

# Understanding women micro-entrepreneurs' use of mobile for business:

Evidence from 10 low- and middle-income countries

## Supplementary data



This data book is supplementary to the report: [Understanding women micro-entrepreneur's use of mobile for business: Evidence from low- and middle-income countries.](#)

It shows further data tables referenced in the main report. As such, for a full overview readers should consult this data book in conjunction with the main report findings, figures and appendices.

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# Contents

## 1. Sample composition

- Unweighted sample sizes
- % of rural micro-entrepreneurs
- % of micro-entrepreneurs with no employees
- % of micro-entrepreneurs by business type
- Definition of sectors

## 2. Mobile use cases for business (by demographic)

- a) Urban
- b) Rural
- c) Secondary education or above
- d) Primary education or below
- e) Agricultural sector
- f) Non-agricultural sectors

## 3. Awareness of mobile use cases for business

- a) All micro-entrepreneurs surveyed
- b) Micro-entrepreneurs surveyed who use mobile for business

## 4a. Barriers to adopting or using mobile for business

- a) Barriers to adopting mobile for business
- b) Barriers to using mobile for business more

## 4b. Barriers to adopting or using mobile for business (combined)

- a) Urban
- b) Rural
- c) Secondary education or above
- d) Primary education or below
- e) Agricultural sector
- f) Non-agricultural sectors

# Sample composition

		Unweighed sample sizes			Weighted proportions							
		Total	Mobile used for business	Mobile not used for business	Rural (%)	No employees (%)	Business type (%)					
							I fish, farm, collect or grow things to sell	I make things to sell	I sell things to customers that I purchase from others	I fix or repair things	I sell or offer services to customers	Something else
Ethiopia	Male micro-entrepreneur	432	208	224	74%	33%	60%	6%	12%	4%	16%	2%
	Female micro-entrepreneur	338	239	99	75%	34%	51%	9%	22%	0%	15%	3%
Ghana	Male micro-entrepreneur	746	117	629	43%	61%	15%	15%	24%	14%	30%	1%
	Female micro-entrepreneur	526	129	397	43%	72%	9%	20%	40%	4%	26%	1%
Kenya	Male micro-entrepreneur	616	143	473	64%	70%	30%	8%	26%	11%	21%	3%
	Female micro-entrepreneur	637	221	416	65%	80%	28%	10%	43%	2%	14%	3%
Nigeria	Male micro-entrepreneur	324	76	248	52%	62%	19%	13%	25%	12%	31%	1%
	Female micro-entrepreneur	252	92	160	52%	72%	21%	23%	28%	2%	24%	2%
Senegal	Male micro-entrepreneur	217	58	159	56%	62%	34%	8%	22%	6%	23%	6%
	Female micro-entrepreneur	173	93	80	55%	88%	18%	19%	41%	3%	16%	3%
Bangladesh	Male micro-entrepreneur	291	97	194	68%	69%	24%	14%	32%	7%	21%	2%
	Female micro-entrepreneur	117	56	61	70%	73%	51%	12%	16%	4%	14%	3%
India	Male micro-entrepreneur	1083	472	611	70%	71%	26%	14%	24%	12%	23%	1%
	Female micro-entrepreneur	661	423	238	70%	68%	24%	17%	25%	8%	24%	1%
Pakistan	Male micro-entrepreneur	548	183	365	64%	57%	29%	13%	32%	11%	15%	1%
	Female micro-entrepreneur	372	184	188	64%	62%	32%	18%	17%	4%	20%	9%
Indonesia	Male micro-entrepreneur	177	84	93	43%	52%	18%	23%	35%	6%	13%	5%
	Female micro-entrepreneur	177	87	90	44%	58%	15%	36%	34%	1%	11%	2%
Guatemala	Male micro-entrepreneur	160	88	72	43%	58%	36%	11%	16%	7%	26%	4%
	Female micro-entrepreneur	142	96	46	42%	70%	24%	17%	22%	1%	35%	3%
<b>TOTAL</b>		<b>7989</b>	<b>4843</b>	<b>3146</b>								

# Micro-entrepreneurs by sector

In each of the 10 survey countries, micro-entrepreneurs were asked which of the following categories best described their business:

1. I fish, farm, collect (e.g. firewood, forest fruits, etc.) or grow things to sell
2. I make things to sell
3. I sell things to customers that I purchase from others
4. I fix or repair things
5. I sell or offer services to customers
6. Something else

Some data tables show findings disaggregated by agricultural and non-agricultural sectors.

Description	Sectors
Agricultural sector	I fish, farm, collect (e.g. firewood, forest fruits, etc.) or grow things to sell
Non-agricultural sectors	All other sectors above

# Mobile use cases for business performed by micro-entrepreneurs

Demographic cuts:

- Urban
- Rural
- Secondary education and above
- Primary education and below
- Agricultural sector
- Non-agricultural sectors

# Mobile use cases for business performed by urban micro-entrepreneurs

*Percentage of urban micro-entrepreneurs surveyed*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	64%	52%	22%	6%	17%	26%	9%	26%	26%	30%	4%	37%	37%	3%
	Female	52%	51%	10%	4%	8%	13%	5%	11%	16%	19%	0%	23%	20%	1%
Ghana	Male	74%	70%	52%	20%	64%	68%	19%	46%	42%	41%	27%	45%	59%	3%
	Female	61%	63%	36%	15%	46%	58%	12%	31%	28%	27%	14%	31%	45%	1%
Kenya	Male	67%	62%	40%	28%	58%	63%	15%	48%	47%	41%	26%	41%	46%	1%
	Female	44%	41%	22%	16%	38%	47%	6%	22%	25%	21%	9%	23%	29%	3%
Nigeria	Male	69%	69%	49%	14%	56%	58%	24%	39%	37%	42%	27%	49%	57%	4%
	Female	65%	61%	33%	5%	33%	48%	15%	32%	29%	38%	16%	38%	45%	1%
Senegal	Male	64%	60%	42%	10%	34%	48%	17%	30%	27%	37%	12%	31%	38%	0%
	Female	34%	32%	26%	7%	11%	24%	8%	14%	15%	16%	4%	13%	18%	0%
Bangladesh	Male	57%	50%	33%	17%	27%	40%	16%	29%	31%	25%	20%	36%	25%	3%
	Female														
India	Male	45%	44%	28%	18%	28%	28%	20%	27%	30%	21%	24%	27%	26%	1%
	Female	27%	27%	15%	12%	15%	17%	11%	13%	17%	14%	10%	13%	15%	1%
Pakistan	Male	43%	48%	17%	7%	12%	26%	9%	16%	18%	13%	15%	15%	16%	1%
	Female	35%	37%	20%	6%	17%	20%	10%	23%	18%	17%	9%	22%	16%	2%
Indonesia	Male	52%	46%	32%	6%	21%	16%	8%	37%	20%	33%	29%	31%	38%	2%
	Female	52%	48%	43%	6%	23%	26%	10%	38%	27%	41%	18%	24%	48%	1%
Guatemala	Male	39%	40%	30%	18%	20%	22%	17%	28%	27%	27%	29%	22%	31%	3%
	Female														



