

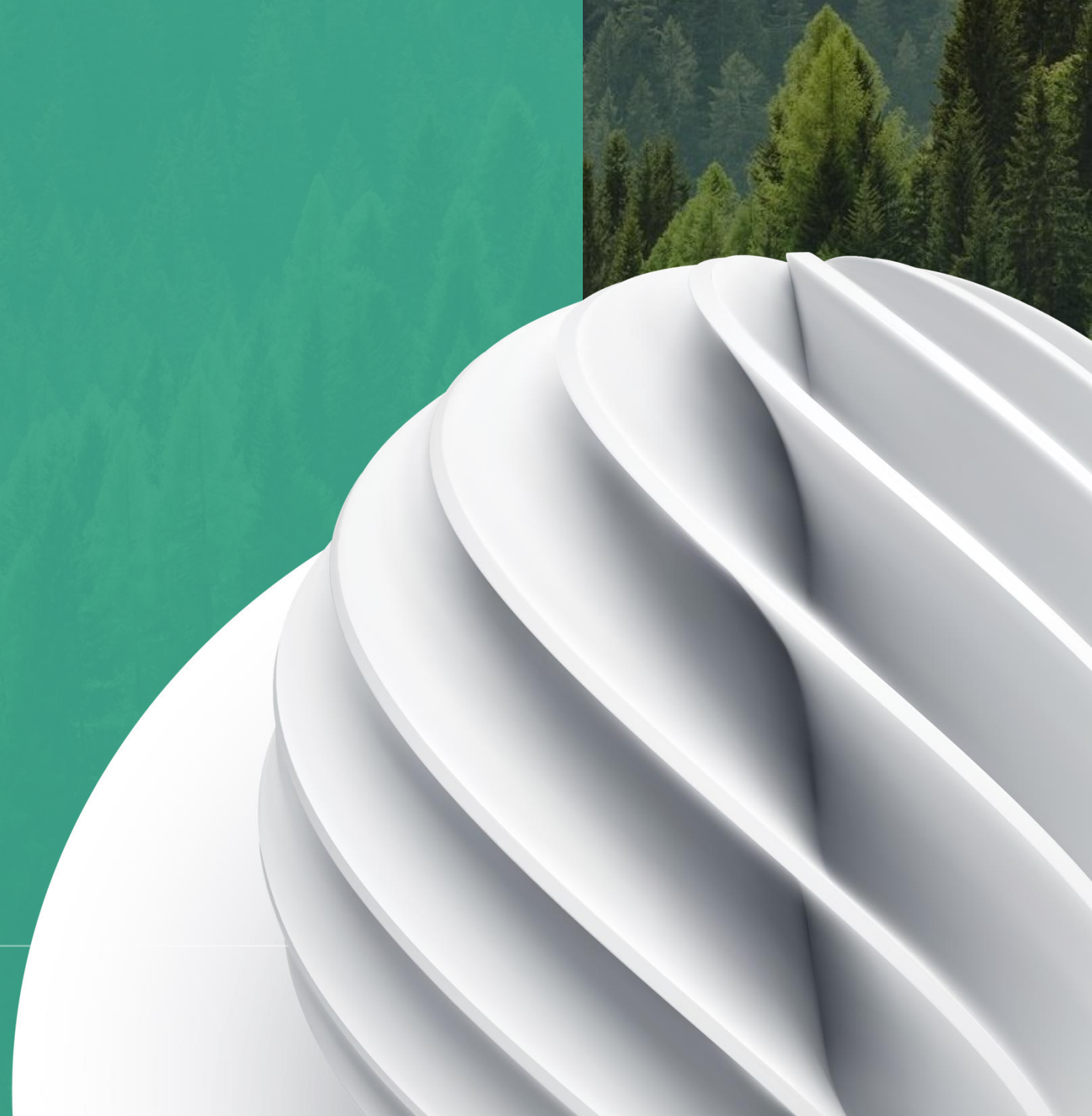


BCG
Green
Ventures

Green Ventures Africa

Women-focused customer research
for electric two-wheelers

Final report - November 2022



Agenda

- 1 Executive summary
- 2 Context
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

Agenda

- 1 Executive summary
- 2 Context
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

M-KOPA, Shell Foundation and P4G, in partnership with BCG, conducted research and developed interventions to promote gender inclusivity in Kenyan 2W¹ market



- Identify enablers for unrestricted and successful participation in Kenyan 2W market
- Uncover **female-specific challenges that hinder women from joining 2W market**
- Deep dive on some critical women specific barriers



- Based on findings from qualitative research, develop quantitative survey to understand market dynamics of Kenyan 2W
- Test hypotheses on **female-specific situations and key enablers/barriers** from qualitative analysis and strengthen them



- Provide the overview of the current situation and the main barriers to women's participation in the motorbike sector as riders or owners
- Suggest **possible intervention plans both for M-KOPA and for broader stakeholders as the sectoral efforts**

1. "2W" refers to all modes, including internal combustion engines (ICE) and electric, while "E2W" refers to electric modes

