarterly

Stock can be written-off for a variety of reasons: damaged goods, theft, spoilage, poor warehousing, and obsolete products. Taking action to keep losses to a minimum is central to effective inventory management.

The stock loss KPI measures the value of written-off inventory as a proportion of the value of your total inventory.

The first step for many companies is to start tracking this KPI, and then to develop best practice processes that keep it as low as possible for your product type.



Calculation

$$\text{Stock loss} = \frac{\text{Value of inventory written-off during a quarter}}{\text{Average value of inventory during the same quarter}}$$

The value of inventory written-off is the difference between the original cost of inventory and the amount which can be obtained by selling off or disposing of the inventory. If the inventory has no remaining value because it cannot be sold, the write off amount will be the full product cost.

Markdowns are price reductions on products that have not sold at their initial price. They may be necessary to ensure that inventory is sold and does not become obsolete.

All inventory values should be calculated at *cost of goods sold*.

Caveats and clarifications

Include write-offs due to the following reasons:

- Theft by shippers or employees
- Spoilage due to short shelf life
- Damage due to inadequate storage and handling
- Obsolete products (often for technology products with high market values that get replaced by next generation products)

Benchmark values

Non-perishable fast-moving consumer goods

Not measured

Under 1% (losses at warehouse level)

Durable goods

Not measured

Dependent on product type*

Can be improved

Best practice

*Very few companies selling durable goods are currently measuring this KPI, hence the lack of benchmark value.

Best practice

Monitor reasons for write-offs

Track the reasons for write-offs, including sales demand, markdown rates, improper storage and theft. You could consider phasing out certain products.

Use inventory management software

Use software tools to keep track of your inventory, including defects, write-offs and stock levels.

Check deliveries

Ensure proper checks of inventory upon delivery to identify defects or non-compliance early on.

Ensure appropriate storage

Measures to improve storage include keeping inventory across multiple sites, implementing dual control storage, using a *bonded warehouse*, ensuring physical sign-offs to release products, and organising storage to ensure a systematic ‘first in first out’ order of shipping for products stored in the warehouse.

Make workers aware of losses

Relevant workers should be aware of inventory write-offs and their causes. You can also tie incentives or bonuses to low stock loss rates.

Related KPIs

KPI 20: Digitalisation indicator

Inventory procurement and agent inventory management are among the 15 key processes recommended to be digitalised.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Manage overheads

KPI 19: Overhead ratio

Measure: Yearly

Overheads are non-field level costs such as head office staff, IT, recruitment, external training, fundraising, impact monitoring, and any other backend functions.

If your company does not invest enough in its overheads, it will not have the capabilities to grow quickly. On the other hand, if your company invests too much, it might overburden your profit and loss statement and make profitability challenging.

The overhead ratio KPI is a good indicator of how efficiently you deploy your administrative and managerial capacity. Tracking the cost of your overheads as a proportion of your revenue each year will help you strike the right balance between being able to grow your business and keep it lean.



Calculation

Overhead ratio =

Yearly overhead costs

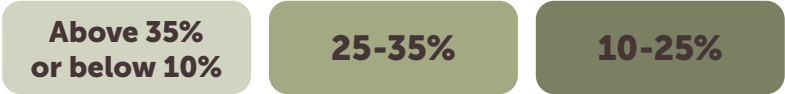
Sales revenue from product sales over the year + other revenues generated directly from the sale of those units

Caveats and clarifications

- Overhead costs are the *selling, general and administrative expenses (SG&A)*, excluding field-level costs such as regional managers, sales managers, sales agents and sales-related expenses.
- Call centres interacting directly with customers (e.g. for credit assessments, lead generation and after-sales support) should be counted in field costs rather than in overheads.
- This KPI value depends on the company's business model and growth trajectory.

Benchmark values

Fast-growing



Stable



- Can be improved
- Good
- Best practice

Best practice

Balance growth needs

While growing, it is important to keep a lean business model and balance increasing overhead costs with using existing resources. Conduct a resource assessment to determine which new functions or expenses are critical to your strategic growth targets.

Conduct annual overhead reviews

Conduct a review of each overhead cost each year to determine whether you can be more efficient with resources.

Focus on financial sustainability

Non-profits focused on serving customers living in extreme poverty may have overhead costs that exceed sales revenue. If these organisations want to move to a more financially sustainable model, they may require a significant restructure to reach the benchmark values shown here.

Related KPIs

KPI 20: Digitalisation indicator

Increased digitalisation may increase IT-related overheads.