Source: GSMA Consumer Survey, 2022

Base: Urban micro-entrepreneurs surveyed

Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=34 to 242 for female micro-entrepreneurs and n=36 to 349 for male micro-entrepreneurs

# Mobile use cases for business performed by rural micro-entrepreneurs

*Percentage of rural micro-entrepreneurs surveyed*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	30%	25%	4%	2%	2%	3%	1%	9%	7%	12%	1%	16%	14%	0%
	Female	10%	10%	1%	0%	1%	1%	1%	2%	1%	3%	0%	5%	5%	0%
Ghana	Male	66%	63%	34%	13%	49%	52%	14%	33%	30%	29%	16%	29%	46%	2%
	Female	49%	52%	28%	14%	46%	45%	10%	23%	22%	16%	7%	21%	36%	1%
Kenya	Male	58%	52%	27%	26%	47%	62%	10%	33%	31%	29%	18%	30%	32%	1%
	Female	53%	47%	18%	19%	36%	46%	6%	21%	24%	21%	7%	18%	30%	1%
Nigeria	Male	59%	57%	24%	7%	29%	33%	6%	20%	15%	23%	8%	27%	38%	3%
	Female	34%	30%	14%	5%	10%	18%	7%	13%	5%	15%	3%	8%	18%	3%
Senegal	Male	52%	52%	27%	12%	35%	46%	16%	30%	20%	32%	11%	29%	31%	2%
	Female	31%	28%	8%	4%	12%	16%	2%	6%	7%	15%	3%	8%	12%	2%
Bangladesh	Male	37%	36%	20%	13%	18%	23%	12%	19%	19%	13%	10%	22%	15%	2%
	Female	30%	28%	21%	11%	14%	25%	13%	19%	22%	15%	9%	20%	15%	3%
India	Male	31%	32%	23%	17%	20%	26%	16%	25%	22%	19%	18%	23%	24%	2%
	Female	16%	16%	11%	8%	8%	10%	7%	11%	10%	10%	6%	12%	10%	0%
Pakistan	Male	40%	37%	15%	9%	16%	18%	8%	14%	17%	18%	11%	18%	18%	1%
	Female	13%	12%	4%	1%	4%	8%	2%	7%	3%	4%	3%	5%	5%	1%
Indonesia	Male														
	Female	28%	26%	24%	8%	13%	11%	7%	22%	11%	16%	14%	18%	21%	3%
Guatemala	Male	28%	31%	29%	5%	7%	11%	12%	25%	17%	22%	13%	21%	20%	6%
	Female														



Source: GSMA Consumer Survey, 2022

Base: Rural micro-entrepreneurs surveyed

Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=32 to 269 for female micro-entrepreneurs and n=36 to 335 for male micro-entrepreneurs

# Mobile use cases for business performed by micro-entrepreneurs with secondary education or above

*Percentage of micro-entrepreneurs surveyed with secondary education or above*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male														
	Female														
Ghana	Male	77%	73%	56%	22%	66%	69%	21%	50%	45%	44%	28%	47%	62%	3%
	Female	65%	67%	46%	19%	59%	64%	17%	38%	35%	34%	17%	38%	52%	1%
Kenya	Male	67%	64%	42%	30%	58%	68%	19%	49%	46%	39%	32%	44%	49%	1%
	Female	53%	51%	27%	21%	42%	54%	12%	34%	34%	30%	14%	30%	39%	2%
Nigeria	Male	70%	65%	45%	10%	55%	52%	19%	36%	32%	36%	23%	47%	54%	3%
	Female	55%	52%	34%	7%	31%	43%	17%	31%	28%	31%	15%	31%	41%	2%
Senegal	Male	76%	75%	57%	16%	52%	58%	28%	59%	48%	63%	33%	56%	59%	0%
	Female														
Bangladesh	Male	53%	46%	31%	16%	31%	33%	19%	30%	29%	24%	23%	35%	24%	4%
	Female	39%	33%	33%	18%	27%	38%	30%	27%	27%	28%	23%	34%	33%	2%
India	Male	43%	43%	30%	20%	29%	32%	21%	31%	30%	24%	25%	30%	30%	2%
	Female	31%	31%	19%	14%	16%	19%	12%	19%	20%	17%	11%	19%	19%	1%
Pakistan	Male	48%	46%	23%	11%	21%	25%	13%	25%	22%	20%	18%	23%	23%	2%
	Female	33%	34%	16%	4%	17%	16%	8%	19%	17%	14%	10%	19%	16%	3%
Indonesia	Male	58%	52%	34%	9%	22%	19%	11%	43%	20%	40%	32%	36%	41%	3%
	Female	63%	63%	57%	13%	33%	33%	17%	48%	35%	50%	28%	34%	56%	1%
Guatemala	Male	46%	51%	43%	18%	20%	26%	25%	39%	32%	37%	30%	32%	37%	7%
	Female	53%	48%	38%	14%	28%	29%	14%	45%	34%	37%	24%	37%	37%	2%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed with secondary education or above

Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=31 to 300 for female micro-entrepreneurs and n=37 to 527 for male micro-entrepreneurs