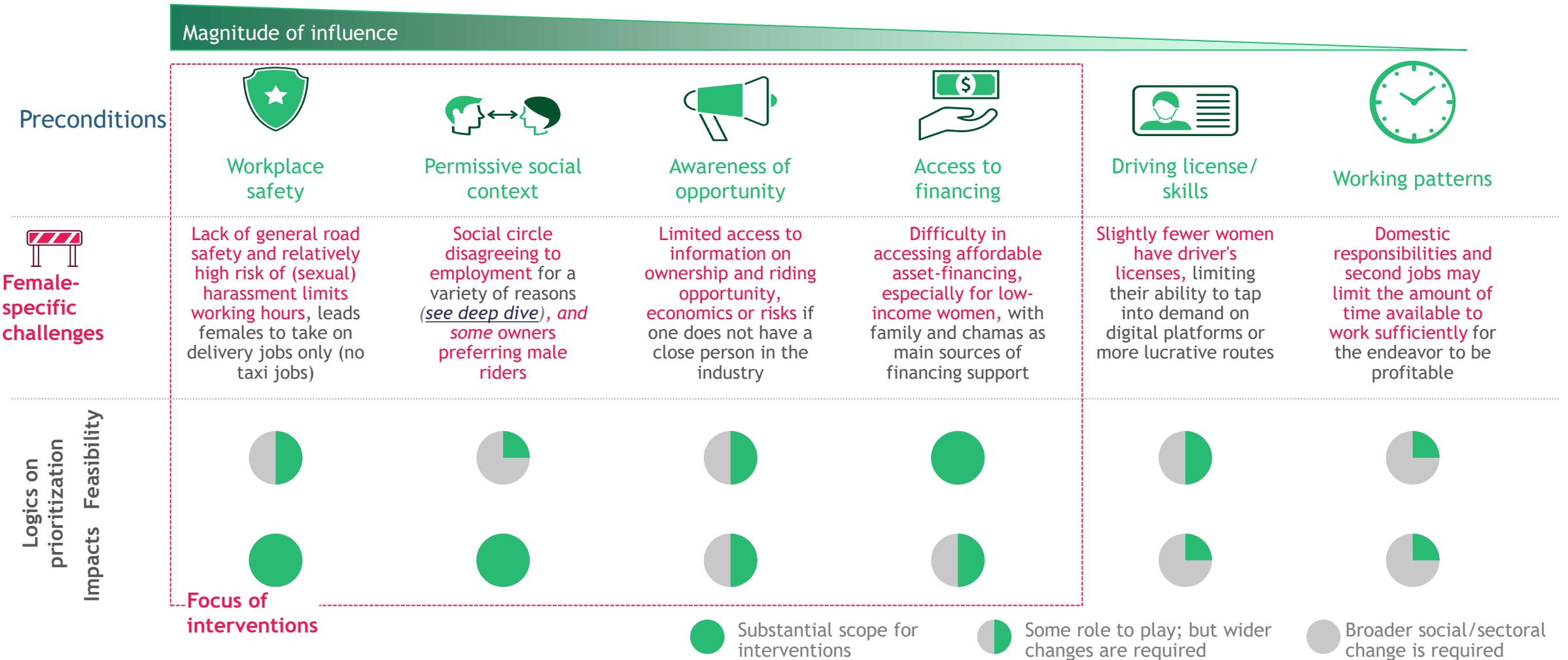
Accelerating female participation in Kenya's 2W market requires sustained and coordinated efforts. Immediate actions can kick-start the journey.

1. The **disproportionately low participation of women** in the Kenyan 2W industry is **due to safety concerns and social norms**. Without transport sector engagement, women miss opportunities for gainful employment directly and indirectly
 - The **biggest factors** deterring women are **safety—general road safety and sexual harassment (for riders)—and social norms (for riders and owners alike)**
 - Additionally, both women riders and owners raised concerns on limited awareness of the opportunity and lack of access to financing

2. Meaningful **change will require ambitious, sustained and coordinated stakeholder initiatives on safety and social norms**—driven by large institutions:
 - Road safety and harassment: Material overhaul of road and urban infrastructure, strict enforcement of traffic laws and anti-harassment are required
 - **Government:** **enhance road quality and enforcement of laws** and policies, and **establish services for and campaigns against sexual harassment**
 - **Private sector and funders:** **partner with the government** on the above and **tactically:** design safer-riding job options for women, provide protective gear, implement safe-rider training, add product features that enhance safety and deter harassment, fund pilots & prototypes
 - Societal context: Wide-reaching campaigns are needed to **address broader gender norms above and beyond the transportation sector**
 - **Government:** **spearhead large-scale public-sensitization campaigns** to empower women and dispel gender stereotypes
 - **Private sector and funders:** leverage marketing to **give positive visibility to women riders and allies** and support female empowerment programs

3. While true industry transformation depends on the interventions above, research revealed short-term opportunities to materially increase inclusion:
 - To trigger the first wave of female 2W riders, a concerted effort by industry players can provide more acceptably safe options for women riders:
 - **Delivery and day-time focused services** can be a gateway option for women with safety concerns (~60%). 70% preferred delivery or 62% preferred day time riding as mitigations. **E-commerce platform/mobility players** can carve-out such services and proactively onboard women to them
 - Marginal enhancements to bike features, protective gear, and safety training can increase women's confidence in industry safety
 - Also, reaching women through **the right channels—with effective messaging and influencers**—will driver further adoption:
 - **Channels:** Leverage the reach of **chamas and e-commerce platforms** to target likely women owners and riders. There are nearly 4 female owners for each female rider, and so ownership is likely the fastest route to gender inclusion in the 2W industry
 - **Messaging:** Focus on **women's primary motivations of gaining independence and earning a predictable income**; and target 2W owners with data on female driver capability, leverage the finding that over 60% of 2W passengers are open to or would prefer women drivers
 - **Influencers:** Drive adoption through **both female and male allies / influencers**: 72% of women owners were introduced by male friends and family
 - Lastly, targeting 2W financing to women and testing **adapted loan products for women** can immediately recruit female 2W owners into the industry