KPI 21: CEO support system

While investing in experienced and qualified head office staff will allow the CEO to better execute on strategic goals, it is also likely to increase overheads.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Case study:
Sun Corp

In 2023, Sun Corp, a (fictional) company distributing solar home systems, had total revenues of \$1,200,000 and reported a gross profit of \$420,000. The SG&A expenses from their income statement totalled \$610,000. (See below)

Sun Corp Income Statement 2023

Revenue	\$1,200,000
Cost of goods sold	\$780,000
Gross profit	\$420,000
SG&A	\$610,000
Salaries for leadership and administrative staff	\$250,000
Salaries for sales staff	\$200,000
Office rent	\$50,000
Utilities	\$10,000
Advertising	\$40,000
Office supplies	\$5,000
Travel for sales team	\$25,000
Fundraising expense	\$20,000
Depreciation on office equipment	\$10,000
Operating profit	-\$190,000

In 2023, Sun Corp, a company distributing solar home systems, had total revenues of \$1,200,000 and reported a gross profit of \$420,000. The SG&A expenses from their income statement totalled \$610,000.

The CEO of Sun Corp asked the CFO to calculate the overhead costs for same year. To achieve this, the CFO subtracted costs from the SG&A that were for field activities rather than head office operations. The combined field activity-related expenses totalled \$265,000.

Salaries for sales staff	\$200,000
Advertising	\$40,000
Travel for sales team	\$25,000
Total field expenses	\$265,000

Sun Corp’s total overhead costs were \$345,000, representing 29% of the company’s 2023 revenue.

Salaries for leadership and administrative staff	\$250,000
Office rent	\$50,000
Utilities	\$10,000
Office supplies	\$5,000
Fundraising expense	\$20,000
Depreciation on office equipment	\$10,000
Total overhead costs	\$345,000

Sun Corp is considered a fast-growing company and their KPI benchmark performance is considered Good.

Leverage digital solutions

KPI 20: Digitalisation indicator

Measure: Yearly

Digitalisation is the transformation of manual processes into digital process using new technology. The digitalisation indicator is a relatively simple KPI that provides a count of how many of your business functions utilise digital solutions. It also helps you see what functions your company could digitalise in future.

Going digital can bring valuable efficiencies to business functions, but these can only be realised by selecting the right ones for your business model and deploying them well across your teams.

Most companies already routinely record data in a digital format. If you don't, then your first step will often be to digitise your data (i.e. input the data into a computer using relevant software) before digitalising a process.

Calculation

Using the table below, count the number of functions that are digitalised within your company.

Business intelligence/analysis and reporting on performance	Market and customer research	HR and payroll	Customer finance solutions	Ordering, invoicing, and e-commerce
Financial accounting	Inventory procurement and management	Remote field team training	Customer acquisition, onboarding, and credit scoring	Payment collection and mobile money integration
Portfolio health and credit risk monitoring	Agent stock management	Remote field/agent performance management	Marketing and mass communications e.g. bulk SMS	After-sales support management

These 15 functions are from [Digital transformation to support last mile distribution: Overcoming barriers together](#), Energy Catalyst.

Caveats and clarifications

- Smaller or younger companies should digitalise once the key processes and workflows have been clarified on paper.
- Before you digitalise a business process, ensure that all the procedures, workflows, and role responsibilities involved are clear to all those involved.

Benchmark values



- Can be improved
- Good
- Best practice

Best practice

Streamline workflows
Streamline all workflows prior to the digitalisation of the process to ensure that only the most suitable functions are digitalised, and efficiency benefits override costs. It is important to consider not just technology costs but also the change management time required for tools to deliver value.

Research digital solutions
The Global Distributors Collective [digital service catalogue](#) is a great starting point for last mile distributors who want to find and compare peer-reviewed digital solutions and service providers. You can also contact specialised software brokers such as Enable Digital or attend matchmaking events to meet digital service providers.

Train staff in digital solutions
If you want to ensure that staff utilise digital solutions correctly and efficiently then you’ll need to provide training on the digital software your company adopts.

Aim for full digitalisation
When calculating this KPI consider which processes are partially digitalised and which still rely on manual processes to be completed. Think about what changes would be necessary to fully digitalise the process.

Analyse collected data
Ensure dedicated team members are responsible for data analysis from digitalised work streams and leverage this to assess performance regularly via a few well-defined metrics.

Related KPIs

KPI 10: Revenue per sales agent

Digital solutions can help sales agents speed up the sales process and dedicate more time to selling, resulting in increased sales.

KPI 16: Sales agent time efficiency

Digital solutions enable agents to optimise their working hours and spend more time selling to customers.