# Mobile use cases for business performed by micro-entrepreneurs with primary education or below

*Percentage of micro-entrepreneurs surveyed with primary education or below*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	33%	27%	6%	2%	3%	5%	1%	10%	7%	13%	1%	17%	16%	0%
	Female	13%	13%	2%	1%	2%	2%	1%	3%	2%	4%	0%	7%	6%	0%
Ghana	Male	53%	50%	12%	5%	35%	37%	6%	15%	15%	13%	6%	12%	28%	1%
	Female	45%	48%	16%	9%	32%	39%	4%	15%	13%	9%	3%	14%	28%	0%
Kenya	Male	58%	52%	26%	25%	48%	60%	8%	34%	32%	31%	15%	29%	32%	1%
	Female	49%	43%	17%	17%	35%	44%	4%	17%	22%	18%	6%	17%	27%	1%
Nigeria	Male	58%	60%	27%	10%	29%	38%	10%	22%	19%	28%	11%	29%	41%	3%
	Female	43%	38%	13%	4%	12%	22%	5%	14%	7%	21%	4%	14%	22%	2%
Senegal	Male	52%	51%	28%	10%	31%	44%	14%	24%	18%	27%	7%	24%	28%	2%
	Female	31%	29%	16%	5%	10%	19%	4%	8%	9%	14%	2%	10%	14%	1%
Bangladesh	Male	32%	35%	17%	12%	9%	23%	7%	14%	16%	10%	3%	17%	13%	0%
	Female	28%	28%	13%	8%	8%	18%	4%	14%	16%	9%	4%	13%	6%	2%
India	Male	22%	20%	13%	11%	10%	15%	10%	14%	12%	11%	10%	12%	15%	0%
	Female	9%	9%	5%	5%	4%	6%	4%	5%	5%	5%	3%	6%	5%	0%
Pakistan	Male	34%	35%	10%	6%	10%	15%	4%	6%	13%	15%	8%	13%	13%	1%
	Female	12%	12%	5%	1%	3%	9%	2%	7%	3%	5%	2%	5%	4%	0%
Indonesia	Male	30%	26%	16%	4%	9%	9%	4%	18%	11%	16%	13%	14%	21%	1%
	Female														
Guatemala	Male														
	Female														



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed with primary education or below

Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=30 to 284 for female micro-entrepreneurs and n=31 to 527 for male micro-entrepreneurs

# Mobile use cases for business performed by micro-entrepreneurs in the agricultural sector

Percentage of micro-entrepreneurs surveyed in the agricultural sector

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	24%	20%	4%	2%	2%	3%	1%	7%	6%	11%	0%	15%	11%	0%
	Female														
Ghana	Male	41%	35%	21%	10%	40%	34%	11%	24%	22%	24%	9%	16%	29%	1%
	Female														
Kenya	Male	51%	43%	26%	26%	41%	51%	10%	34%	31%	28%	17%	28%	31%	1%
	Female	35%	23%	7%	9%	23%	28%	0%	8%	12%	11%	3%	8%	17%	1%
Nigeria	Male	61%	61%	35%	14%	40%	48%	17%	31%	27%	41%	19%	42%	46%	6%
	Female	31%	25%	21%	5%	23%	27%	10%	20%	12%	20%	12%	17%	23%	4%
Senegal	Male	43%	46%	25%	11%	24%	38%	10%	26%	17%	24%	9%	30%	29%	1%
	Female	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Bangladesh	Male	31%	33%	13%	9%	12%	21%	9%	9%	11%	7%	6%	4%	6%	0%
	Female	35%	32%	15%	2%	9%	18%	4%	15%	13%	6%	4%	8%	8%	2%
India	Male	28%	28%	16%	13%	15%	20%	13%	18%	18%	13%	15%	19%	20%	1%
	Female														
Pakistan	Male	38%	35%	13%	9%	15%	19%	7%	15%	17%	19%	7%	22%	18%	4%
	Female														
Indonesia	Male														
	Female														
Guatemala	Male														
	Female														



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed in the agricultural sector

Those categorised within the "agricultural sector" reported that they "fish, farm, collect or grow things to sell". Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=31 to 70 for female micro-entrepreneurs and n=37 to 108 for male micro-entrepreneurs

# Mobile use cases for business performed by micro-entrepreneurs in non-agricultural sectors

Percentage of micro-entrepreneurs surveyed in non-agricultural sectors

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	52%	43%	12%	5%	9%	11%	2%	19%	16%	21%	2%	26%	28%	1%
	Female	27%	27%	4%	2%	3%	6%	2%	5%	6%	10%	0%	13%	8%	0%
Ghana	Male	76%	73%	48%	18%	61%	66%	18%	43%	40%	37%	24%	42%	58%	3%
	Female	59%	62%	36%	15%	49%	56%	12%	30%	27%	25%	12%	29%	44%	1%
Kenya	Male	66%	61%	33%	27%	56%	67%	12%	41%	39%	36%	22%	36%	40%	1%
	Female	56%	53%	24%	22%	42%	54%	8%	26%	30%	25%	9%	25%	34%	2%
Nigeria	Male	65%	63%	36%	9%	42%	43%	14%	28%	25%	30%	16%	37%	48%	3%
	Female	53%	50%	25%	5%	21%	33%	10%	22%	18%	28%	8%	23%	34%	1%
Senegal	Male	65%	61%	39%	12%	40%	51%	21%	33%	27%	40%	13%	30%	37%	1%
	Female	36%	34%	19%	7%	14%	21%	5%	11%	13%	16%	4%	11%	17%	1%
Bangladesh	Male	47%	45%	27%	16%	24%	30%	14%	27%	25%	21%	15%	33%	22%	3%
	Female	31%	28%	26%	19%	21%	30%	25%	23%	24%	27%	20%	32%	27%	2%
India	Male	40%	40%	29%	20%	26%	30%	20%	29%	28%	23%	22%	28%	28%	2%
	Female	24%	23%	14%	11%	12%	15%	10%	15%	14%	13%	7%	15%	15%	0%
Pakistan	Male	41%	42%	17%	8%	15%	20%	9%	14%	17%	16%	14%	16%	17%	0%
	Female	27%	26%	13%	4%	10%	15%	6%	15%	10%	11%	7%	13%	10%	1%
Indonesia	Male	50%	44%	28%	7%	17%	16%	8%	35%	16%	32%	26%	26%	34%	2%
	Female	45%	42%	39%	7%	20%	22%	10%	34%	23%	34%	17%	22%	39%	2%
Guatemala	Male	40%	42%	33%	15%	17%	20%	16%	31%	27%	30%	28%	26%	34%	3%
	Female	33%	26%	26%	8%	14%	16%	9%	25%	19%	20%	14%	21%	23%	2%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed in non-agricultural sectors