Challenges | Four types of female-specific challenges identified for the focus of interventions



Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); BCG analysis

Macro interventions | Wider efforts are required to fully resolve the workplace safety and permissive social context challenges to female 2W participation



Workplace safety



Addressing need for **comprehensive road upgrades and lighting infrastructure** e.g., streetlights, guard rails



Supportive **law enforcement**: education on road traffic rules, deterrent fines, aggressive enforcement of traffic laws



Elimination of sexual harassment risks: social education, highly visible campaigns, reporting hotlines and enforcement by police (as well as ensuring police are not perpetrators)



Protection from theft of assets, e.g., snatching of motorcycles



Permissive social context



Driving a **change in cultural that limits opportunities for women and girls broadly** via massively coordinated efforts e.g., awareness campaigns, influencers, subsidies



Increasing champions and visible **allyship by all males** (top leadership and police included) to challenge stereotypes and educate passengers on equal capacity of women to ride



Public dialogue on **gender norms to change 'dirty' perception of industry** and normalize female employment in "male dominated industries" (including 2W)



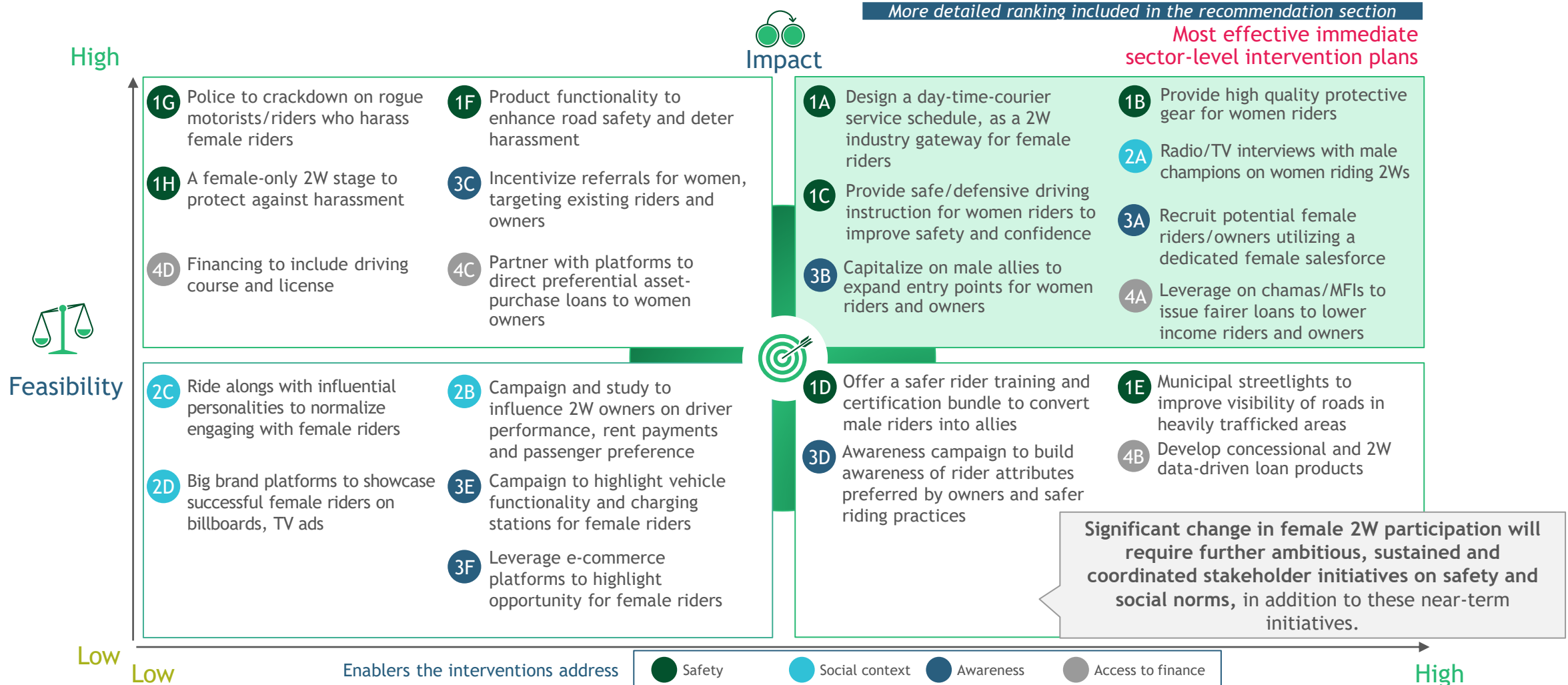
Provision of **reliable, affordable childcare**, to enable equitable participation in the workplace and at home

Transformational impact



Despite the ambitious transformation required on safety and social norms, the research revealed many opportunities for quick actions remain across all 4 enablers to recruit the next wave of female 2W riders/owners into the industry. Interventions in the following section focus on actions one or a few aligned stakeholders can do together in 12-18 months to drive progress in 2W inclusion.