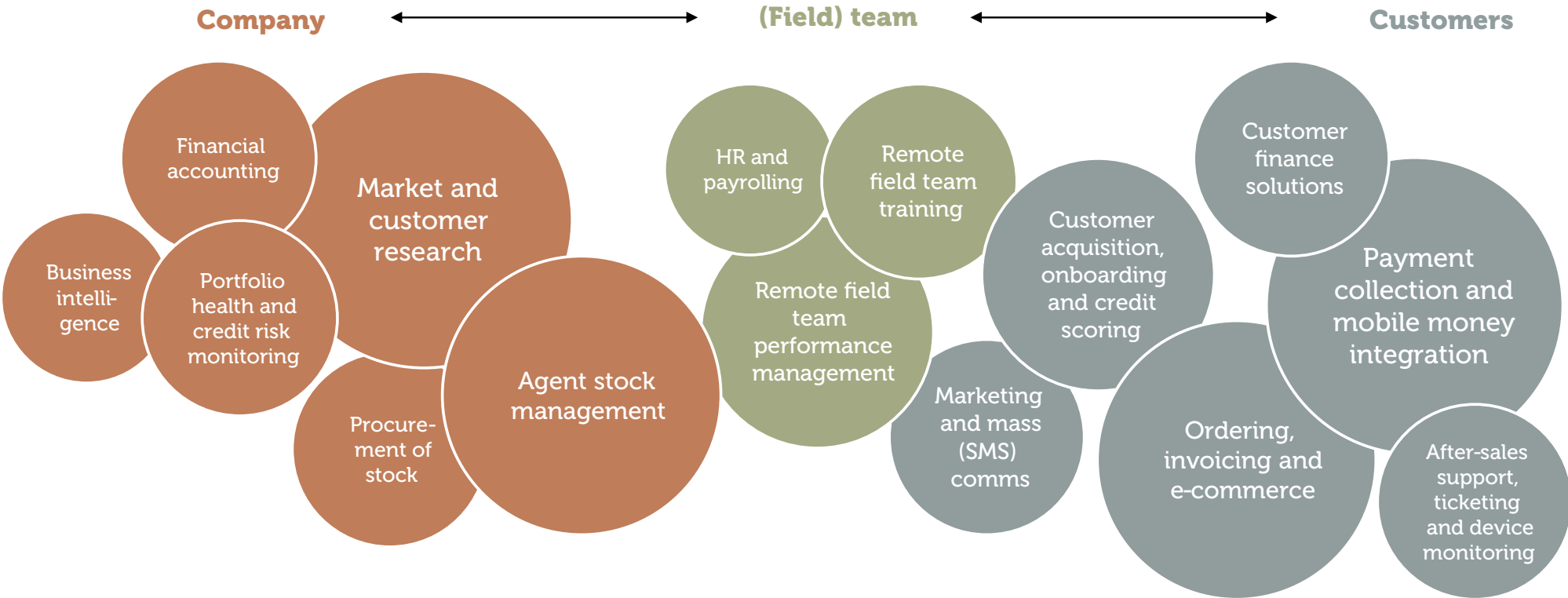
KPI 19: Overhead ratio

The costs of digitalisation are part of your company’s overheads and may increase the overhead ratio.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

15 most frequently digitalised processes in the last mile distribution sector



The size of each circle reflects how often each function was mentioned in the survey among last mile distributors when they were asked: What do you use digital solutions for currently?

Source: Survey with 28 Global Distributors Collective members (last mile distributors) to evaluate their use of digital solutions

Source: Digital transformation to support last mile distribution: Overcoming barriers together, Energy Catalyst

Diversify CEO support

KPI 21: CEO support system

Measure: Yearly

The CEO of a company should not work in isolation, but instead draw on the insight and experience of a range of different people, both internally and externally.

Ensuring the company leader has a diverse support system in place can improve decision-making as well as the overall execution of the company’s strategic goals. This is also important to avoid the feeling of isolation that CEOs of social businesses can experience, which can lead to burn out.

Variety is the key measure. Beyond senior management and a board of directors, the CEO should regularly engage with a range of specialists, coaches and peers. Taking this approach can open new business opportunities and ensure sustainable growth.

Calculation

There are broadly five categories of people that a business leader can draw on for support:

- **Senior management:** C-levels, key employees
- **Coaches:** mentors, incubators, investors, network
- **Board:** board of directors, advisory council, investors
- **Peers:** other entrepreneurs, network
- **Specialists:** advisors on regulations, technology, sales, HR, strategy and other specialist topics




For the CEO support system KPI, simply count the number of different categories of people that your CEO regularly consults with on strategic matters.