Those categorised within "non-agricultural sectors" reported to be in any other business sector apart from "fish, farm, collect or grow things to sell". Percentages indicate the proportion of micro-entrepreneurs who answered that they have performed each use case in the past three months. Use cases were only asked of micro-entrepreneurs who reported using mobile for business. However, the percentages still represent the proportion of micro-entrepreneurs overall who use that mobile use case. Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=30 to 382 for female micro-entrepreneurs and n=49 to 580 for male micro-entrepreneurs

# Awareness of mobile use cases for business among micro-entrepreneurs

Demographic cuts:

- All micro-entrepreneurs surveyed
- All micro-entrepreneurs surveyed who have use mobile for business

# Awareness of mobile use cases for business among micro-entrepreneurs

*Percentage of micro-entrepreneurs surveyed*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	100%	100%	36%	53%	37%	39%	44%	44%	36%	36%	26%	26%	22%	1%
	Female	100%	100%	24%	37%	24%	28%	32%	28%	23%	22%	11%	18%	12%	0%
Ghana	Male	100%	100%	91%	76%	76%	74%	68%	65%	88%	70%	59%	82%	40%	3%
	Female	100%	100%	87%	65%	63%	60%	54%	57%	78%	58%	46%	74%	33%	1%
Kenya	Male	100%	100%	86%	77%	79%	76%	71%	67%	84%	62%	63%	68%	44%	1%
	Female	100%	100%	83%	69%	74%	58%	61%	53%	80%	54%	47%	63%	34%	2%
Nigeria	Male	100%	100%	78%	78%	73%	65%	67%	62%	74%	54%	54%	55%	40%	3%
	Female	100%	100%	72%	66%	62%	59%	54%	56%	64%	47%	45%	47%	31%	1%
Senegal	Male	100%	100%	83%	68%	74%	64%	63%	68%	64%	55%	48%	46%	50%	1%
	Female	100%	100%	58%	42%	46%	37%	32%	37%	42%	30%	20%	27%	28%	1%
Bangladesh	Male	100%	100%	64%	50%	58%	55%	57%	47%	55%	54%	46%	46%	43%	3%
	Female	100%	100%	56%	47%	51%	48%	54%	39%	49%	46%	42%	34%	35%	2%
India	Male	100%	100%	48%	45%	47%	46%	46%	39%	46%	45%	45%	37%	37%	2%
	Female	100%	100%	30%	30%	32%	31%	28%	26%	29%	29%	29%	27%	24%	0%
Pakistan	Male	100%	100%	50%	40%	48%	42%	48%	41%	48%	42%	40%	32%	32%	0%
	Female	100%	100%	40%	34%	40%	39%	36%	32%	31%	31%	29%	24%	29%	1%
Indonesia	Male	100%	100%	42%	59%	58%	58%	51%	57%	42%	35%	52%	35%	26%	2%
	Female	100%	100%	41%	56%	59%	53%	46%	54%	38%	36%	47%	32%	27%	2%
Guatemala	Male	100%	100%	68%	70%	77%	73%	69%	68%	61%	65%	65%	62%	63%	3%
	Female	100%	100%	49%	52%	57%	50%	50%	49%	43%	43%	46%	43%	42%	2%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed

A person is considered aware of a particular activity if they have either performed that activity for their business before or have not performed that activity but are aware they could do so.

n= from 117 to 661 for female micro-entrepreneurs and n= from 160 to 1,083 for male micro-entrepreneurs

# Awareness of mobile use cases for business among micro-entrepreneurs who use mobile for business

*Percentage of micro-entrepreneurs surveyed who use mobile for business*

		Communicate with customers	Communicate with suppliers	Market, advertise or promote my business	Take out loans, credit, insurance products	Save or store money in account	Make or receive payments	Issue invoices or receipts for my business	Learn new skills or get new ideas for my business	Manage or track my business finances	Plan business activities	Access maps or location services	Find information to help with business	Store information and files	Any other way
Ethiopia	Male	100%	100%	48%	70%	48%	49%	61%	59%	45%	47%	29%	34%	29%	1%
	Female	100%	100%	38%	58%	38%	43%	55%	40%	36%	32%	12%	23%	20%	2%
Ghana	Male	100%	100%	92%	81%	83%	79%	75%	71%	88%	66%	65%	69%	46%	0%
	Female	100%	100%	89%	74%	80%	62%	64%	56%	87%	58%	50%	63%	35%	0%
Kenya	Male	100%	100%	98%	80%	82%	82%	76%	72%	93%	76%	66%	85%	43%	1%
	Female	100%	100%	96%	74%	71%	70%	64%	66%	91%	68%	55%	78%	40%	2%
Nigeria	Male	100%	100%	82%	84%	78%	68%	74%	69%	78%	60%	58%	60%	42%	1%
	Female	100%	100%	78%	73%	70%	67%	64%	67%	71%	55%	52%	53%	34%	2%
Senegal	Male	100%	100%	89%	77%	80%	71%	68%	76%	67%	64%	55%	50%	55%	3%
	Female	100%	100%	73%	51%	57%	43%	43%	48%	48%	34%	27%	29%	36%	1%
Bangladesh	Male	100%	100%	75%	58%	67%	64%	66%	57%	60%	63%	50%	51%	48%	3%
	Female	100%	100%	74%	61%	67%	64%	74%	55%	63%	61%	53%	46%	49%	2%
India	Male	100%	100%	63%	61%	64%	63%	62%	51%	62%	60%	59%	51%	51%	0%
	Female	100%	100%	46%	47%	48%	49%	44%	43%	45%	45%	42%	39%	38%	0%
Pakistan	Male	100%	100%	66%	54%	63%	55%	63%	52%	61%	56%	51%	41%	40%	2%
	Female	100%	100%	65%	54%	58%	64%	57%	49%	48%	50%	43%	40%	43%	1%
Indonesia	Male	100%	100%	54%	78%	74%	76%	66%	75%	51%	46%	69%	42%	35%	2%
	Female	100%	100%	65%	88%	88%	84%	73%	86%	64%	60%	72%	52%	45%	2%
Guatemala	Male	100%	100%	82%	83%	87%	86%	84%	83%	75%	80%	82%	70%	78%	3%
	Female	100%	100%	83%	83%	87%	82%	80%	80%	70%	76%	72%	72%	73%	0%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed

A person is considered aware of a particular activity if they have either performed that activity for their business before or have not performed that activity but are aware they could do so.

n= from 46 to 416 for female micro-entrepreneurs, n= from 72 to 629 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs from starting to use a mobile for business or using it more

In each of the 10 survey countries:

1. Micro-entrepreneurs who owned a phone but did not yet use a mobile for business were asked to identify barriers preventing them from doing so.
2. Micro-entrepreneurs who owned a phone and already used a mobile for business were asked to identify barriers preventing them from using it *more* in their business.

The following data tables show the separate results of these two groups.

# Barriers preventing mobile-owning micro-entrepreneurs from starting to use mobile for business

Percentage of micro-entrepreneurs surveyed who own a phone and do not yet use mobile for business

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	50%	40%	34%	29%	12%	31%	17%	17%	2%	5%	31%	28%	16%	25%	3%
	Female	54%	44%	39%	27%	18%	47%	33%	24%	0%	12%	17%	9%	18%	15%	7%
Ghana	Male	24%	21%	13%	3%	12%	19%	18%	11%	1%	2%	9%	7%	6%	5%	3%
	Female	21%	27%	19%	5%	13%	19%	15%	17%	2%	3%	6%	5%	4%	4%	8%
Kenya	Male	32%	35%	33%	11%	23%	20%	13%	26%	5%	7%	11%	7%	12%	11%	3%
	Female	35%	37%	42%	13%	29%	26%	16%	29%	7%	10%	6%	8%	5%	10%	2%
Nigeria	Male	20%	20%	27%	4%	22%	17%	18%	21%	2%	8%	9%	5%	8%	2%	7%
	Female	30%	34%	47%	11%	23%	29%	26%	31%	9%	13%	17%	26%	15%	15%	23%
Senegal	Male	20%	25%	23%	6%	16%	19%	17%	4%	5%	5%	15%	7%	11%	5%	3%
	Female	26%	24%	23%	17%	15%	13%	22%	15%	3%	9%	15%	7%	6%	3%	2%
Bangladesh	Male	20%	8%	17%	14%	19%	17%	11%	17%	8%	5%	6%	10%	8%	7%	13%
	Female															
India	Male	25%	34%	39%	32%	35%	36%	33%	27%	20%	21%	23%	27%	27%	26%	25%
	Female	20%	22%	33%	21%	29%	29%	29%	20%	17%	20%	21%	19%	20%	21%	13%
Pakistan	Male	25%	23%	35%	19%	31%	26%	17%	23%	23%	21%	18%	22%	24%	24%	14%
	Female	29%	23%	24%	14%	43%	27%	20%	27%	29%	27%	15%	19%	18%	22%	12%
Indonesia	Male	14%	23%	56%	29%	31%	33%	22%	37%	11%	17%	35%	26%	23%	26%	11%
	Female	22%	22%	49%	30%	34%	44%	18%	26%	20%	21%	24%	21%	19%	15%	10%
Guatemala	Male	22%	28%	29%	24%	44%	42%	28%	26%	27%	23%	24%	24%	19%	27%	11%
	Female	19%	29%	35%	23%	43%	39%	22%	22%	24%	24%	25%	30%	21%	30%	14%



Source: GSMA Consumer Survey, 2022

Base: Urban micro-entrepreneurs surveyed who own a phone

n=32 to 292 for female micro-entrepreneurs and n=55 to 396 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs from using mobile for business more

Percentage of micro-entrepreneurs surveyed who own a phone and use mobile for business

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	46%	48%	36%	18%	15%	38%	21%	23%	2%	5%	33%	31%	11%	25%	1%
	Female	59%	54%	41%	24%	13%	45%	27%	21%	4%	8%	22%	18%	13%	12%	3%
Ghana	Male	12%	12%	10%	3%	9%	7%	9%	14%	2%	4%	7%	6%	5%	5%	3%
	Female	14%	19%	16%	4%	11%	13%	19%	15%	7%	6%	7%	7%	8%	5%	5%
Kenya	Male	19%	19%	27%	4%	20%	10%	7%	25%	4%	5%	11%	14%	6%	14%	3%
	Female	24%	25%	27%	6%	18%	13%	7%	26%	4%	6%	9%	13%	6%	13%	2%
Nigeria	Male	19%	21%	33%	8%	21%	20%	14%	21%	6%	9%	10%	11%	10%	11%	9%
	Female	23%	30%	33%	8%	22%	24%	20%	27%	5%	7%	7%	12%	10%	11%	9%
Senegal	Male	13%	13%	13%	2%	4%	7%	9%	14%	1%	4%	10%	9%	12%	5%	2%
	Female	22%	26%	12%	6%	9%	9%	16%	20%	0%	2%	12%	6%	10%	5%	3%
Bangladesh	Male	17%	23%	28%	12%	25%	19%	10%	13%	11%	10%	10%	10%	14%	15%	8%
	Female	29%	23%	20%	14%	27%	25%	15%	13%	22%	24%	13%	26%	13%	17%	11%
India	Male	9%	18%	31%	19%	27%	22%	23%	21%	15%	17%	18%	22%	16%	19%	12%
	Female	10%	17%	24%	19%	22%	20%	21%	15%	14%	15%	15%	17%	14%	16%	10%
Pakistan	Male	8%	14%	35%	9%	21%	19%	20%	15%	10%	18%	22%	14%	16%	13%	2%
	Female	10%	18%	42%	15%	30%	23%	17%	25%	13%	15%	24%	16%	14%	15%	6%
Indonesia	Male	25%	23%	39%	19%	27%	30%	19%	17%	7%	15%	19%	18%	17%	20%	7%
	Female	14%	22%	36%	18%	18%	20%	21%	16%	19%	18%	16%	14%	17%	21%	8%
Guatemala	Male	20%	25%	32%	16%	36%	35%	23%	14%	10%	16%	32%	30%	21%	27%	7%
	Female	9%	24%	25%	12%	35%	24%	15%	10%	10%	18%	23%	33%	12%	23%	2%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed who own a mobile and already use mobile for business

Percentages indicate the proportion of respondents who answered "Yes, this is something that stops me from using mobile phones [more] in my business" to each barrier.

n= from 42 to 401 for female micro-entrepreneurs and n= from 67 to 630 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs from starting to use a mobile for business or using it more

In each of the 10 survey countries:

1. Micro-entrepreneurs who owned a phone but did not yet use a mobile for business were asked to identify barriers preventing them from doing so.
2. Micro-entrepreneurs who owned a phone and already used a mobile for business were asked to identify barriers preventing them from using it *more* in their business.