Priority near-term interventions | Impact-Feasibility Matrix shows 7 near-term interventions for increasing female 2W inclusion



Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

To drive meaningful 2W gender inclusion, each stakeholder should prioritize the most impactful interventions within their sphere of influence



Government

Tackle the foundational barriers in safety and social norms by prioritizing massive road infrastructure upgrades, road safety enforcement and run widespread campaigns on gender equity



Associations, MFIs and Chamas

Educate female members on the economic benefits of 2W ownership and ridership, as well as partnering with 2W companies/platforms/financiers to onboard female members into the industry



Financiers

Partner with chamas to recruit female customers; partner with funders to test flexible loan products that target strong female “prospects” who can’t enter the industry without financing



E-commerce platforms

Leverage platform entry points to drive female participation by giving targeted information, dedicated recruitment / referral codes and preferential position in app-service options; use marketing to profile female riders



Grant funders

Fund effective coalitions / campaigns on safety and dispelling gender bias; fund experiments in recruiting female riders/owners, including product design and debt structures



2W Manufacturers

Employ marketing campaigns to impact social perceptions and raise awareness among female prospectives; develop and educate owners / riders on features that enhance safety

Impact will require ambitious, sustained and coordinated multi-stakeholder initiatives on safety and social norms

Agenda

- 1 Executive summary
- 2 Context
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

The current situation for women in the Kenyan transport system

1

Limited economic opportunity: The transportation industry is a source of both direct economic opportunity for women—in the form of employment or entrepreneurship—as well as indirect as a critical factor in women’s ability to access work. Without transportation, women are isolated

2

Unfavorable social norms: gendered perception of skills (e.g., women perceived as less technically inclined, less suitable for promotion), women feel unsupported to enter the transport industry

3

High degree of harassment: In Nairobi, approximately 70% of women who use public transport experienced dispute over payment, 45%- verbal abuse and roughly 30%- sexual harassment; harassment is experienced by female passengers and conductors

4

Low formal representation: very few women in transport policy-making and management roles (<1%): only ~7% female participation across Kenya’s public transport sector (most as matatu conductors); resulting in exclusion from transport and infrastructure planning

M-KOPA, Shell Foundation and P4G, in partnership with BCG, conducted research and developed interventions to promote gender inclusivity in Kenyan 2W¹ market



- Identify enablers for unrestricted and successful participation in Kenyan 2W market
- Uncover female-specific challenges that hinder women from joining 2W market
- Deep dive on some critical women specific barriers



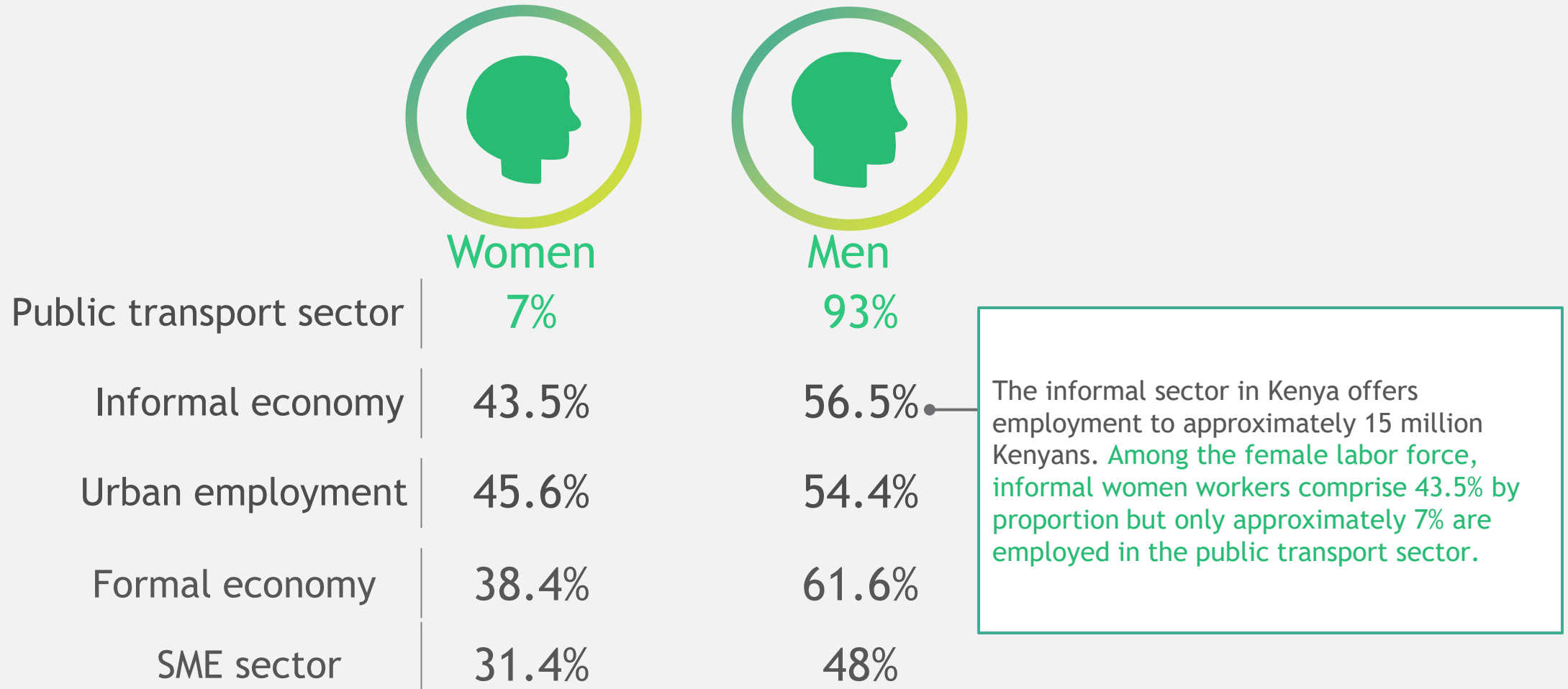
- Based on findings from qualitative research, develop quantitative survey to understand market dynamics of Kenyan 2W
- Test hypotheses on female-specific situations and key enablers/barriers from qualitative analysis and strengthen them