Caveats and clarifications

Leaders should generally try to get the perspectives of at least two different categories of people. They should aim to capture both internal and external points of view, while also leveraging individual expertise.

Benchmark values



-  Can be improved
-  Good
-  Best practice

Best practice

Delegate authority

Responsibilities and decision-making should flow down to operational teams. Clear delegation and process monitoring can ensure accountability and transparency.

Related KPIs

KPI 19: Overhead ratio

Investing in experienced and qualified head office staff and having a board of directors allows the CEO to discuss strategic matters, but it will increase overheads.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Convert inventory to cash

KPI 22: Cash conversion cycle

Measure: Yearly, or more frequently

The *cash conversion cycle* (CCC) measures the number of days between paying your supplier for a finished product and receiving cash from your customer. A company's operating capital generates no value, so the cash conversion cycle needs to be as short as possible while minimising the risk of *stockouts*. If the cycle is too long it may reduce overall growth.

Excess inventory results in high *carrying costs* and low capital availability. On the other hand, if your inventory is too low you run the risk of running out of stock. Getting the balance right is about effectively managing your working capital.

The cash conversion cycle KPI is used to assess working capital management and is a critical metric to monitor for financing.



Calculation

Cash conversion cycle (CCC) = Days sales outstanding (DSO) + Days of inventory outstanding (DIO) – Days payable outstanding (DPO)

Days sales outstanding (DSO) is the number of days, on average, it takes a company to collect its *accounts receivable*.

DSO = (Average accounts receivable over the year ÷ Total sales made during the year (do not include other revenue generated from the sale of those units)) x 365 days

Days of inventory outstanding (DIO) is the number of days, on average, it takes a company to turn its inventory into sales.

DIO = (Average inventory over the year ÷ Total cost of goods sold during the year) x 365 days

Days payable outstanding (DPO) is the number of days, on average, it takes a company to pay back its *accounts payable*.

DPO = (Average accounts payable over the year ÷ Total cost of goods sold over during the year) x 365 days

Caveats and clarifications

- This KPI is very dependent on industry. Benchmark values shown here only apply to distribution businesses, not to manufacturing businesses.
- The inventory value is calculated at *cost of goods sold*.
- The time period for calculations is one year, however, you could use a different fixed time period to calculate your cash conversion cycle. Note that the formulas for DSO, DIO and DPO will need to be multiplied by the number of days in your chosen time period (in replacement of the 365 days indicated above).
- Beyond one year, the activity is considered to be a lending activity as defined by the International Financial Reporting Standards (IFRS) and is no longer a working capital issue but relates to the company’s lending book. If you offer customers a *loan tenure* of less than 12 months, it may be considered accounts payable, however this metric is not designed to measure the quality of a credit portfolio.

Benchmark values

Fast-moving consumer goods



Durable goods without financing



Durable goods with financing, if the loan tenure is less than one year



- Can be improved
- Good
- Best practice

Best practice

Continuously track your cash conversion cycle

Review how working capital is being used, track the three metrics required to calculate the cash conversion cycle (i.e. DSO, DIO and DPO), and get continuous feedback from the field to identify breakdowns or bottlenecks in inventory, supply chain or collections management.

Identify inefficiencies

To find inefficiencies, periodically ask yourself these questions:

- Am I holding the right volume and type of stock, (overall and in specific locations)?
- Are there shortages or surpluses, and if so, why? Am I missing sales, and if so, why?
- Which bottlenecks occur most frequently?
- Am I targeting the right customers with the right customer financing offer?
- Does cash circulate smoothly or is there friction? Is cash sometimes difficult to get back, or does it take more time to receive than it should?

Know your carrying costs

Carrying costs are the expenses a company incurs for holding inventory in stock. A business can pay a variety of carrying costs, including taxes, insurance, employee costs, depreciation, warehouse storage costs, the cost of replacing perishable items, and opportunity costs. Carrying costs may vary by product category.

Understand the cost of a lost sale

This cost refers to the losses incurred due to stockouts and often varies by product. It can be calculated by multiplying a product's average daily sales revenue by the number of days that the product is out of stock.

Make trade-offs to minimise CCC

Decisions on how you use working capital often involve trade-offs. You should prioritise actions that deliver maximum long-term impact at a reasonable cost.

For example:

- Reduce days sales outstanding (DSO): Aim to tighten credit terms (e.g. by increasing upfront payment and reducing repayment periods as much as feasible to remain affordable) to minimise default risk, without undermining sales. You can also segment customers and offer repayment incentives to a subset of them, without spending too much on these incentives.
- Reduce days of inventory outstanding (DIO): Try to minimise the inventory you hold without missing sales due to stockouts.
- Increase days payable outstanding (DPO): Make a trade-off between price and payment terms by accepting slightly higher prices from suppliers in exchange for longer payment terms.