The following data tables show the combined results of these two groups among various demographic groups.

# Barriers preventing mobile-owning micro-entrepreneurs from starting to use a mobile for business or using it more

Demographic cuts:

- Urban
- Rural
- Secondary education and above
- Primary education and below
- Agricultural sector
- Non-agricultural sectors

# Barriers preventing urban mobile-owning micro-entrepreneurs from starting to use mobile for business or using it more

Percentage of urban micro-entrepreneurs surveyed who own a phone

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/ SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	36%	32%	38%	22%	14%	20%	15%	17%	1%	7%	22%	21%	13%	10%	2%
	Female	49%	47%	43%	23%	13%	40%	32%	23%	0%	9%	2%	12%	14%	2%	1%
Ghana	Male	11%	10%	10%	4%	11%	7%	9%	11%	2%	4%	7%	8%	6%	5%	5%
	Female	18%	22%	16%	7%	8%	13%	17%	16%	5%	6%	6%	6%	8%	5%	6%
Kenya	Male	21%	21%	32%	4%	21%	11%	9%	21%	2%	5%	5%	9%	7%	10%	3%
	Female	26%	27%	32%	11%	19%	13%	7%	24%	4%	8%	7%	9%	2%	9%	1%
Nigeria	Male	13%	11%	24%	7%	18%	18%	15%	20%	4%	8%	6%	6%	8%	8%	6%
	Female	22%	25%	38%	8%	23%	26%	21%	29%	4%	5%	6%	14%	9%	10%	12%
Senegal	Male	6%	10%	13%	4%	4%	9%	8%	10%	1%	4%	7%	5%	4%	6%	0%
	Female	15%	19%	13%	13%	10%	8%	12%	15%	1%	7%	7%	6%	1%	4%	4%
Bangladesh	Male	16%	25%	23%	19%	24%	18%	10%	13%	9%	8%	9%	9%	14%	16%	10%
	Female	21%	19%	11%	12%	25%	10%	6%	13%	13%	7%	6%	7%	3%	3%	6%
India	Male	16%	23%	29%	23%	29%	26%	24%	23%	15%	17%	18%	21%	19%	19%	17%
	Female	10%	18%	27%	21%	23%	22%	23%	13%	14%	14%	11%	20%	14%	16%	14%
Pakistan	Male	17%	22%	33%	18%	27%	26%	18%	17%	11%	14%	11%	12%	16%	21%	4%
	Female	8%	15%	33%	10%	24%	11%	13%	11%	16%	22%	8%	7%	13%	21%	2%
Indonesia	Male	13%	21%	43%	17%	29%	28%	23%	26%	13%	21%	30%	20%	21%	20%	8%
	Female	14%	21%	50%	18%	34%	33%	20%	23%	16%	18%	21%	18%	17%	12%	9%
Guatemala	Male	13%	22%	28%	18%	38%	37%	28%	11%	11%	15%	32%	29%	20%	30%	7%
	Female	12%	19%	19%	10%	37%	33%	20%	8%	8%	18%	12%	27%	10%	16%	4%



Source: GSMA Consumer Survey, 2022

Base: Urban micro-entrepreneurs surveyed who own a phone

n=32 to 292 for female micro-entrepreneurs and n=55 to 396 for male micro-entrepreneurs

# Barriers preventing rural mobile-owning micro-entrepreneurs from starting to use mobile for business or using it more

Percentage of rural micro-entrepreneurs surveyed who own a phone

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	50%	48%	35%	22%	14%	40%	21%	22%	2%	5%	35%	32%	13%	28%	2%
	Female	59%	50%	39%	26%	16%	49%	29%	22%	3%	10%	26%	15%	16%	18%	6%
Ghana	Male	17%	19%	11%	2%	8%	11%	11%	17%	2%	4%	7%	5%	5%	4%	1%
	Female	12%	19%	18%	2%	16%	17%	20%	15%	7%	5%	7%	7%	6%	3%	7%
Kenya	Male	24%	25%	28%	7%	21%	14%	8%	28%	5%	6%	14%	14%	9%	15%	3%
	Female	29%	31%	33%	8%	24%	20%	12%	29%	6%	7%	9%	13%	7%	14%	3%
Nigeria	Male	23%	29%	37%	7%	24%	21%	15%	21%	6%	9%	12%	13%	11%	10%	11%
	Female	27%	37%	35%	9%	22%	25%	23%	28%	9%	13%	13%	18%	15%	15%	13%
Senegal	Male	21%	20%	17%	2%	8%	11%	14%	13%	2%	5%	15%	11%	18%	5%	4%
	Female	34%	31%	21%	8%	14%	14%	27%	21%	1%	3%	20%	7%	15%	5%	2%
Bangladesh	Male	19%	16%	25%	9%	23%	19%	10%	15%	10%	9%	9%	11%	12%	11%	9%
	Female	32%	24%	25%	23%	30%	36%	16%	17%	29%	31%	11%	31%	20%	18%	14%
India	Male	15%	25%	36%	25%	31%	28%	28%	23%	18%	19%	21%	25%	21%	23%	17%
	Female	18%	20%	29%	19%	27%	27%	26%	20%	16%	19%	23%	17%	20%	20%	11%
Pakistan	Male	28%	24%	39%	20%	29%	30%	19%	20%	13%	18%	21%	21%	21%	21%	11%
	Female	27%	27%	29%	18%	32%	29%	24%	26%	28%	23%	19%	21%	20%	22%	14%
Indonesia	Male	6%	12%	44%	18%	19%	19%	16%	21%	6%	12%	22%	17%	13%	15%	2%
	Female	16%	16%	39%	28%	28%	29%	13%	29%	15%	17%	29%	18%	15%	18%	6%
Guatemala	Male	28%	30%	33%	21%	42%	39%	23%	27%	24%	23%	25%	26%	20%	24%	10%
	Female	18%	36%	45%	27%	42%	33%	18%	27%	30%	26%	39%	37%	25%	40%	15%