- Provide the overview of the current situation and the main barriers to women's participation in the motorbike sector as riders or owners
- Suggest possible intervention plans both for M-KOPA and for broader stakeholders as the sectoral efforts

1. "2W" refers to all modes, including internal combustion engines (ICE) and electric, while "E2W" refers to electric modes

Current situation | In Kenya, women predominantly earn a livelihood from informal urban economies which are considered flexible work environments



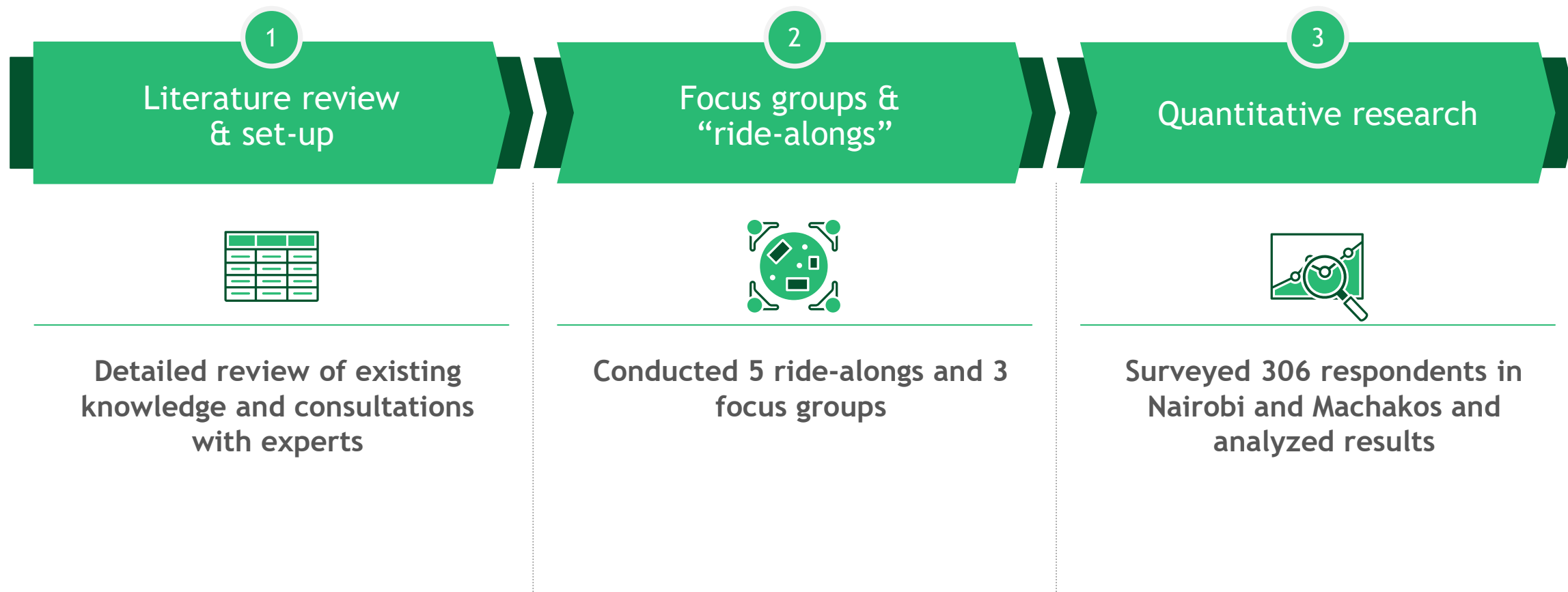
1. In Kenya, 31.4 % of the licensed SMEs are owned by women as compared to 48% owned by men and approximately 17% owned jointly by both men and women.