Related KPIs

KPI 18: Stock loss

A high DIO can lead to the deterioration of stocks and a higher percentage of stocks written-off.

KPI 1: Net Promoter Score & KPI 17: Product servicing rate

Unsatisfied customers are unlikely to pay quickly for the product.

Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Case study: How a cookstove distributor calculates cash conversion cycle

A company that sells imported clean cookstoves in Africa has a gross margin of 23%. It orders 12,000 units every three months at a cost price of \$20/unit. The company sells 4,000 units per month to local retailers at \$26 per unit who pay for these products in one month.

At the end of year one:

Total annual cost of goods sold (COGS) = Total units ordered every three months x Number of orders per year x Cost price per unit = 12,000 x 4 x \$20 = \$960,000

Total annual sales = Total units sold every month x 12 months x Sales price = 4,000 x 12 x \$26 = \$1,248,000

Average accounts receivable = (Receivables at beginning of month one + Receivables at end of month 12) ÷ 2 = (0 + \$104,000) ÷ 2 = \$52,000

Average accounts payable = (Payables at beginning of month one + Payables at end of month 12) ÷ 2 = (\$240,000 + 0) ÷ 2 = \$120,000

Average inventory = (Inventory at beginning of month one + Inventory at end of month 12) ÷ 2 = (\$240,000 + 0) ÷ 2 = \$120,000

Based on these inputs, we can calculate the cash conversion cycle:

DSO = (Average accounts receivable over the year ÷ Total sales made during the year) x 365 days = (\$52,000 ÷ \$1,248,000) x 365 = 15 days (approx.)

DIO = (Average inventory over the year ÷ Total COGS during the year) x 365 days = (\$120,000 ÷ \$960,000) x 365 = 46 days (approx.)

DPO = (Average accounts payable over the year ÷ Total COGS over the year) x 365 days = (\$120,000 ÷ \$960,000) x 365 = 46 days (approx.)

CCC = DSO + DIO – DPO = 15 + 46 – 46 = 15 days

This example is a simplified, theoretical example and does not account for situations of non-payments, precautionary stocking, delays in delivery, etc.

Source: Hystra analysis

Reduce grant dependency

KPI 23: Grant contribution

Measure: Yearly

Leveraging grant funding when launching a company is common practice, but keeping a high ratio of grants as the company grows can be a sign that your business is unsustainable without them.

Your grant contribution is the proportion of your total gross revenue that comes from one-off grants. This KPI helps determine how dependent a company is on grants.

Having a high proportion of grants for several years in a row may signal a financial dependency. Your team may also be spending a significant amount of time sourcing and managing grants instead of managing the business. Not addressing these can put the future of the company at risk.



Calculation

$$\text{Grant contribution} = \frac{\text{Value of one-off grants received during a year}}{\text{Gross revenue received during the same year from all sources}}$$

Caveats and clarifications

- The ratio of grants will depend on the stage, size and fundraising strategy of your company.
- While *results-based financing* is a form of grant capital, it is not considered a one-off grant as the income is reoccurring. It should not be included as a one-off grant.
- External shocks (e.g. Covid-19) create the need for industry-wide financial support which can impact this ratio significantly. At such times, this ratio will not be as relevant.




Benchmark values

For companies with revenues below \$1m

No set rules, see benchmark data from GDC on the following page for an idea of range.

For companies with revenues above \$1m



-  Can be improved
-  Good
-  Best practice

Best practice

Use funds strategically

Grants are suitable for high-risk activities such as research and development, targeting a different market, launching a new product or business line, or alternatively, to fund capital expenditure.

Understand fundraising and M&E costs

It's important to fully understand the true cost and value of a grant. Track expenses associated with both generating new funds and fulfilling grant contracts. For example, calculate costs for monitoring and evaluation (M&E) staff, compliance activities, grant reporting, and any software you need.

Align grants with business-as-usual

Avoid grants that require your company to enter a new market or start a new product or service which you did not intend to enter. Take a critical look at the grant to see if it is helping you reach your strategic goals or distracting you from your primary objectives.

Prioritise reoccurring grants

While one-off grants can be helpful to a seed-stage company, a growth-phase company should focus on reoccurring revenue streams such as results-based financing.

Related KPIs

KPI 4: Revenue streams

Finding ways to monetise your assets beyond gaining revenue from product sales can generate additional margins and help reach sustainability faster.