Source: GSMA Consumer Survey, 2022

Base: Rural micro-entrepreneurs surveyed who own a phone

n=53 to 350 for female micro-entrepreneurs and n=54 to 510 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs with secondary education or above from starting to use mobile for business or using it more

*Percentage of micro-entrepreneurs surveyed with secondary education or above and own a phone*

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/ SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	31%	29%	38%	32%	13%	6%	8%	20%	0%	6%	28%	31%	18%	2%	1%
	Female															
Ghana	Male	8%	9%	10%	3%	11%	6%	8%	11%	2%	4%	7%	7%	5%	5%	4%
	Female	14%	17%	13%	5%	9%	13%	11%	17%	5%	7%	10%	7%	8%	5%	7%
Kenya	Male	16%	16%	27%	3%	21%	9%	3%	24%	5%	4%	8%	6%	6%	10%	3%
	Female	20%	24%	30%	8%	22%	6%	5%	22%	6%	9%	5%	10%	3%	11%	3%
Nigeria	Male	10%	9%	22%	4%	15%	10%	6%	16%	2%	5%	10%	11%	3%	8%	7%
	Female	15%	23%	27%	6%	25%	18%	11%	25%	6%	11%	11%	22%	10%	14%	14%
Senegal	Male	5%	8%	15%	2%	5%	6%	0%	12%	0%	2%	12%	5%	2%	3%	0%
	Female															
Bangladesh	Male	13%	14%	24%	11%	21%	17%	12%	10%	12%	6%	10%	9%	11%	10%	10%
	Female	17%	22%	26%	11%	22%	18%	15%	15%	27%	21%	14%	33%	16%	15%	13%
India	Male	16%	25%	35%	24%	33%	28%	27%	25%	17%	20%	22%	25%	23%	23%	16%
	Female	15%	23%	33%	24%	32%	30%	25%	23%	18%	22%	21%	23%	22%	25%	15%
Pakistan	Male	11%	17%	35%	18%	22%	20%	13%	21%	9%	15%	21%	15%	18%	19%	6%
	Female	9%	14%	25%	17%	23%	17%	15%	19%	19%	20%	13%	15%	17%	22%	8%
Indonesia	Male	6%	17%	44%	15%	25%	21%	22%	23%	8%	17%	29%	18%	19%	16%	6%
	Female	10%	18%	39%	9%	30%	26%	16%	22%	10%	17%	28%	20%	14%	15%	8%
Guatemala	Male	17%	20%	31%	16%	36%	33%	22%	16%	18%	20%	28%	30%	18%	22%	7%
	Female	6%	15%	22%	13%	25%	26%	14%	7%	11%	15%	17%	25%	10%	15%	3%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed with secondary education or above who own a phone

Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=37 to 361 for female micro-entrepreneurs and n=34 to 671 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs with primary education or below from starting to use mobile for business or using it more

*Percentage of micro-entrepreneurs surveyed with primary education or below and own a phone*

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/ SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	49%	46%	35%	21%	14%	39%	21%	21%	2%	5%	33%	30%	12%	27%	2%
	Female	58%	50%	41%	26%	15%	49%	30%	22%	3%	10%	21%	15%	16%	15%	5%
Ghana	Male	29%	28%	12%	2%	7%	16%	17%	22%	3%	3%	7%	5%	6%	3%	2%
	Female	17%	26%	21%	4%	15%	17%	26%	13%	6%	3%	2%	5%	6%	4%	5%
Kenya	Male	26%	27%	30%	7%	20%	14%	11%	26%	4%	7%	12%	15%	9%	15%	3%
	Female	30%	31%	34%	10%	22%	21%	12%	29%	5%	7%	9%	12%	6%	12%	2%
Nigeria	Male	26%	31%	40%	9%	27%	28%	23%	25%	7%	11%	9%	10%	15%	10%	10%
	Female	34%	40%	47%	11%	19%	33%	32%	31%	6%	7%	9%	11%	13%	11%	12%
Senegal	Male	16%	18%	16%	3%	7%	11%	14%	11%	2%	5%	11%	9%	14%	6%	3%
	Female	25%	25%	18%	12%	11%	12%	20%	19%	1%	6%	13%	7%	7%	4%	3%
Bangladesh	Male	24%	26%	25%	15%	27%	20%	9%	18%	8%	12%	6%	11%	16%	15%	9%
	Female	36%	23%	16%	25%	33%	33%	11%	16%	22%	24%	5%	15%	14%	12%	10%
India	Male	15%	24%	30%	25%	23%	26%	25%	18%	17%	14%	15%	21%	13%	19%	20%
	Female	16%	15%	23%	16%	18%	19%	25%	11%	13%	12%	15%	11%	12%	11%	8%
Pakistan	Male	37%	29%	39%	20%	34%	37%	24%	18%	16%	19%	17%	23%	21%	23%	13%
	Female	29%	28%	34%	15%	35%	28%	24%	23%	27%	25%	18%	18%	18%	21%	11%
Indonesia	Male	17%	18%	43%	20%	26%	30%	18%	26%	13%	19%	25%	20%	18%	21%	6%
	Female	20%	21%	52%	35%	33%	38%	18%	28%	23%	17%	19%	16%	18%	14%	8%
Guatemala	Male	25%	34%	31%	24%	45%	44%	29%	24%	18%	19%	28%	24%	22%	32%	11%
	Female	24%	39%	40%	23%	55%	40%	25%	27%	26%	29%	33%	39%	25%	40%	15%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed with primary education or below who own a phone  
n=48 to 383 for female micro-entrepreneurs and n=62 to 338 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs in the agricultural sector from starting to use mobile for business or using it more