Source: SDG Gender Factsheet- Kenya (2021) Available [here](#); The East African (2021) Available [here](#); Kenya National Bureau of Statistics (2022) Available [here](#); Trading Economics (2022) Available [here](#); Determinants of performance of women-owned small and medium enterprises in Nairobi county (2018) Available [here](#); Informal women workers and missed opportunities (2021) Available [here](#); The Standard (2020) Available [here](#)

Agenda

- 1 Context
- 2 Executive summary
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

Research approach | We adopted a three-step approach to understand the key issues affecting women in 2W industry



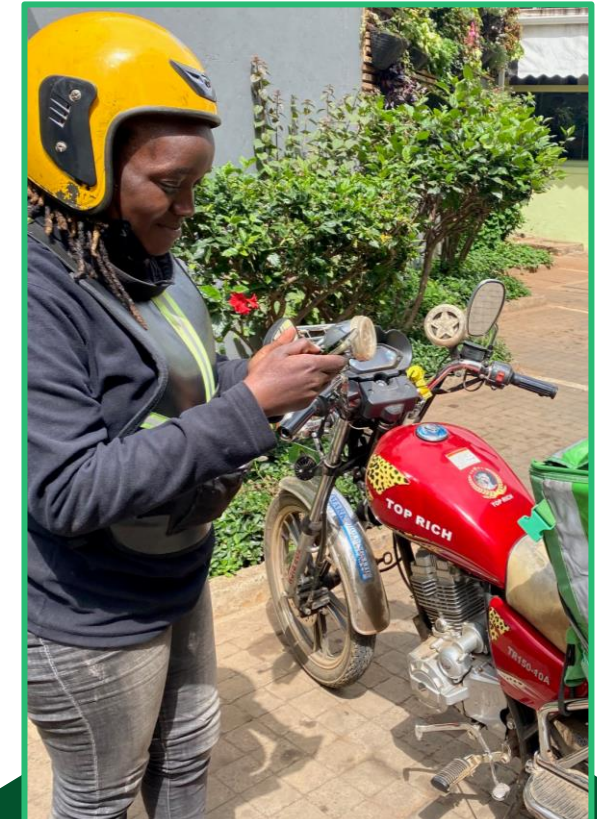
Research approach | We spoke with riders, owners and prospectives to understand the most important issues affecting women in 2W industry



5 ride-alongs



3 focus groups

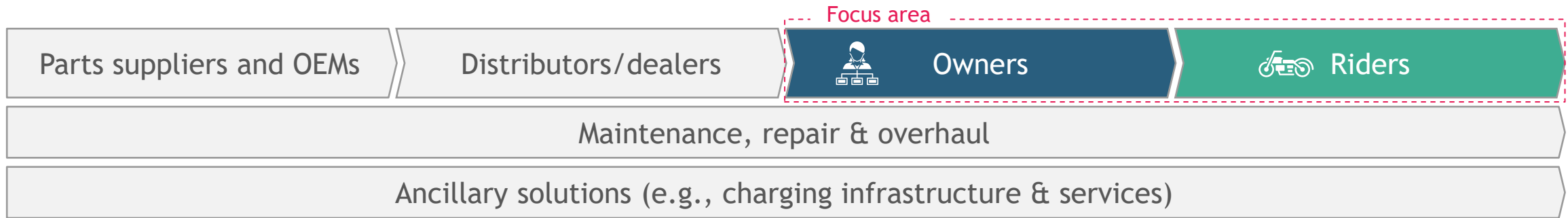


Survey of 306 respondents in Nairobi and Machakos

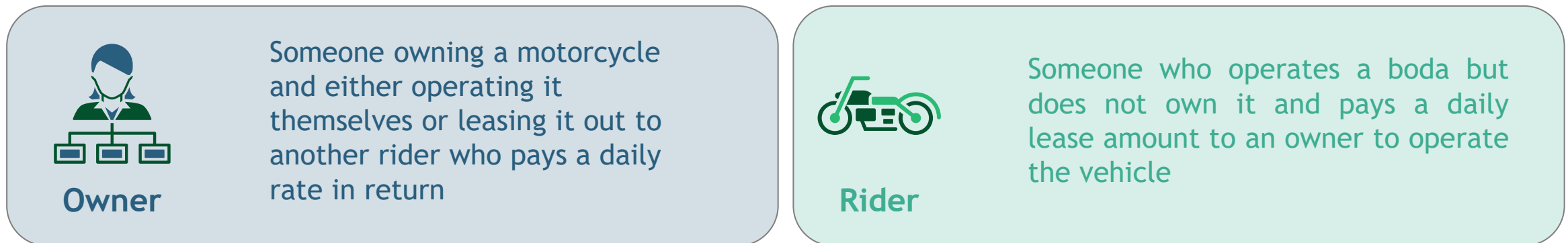
Qualitative and quantitative research supplemented by desk research and literature review

Scope & definitions | The focus of the research is specifically on 'owner' and 'rider' profiles, rather than employment opportunities in the value chain

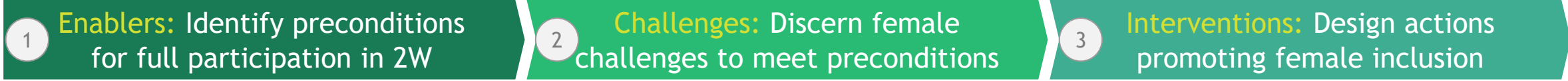
Simplified/stylized value chain of 2W market