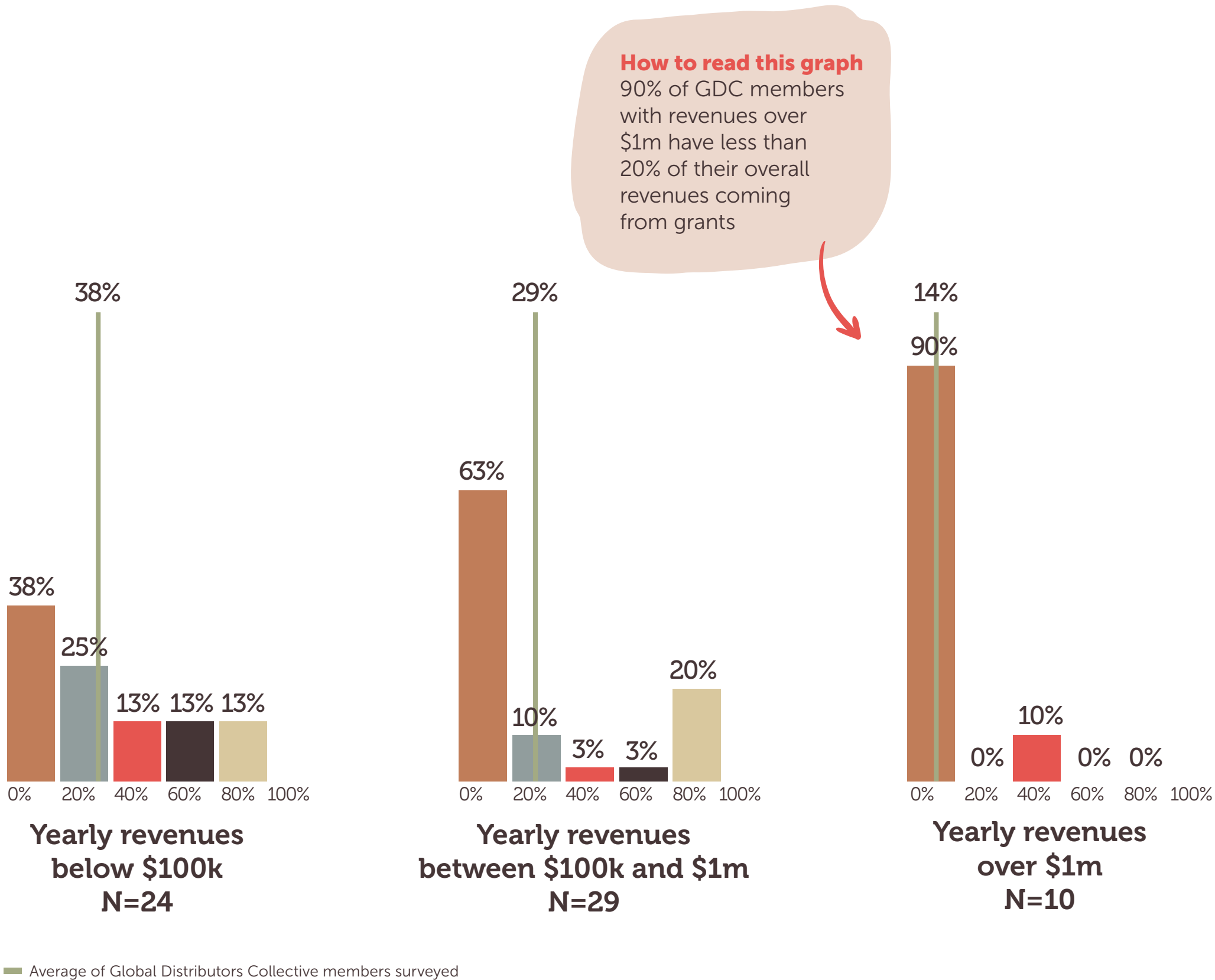
Additional resources

Please refer to the additional resources at the end of this section (page 72) for supplementary readings on this KPI.

Grant contribution by company size

For three different sizes of company, the graphs below show the proportion of total gross revenue that comes from one-off grants for last mile distributors.

The graphs show that grant dependence decreases as revenue increases. Companies with annual revenues below \$100,000, had an average of 38% of revenues in the form of grants. Companies with annual revenues between \$100,000 and \$1 million had an average of 29% of revenues in the form of grants, while companies with over \$1 million annual revenue had an average of 14% of revenue as grant capital.



Source: Global Distributors Collective survey of members, 2021; data were cleaned for companies with inconsistent answers.