Percentage of micro-entrepreneurs surveyed in the agricultural sector who own a phone

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	53%	52%	39%	23%	18%	46%	26%	30%	3%	5%	40%	31%	16%	34%	2%
	Female	54%	49%	38%	25%	18%	60%	38%	28%	2%	11%	21%	20%	20%	23%	10%
Ghana	Male	24%	18%	8%	3%	11%	11%	18%	21%	3%	3%	11%	5%	9%	7%	2%
	Female	24%	29%	19%	1%	13%	19%	13%	31%	3%	7%	6%	16%	3%	3%	5%
Kenya	Male	33%	25%	30%	10%	26%	19%	14%	27%	7%	10%	18%	14%	13%	15%	3%
	Female	35%	45%	34%	11%	29%	29%	17%	34%	8%	9%	10%	9%	9%	11%	3%
Nigeria	Male	20%	19%	26%	2%	22%	26%	17%	24%	0%	9%	7%	4%	5%	10%	7%
	Female	35%	21%	31%	2%	20%	32%	14%	36%	5%	11%	9%	16%	11%	16%	9%
Senegal	Male	20%	25%	22%	3%	9%	16%	18%	26%	3%	5%	14%	6%	18%	12%	0%
	Female															
Bangladesh	Male	28%	26%	39%	17%	30%	34%	17%	29%	17%	8%	14%	19%	20%	10%	13%
	Female	32%	22%	21%	23%	26%	27%	2%	10%	21%	17%	6%	16%	7%	9%	12%
India	Male	22%	31%	39%	29%	32%	33%	37%	25%	16%	20%	21%	26%	17%	24%	18%
	Female	13%	9%	23%	18%	24%	19%	25%	12%	14%	12%	18%	13%	18%	15%	6%
Pakistan	Male	33%	23%	42%	20%	33%	30%	21%	27%	9%	21%	14%	27%	20%	22%	14%
	Female	32%	24%	24%	20%	48%	34%	14%	24%	39%	32%	20%	18%	28%	17%	17%
Indonesia	Male															
	Female															
Guatemala	Male	30%	36%	30%	22%	34%	37%	26%	25%	25%	27%	28%	29%	22%	28%	9%
	Female															



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed in the agricultural sector who own a phone

Those categorised within the "agricultural sector" reported that they "fish, farm, collect or grow things to sell". Cells in grey reflect where sample sizes were below 30 and therefore insufficient.

n=30 to 117 for female micro-entrepreneurs and n=53 to 167 for male micro-entrepreneurs

# Barriers preventing mobile-owning micro-entrepreneurs in non-agricultural sectors from starting to use mobile for business or using it more

Percentage of micro-entrepreneurs surveyed in non-agricultural sectors who own a phone

		DON'T HAVE THE RIGHT TYPE OF PHONE		RELEVANCE		SAFETY AND SECURITY	SKILLS AND CONFIDENCE		DATA/SERVICE AFFORDABILITY	SOCIAL NORMS		INFRASTRUCTURE/OTHER				
		No internet enabled phone	Phone not allowing to do things easily	Prefer cash/other payment type	Mobile can't help my business (more)	Safety and security concerns	Lack confidence or skills	Need help using mobile	Cost of mobile data or services	Family concerns	Uncomfortable connecting with other gender	Limited/ no coverage	Slow connection	Agent access/ service	Limited battery	Something else
Ethiopia	Male	41%	36%	32%	21%	9%	24%	12%	11%	1%	5%	24%	30%	8%	14%	2%
	Female	58%	50%	41%	26%	14%	38%	25%	19%	3%	9%	19%	11%	13%	8%	1%
Ghana	Male	12%	13%	11%	3%	9%	8%	9%	13%	2%	4%	6%	7%	5%	4%	4%
	Female	15%	20%	17%	5%	11%	14%	18%	14%	6%	5%	7%	6%	7%	5%	6%
Kenya	Male	18%	23%	29%	4%	18%	10%	6%	25%	3%	4%	8%	11%	6%	13%	3%
	Female	26%	25%	32%	8%	20%	14%	8%	25%	4%	7%	8%	12%	4%	12%	2%
Nigeria	Male	19%	21%	33%	9%	21%	18%	14%	20%	6%	9%	10%	11%	11%	9%	9%
	Female	22%	34%	38%	10%	23%	24%	24%	26%	7%	9%	10%	16%	12%	12%	14%
Senegal	Male	11%	11%	13%	3%	5%	7%	7%	5%	1%	4%	10%	9%	8%	2%	3%
	Female	22%	24%	15%	12%	12%	11%	17%	18%	2%	5%	14%	6%	8%	4%	3%
Bangladesh	Male	15%	17%	20%	11%	21%	14%	8%	9%	8%	9%	7%	8%	10%	13%	8%
	Female	25%	23%	20%	16%	30%	27%	22%	21%	26%	28%	12%	29%	21%	16%	11%
India	Male	13%	22%	32%	23%	30%	25%	23%	22%	17%	18%	19%	23%	21%	21%	17%
	Female	16%	22%	30%	21%	26%	27%	25%	19%	16%	19%	19%	20%	18%	20%	14%
Pakistan	Male	22%	24%	36%	19%	26%	28%	18%	16%	14%	15%	21%	16%	19%	21%	8%
	Female	18%	22%	32%	14%	24%	20%	22%	20%	19%	20%	14%	16%	14%	23%	8%
Indonesia	Male	9%	19%	42%	14%	25%	22%	20%	23%	10%	18%	25%	21%	17%	19%	6%
	Female	15%	19%	46%	20%	33%	32%	18%	28%	17%	19%	23%	20%	16%	15%	7%
Guatemala	Male	15%	21%	32%	18%	44%	39%	25%	16%	14%	14%	28%	26%	19%	26%	9%
	Female	16%	24%	32%	16%	39%	33%	19%	18%	18%	19%	24%	33%	19%	26%	8%



Source: GSMA Consumer Survey, 2022

Base: Micro-entrepreneurs surveyed in non-agricultural sectors who own a phone

Those categorised within "non-agricultural sectors" reported to be in any other business sector apart from "fish, farm, collect or grow things to sell".

n=46 to 478 for female micro-entrepreneurs and n=78 to 706 for male micro-entrepreneurs