In-scope role definitions



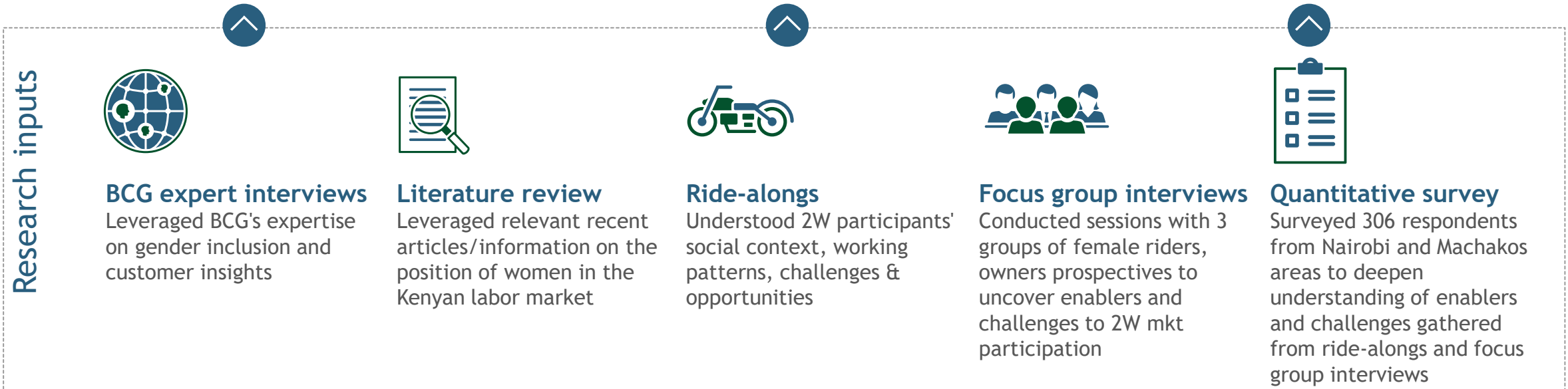
Analytical framework | To identify interventions for female inclusion, we study preconditions for 2W participation and examine women's ability to meet them



Through research, **identify all (gender-agnostic) pre-conditions ("enablers")** that must be met for unconstrained and successful participation in the 2W market

Identification of female-specific challenges towards meeting pre-conditions for full participation in 2W market, both in a 'rider' or 'owner' role

Identify potential interventions towards female inclusion viable for stakeholders; highlight challenges that can only be fully overcome through broader social change



Research inputs



BCG expert interviews
Leveraged BCG's expertise on gender inclusion and customer insights



Literature review
Leveraged relevant recent articles/information on the position of women in the Kenyan labor market



Ride-alongs
Understood 2W participants' social context, working patterns, challenges & opportunities



Focus group interviews
Conducted sessions with 3 groups of female riders, owners perspectives to uncover enablers and challenges to 2W mkt participation



Quantitative survey
Surveyed 306 respondents from Nairobi and Machakos areas to deepen understanding of enablers and challenges gathered from ride-alongs and focus group interviews

Agenda

- 1 Executive summary
- 2 Context
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

Executive Summary: Key Insights

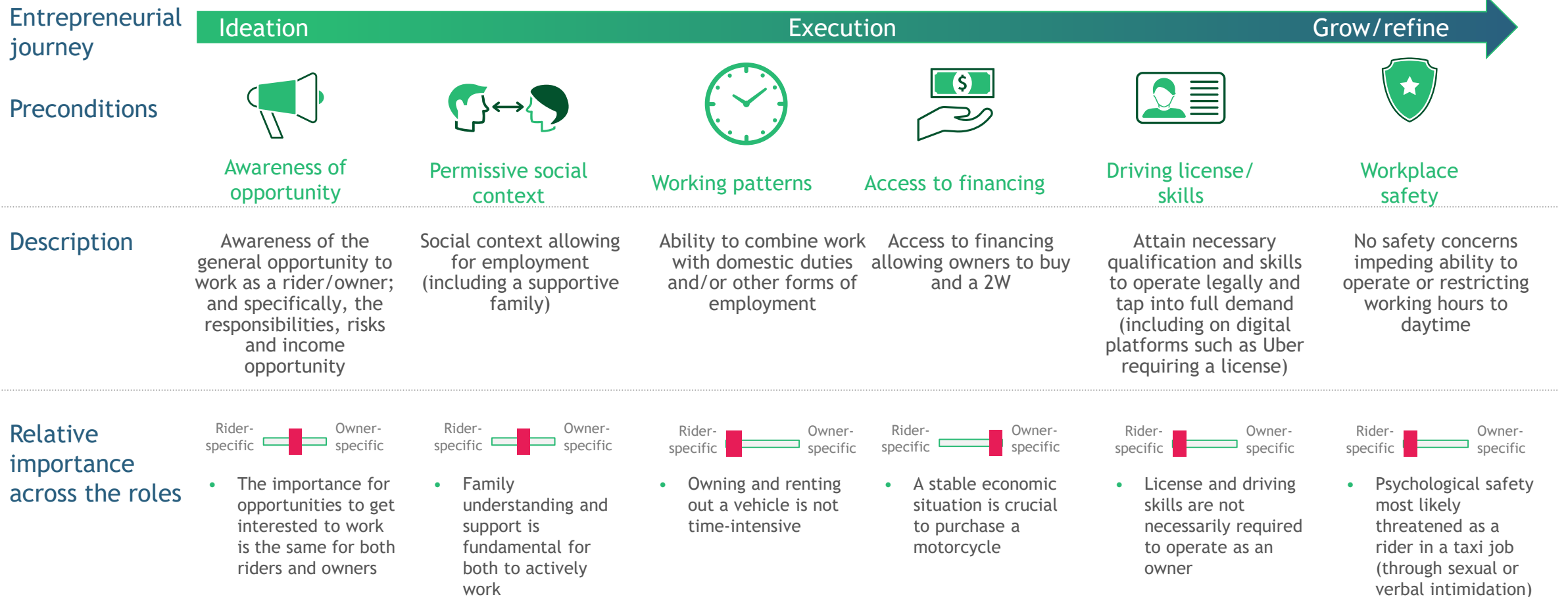
The following insights are based on qualitative and quantitative research to understand female riders, owners and “prospectives”