Additional resources

BACKEND INFRASTRUCTURE & OVERHEADS

KPI 17: Product servicing rate

[Why Off-grid Energy Matters 2024](#), p.38, 60 Decibels, 2024

KPI 18: Stock loss

[The importance of ABC analysis in inventory management](#), EasyStock, 2024

KPI 19: Overhead ratio

[LMD business diagnostic webinar](#), GDC, 2023

[When is the right time to hire a general manager?](#), Rohan Musa, 2023

[12 signs you need to hire a manager](#), Bplans, 2023

KPI 20: Digitalisation indicator

[Digital transformation to support last-mile distribution: overcoming barriers together](#), Energy Catalyst, 2021

[Digital service catalogue](#), Global Distributors Collective

Enable Digital

KPI 21: CEO support system

[LMD business diagnostic webinar](#), GDC, 2023

[Building a last mile distribution board](#), GDC, 2021

[TRANSFORM Support Hub](#), MovingWorlds

KPI 22: Cash conversion cycle

[How is the last mile distribution sector adapting and innovating following Covid-19?](#), GDC, 2022

[The power of lean manufacturing](#), Manufacturing Tomorrow, 2019

KPI 23: Grant contribution

[The growth and fundraising journey of last mile distributors](#), GDC, 2021

[Last Mile Distribution Investors Forum](#), GDC, 2022

Glossary

Glossary

Above-the-line

Untargeted marketing that primarily aims to raise brand awareness through use of channels such as TV and radio, print media and outdoor advertising.

Accounts payable

A short-term liability on a balance sheet where a business owes money to its vendors/suppliers that have provided the business with goods or services on credit.

Accounts receivable

Amounts owed to a business as a result of products and/or services delivered. Receivables are regarded as current assets as they are typically turned into cash within one year.

Average accounts payable

Accounts payable or payables refer to outstanding bills or payments that the company owes to somebody else, such as a supplier or contractor.

Average accounts receivable

Average accounts receivable is the sum of starting and ending accounts receivable over a time period, divided by two.

Below-the-line marketing

Local, targeted marketing such as demonstrations, door-to-door sales and targeted WhatsApp messages.

Bonded warehouse

A site for storing and processing imported goods without paying customs duties until they are moved to the final destination.

Business-to-business (B2B)

Describes a business model where a company sells goods or services to other businesses.

Business-to-consumer (B2C)

Describes a business model where a company sells goods or services to consumers/end users.

Business-to-government (B2G)

Describes a business model where a company sells goods or services to the government sector.

Carbon financing

A financing model where carbon emitting companies provide funds to organisations that undertake activities to reduce carbon emissions. This allows polluting companies to offset their emissions and provides a source of income to the organisations that take steps to reduce emissions.

Carrying costs

Expenses a company incurs for holding inventory in stock. A business can pay a variety of carrying costs, including taxes, insurance, employee costs, depreciation, the cost of keeping items in storage, the cost of replacing perishable items, and opportunity costs.

Cash conversion cycle

Also known as the cash-to-cash cycle, this term is used in working capital management to describe the process of buying inventory (for cash) and then selling the inventory (and turning it back into cash).

Cost of goods sold (COGS)

Cost of goods sold refers to the direct costs of producing the goods sold by a company. This amount includes the cost of the materials and labour directly used to create the good. It excludes indirect expenses, such as distribution costs and sales force costs.

Course-correct mode

A term used in management and leadership that refers to evaluating and addressing business failures and making strategic decisions to keep the company on track to achieve its objectives.

Competitor mapping exercise

A business strategy exercise, usually done before launching a new product or service, to assess who your competitors are. The exercise usually involves understanding customer needs, the benefits of your product, and includes reviewing competitor products, prices, brands and geographic locations.

Days sales outstanding (DSO)

The number of days, on average, it takes a company to collect its receivables over a year.

Days of inventory outstanding (DIO)

The number of days, on average, it takes a company to turn its inventory into sales over a year.

Days payable outstanding (DPO)

The number of days, on average, it takes a company to pay back its payables over a year.

Detractors

Customers who rate their likelihood to recommend your product or service as six or less, on a scale of zero to 10.

Direct costs

Costs incurred by a business that are directly related to producing a good or providing a service (as opposed to other costs related sales, marketing, accounting, etc.)

Durable goods

These are goods that generally last longer and provide benefit over time to a customer; they can be used multiple times. Examples include solar panels, lighting, refrigerators, vehicles, and books.

Fast-moving consumer goods (FMCG)

These are goods that generally sell quickly, often at relatively low cost and they usually have a short shelf life. Common examples include foods, drinks, toiletries and medicines.

Field force

All staff in a business that support sales generation, either through selling, supporting sales staff or interacting with customers. These staff are usually field based rather than head office based. The field force includes technicians, sales agents, sales force managers and regional managers. It may also include call centre staff if they interact directly with customers.

Growth-phase company

A stage in the development of a business, after the seed stage, where initial venture capital investment has often been secured and the company is scaling up production.

Key performance indicator (KPI)

A quantifiable measure of business performance to assess whether a company is achieving a specific objective or target.

Last mile distributor (LMD)

Used to describe a type of businesses that is focused on getting beneficial products (such as solar systems, water purifiers and clean cookstoves) to people who cannot otherwise access these products because they are poor, live in remote areas or have other access challenges (e.g. cannot access credit).

Loan tenure

The total amount of time given to repay your loan, typically through regular instalments.

Net Promoter Score (NPS)

A type of survey used to assess whether an individual would recommend a product or company.

Promoters

Customers who rate their likelihood to recommend your product or service as nine or 10, on a scale of zero to 10.

Positive externalities

A term used in economics to describe a situation where others benefit, intentionally or not, from the actions of a private producer or consumer.

Positive unit economics

The margin from one unit covers the direct costs related to that unit.

Poverty probability index (PPI)

A poverty measurement tool used by impact-focused organisations to assess the likelihood that a customer or employee is living below the poverty line.

Results-based funding (RBF)

A mechanism through which a funder makes payments to an agent who assumes responsibility for achieving pre-defined results. Funding is only released upon the achievement of these results that are verified independently. Results-based funding covers a variety of applications such as: payment by results (PbR), payment for results (PforR), results-based lending (RBL), performance-driven loans (PDL), performance-based aid for REDD+, performance tranches in budget support, cash on delivery (CoD), output-based aid (OBA), etc.

Seed stage company

Also known as startups, seed stage companies are new companies in the early stages of developing their business. Financing at this stage is usually limited to personal funds, and funds from friends, family and angel investors. These companies are usually developing their product and may have generated little or no revenue so far.

Selling, general and administrative expenses (SG&A)

These are all the costs that a business incurs in running its day-to-day operations but excludes the costs to produce the good or service.

Short messaging service (SMS)

Often called text messaging it refers to digital messaging either to or between mobile devices. It can also refer to other types of mobile digital messaging apps, platforms and services (e.g. WhatsApp).

Stockouts

When a company is out of stock of one or more product that a customer wants to buy; also known as out-of-of stocks.



Photo credit: BBC Storyworks

References

References for benchmark values

VALUE PROPOSITION

- KPI 1: Net Promoter Score:** PAYGo PERFORM Technical Guide, 2021; 60dB Impact Performance Benchmarks; 2023; Hystra analysis
- KPI 2: Unique selling proposition:** Hystra analysis
- KPI 3: Number of market segments:** Hystra analysis
- KPI 4: Revenue streams:** Hystra analysis
- KPI 5: Gross margin:** Hystra analysis
- KPI 6: Inclusivity ratio:** Global Distributors Collective, 2021; 60 Decibels, 2024
- KPI 7: Product utilisation rate:** PAYGo Lab analysis

SALES & MARKETING

- KPI 8: Above-the-line marketing:** Hystra analysis
- KPI 9: Market penetration:** Hystra analysis
- KPI 10: Revenue per sales agent:** Hystra and Global Distributors Collective analysis
- KPI 11: Sales agent compensation:** Hystra analysis
- KPI 12: Sales agent cost ratio:** Hystra analysis
- KPI 13: Sales agent churn:** Hystra analysis
- KPI 14: Sales agent per manager:** Hystra analysis
- KPI 15: Cost of field force:** Hystra analysis
- KPI 16: Sales agent time efficiency:** Hystra analysis

BACKEND INFRASTRUCTURE & OVERHEADS

- KPI 17: Product servicing rate:** Hystra analysis
- KPI 18: Stock loss:** Hystra analysis
- KPI 19: Overhead ratio:** Hystra analysis
- KPI 20: Digitalisation indicator:** Digital transformation to support last-mile distribution: Overcoming barriers together, Energy Catalyst; and Hystra analysis
- KPI 21: CEO support system:** Hystra analysis
- KPI 22: Cash conversion cycle:** Hystra analysis
- KPI 23: Grant contribution:** Hystra analysis; Global Distributors Collective, 2021

Find more resources on our website
globaldistributorscollective.org

Got technical questions?
Email: lklarsfeld@hystra.com

Got feedback?
Email: gdc@practicalaction.org.uk

HYSTRA
hybrid strategies consulting

**Practical
ACTION**

**bop
inc**

Funded by



Transforming
Energy
Access