- **Motivators** | Majority of female owners (81%) motivated by gaining independence, a close inspiring person and predictable income. Female riders qualitatively motivated by know-how, predictable income and a close inspiring person
- **Barriers** | Women’s safety (both road safety and sexual harassment) and social expectations are the biggest factors in a woman’s decision to join the 2W industry—over access to financing, information or skills

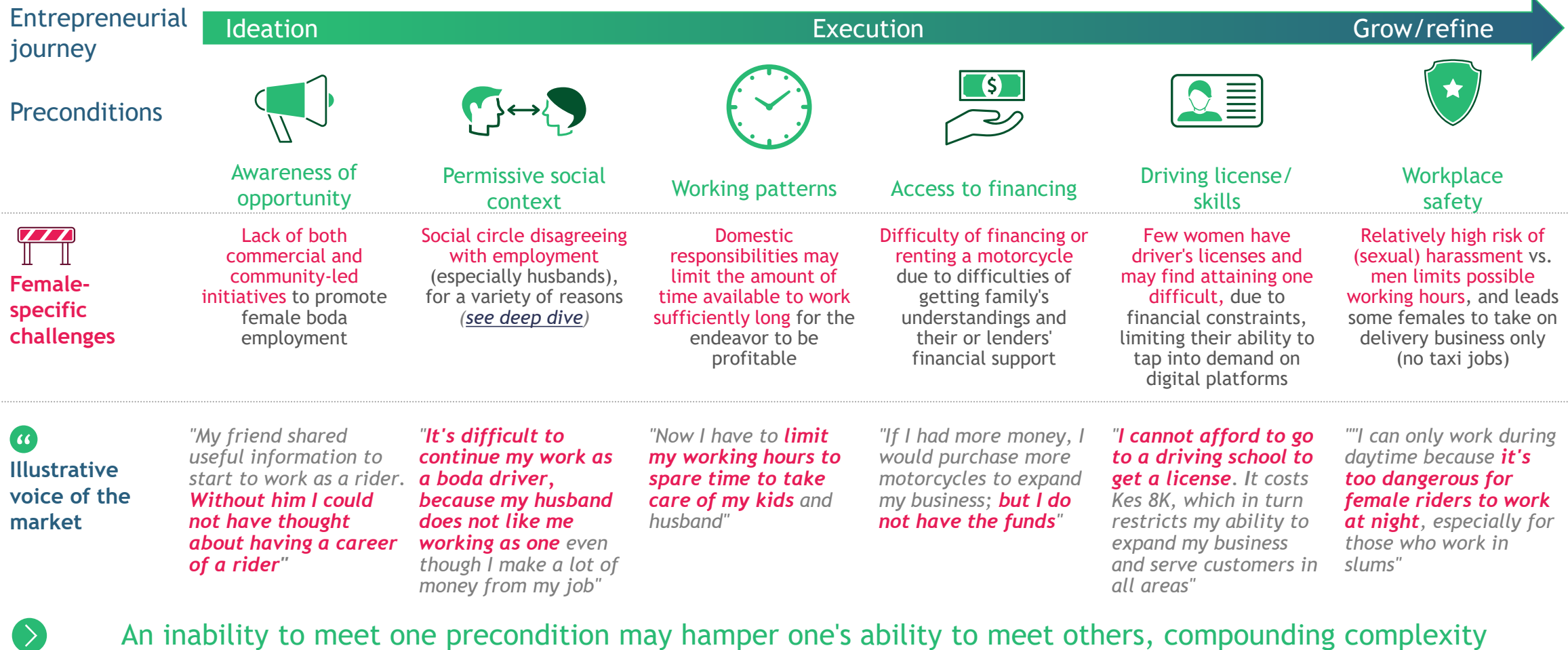
Through qualitative and quantitative research, insights on of the **6 pre-conditions for successful participation in 2W** were identified:

- **Workplace safety** | Sexual harassment and general road safety are primary female safety concerns. 70% female riders feel most unsafe when returning home at night or when riding in the streets. Delivery work and daytime hours are preferred safety measures
- **Social Context** | Despite social pressures on female riders and owners, 60% of 2W passengers show openness to female drivers and 48% of 2W owners show openness to renting to female drivers. Male family members (e.g., father, husband) have an outsized influence
- **Access to financing** | Male 2W owners are 20% more likely to have self-financed; >50% of female 2W owners were able to access financing with low-income women being more likely to use financing. Banks or lending companies and SACCOs gave >65% of loans
- **Awareness** | Male friends/family play a critical role, responsible for introducing 67% of female driver/owners to the industry; but female-to-female introductions are disproportionately high for the number of women in the industry. Both genders are important “influences”
- **Driving skills** | Anecdotally, the vast majority of male & female riders were license holders, and men were >20% more likely to be license-holders. However, this did not seem to be the largest impediment to participation in the 2W industry
- **Working patterns** | Qualitatively, female riders work ~10 hours fewer per week than male riders – citing safety concerns and domestic duties as the main factors – and are ~27% more likely to have a second job

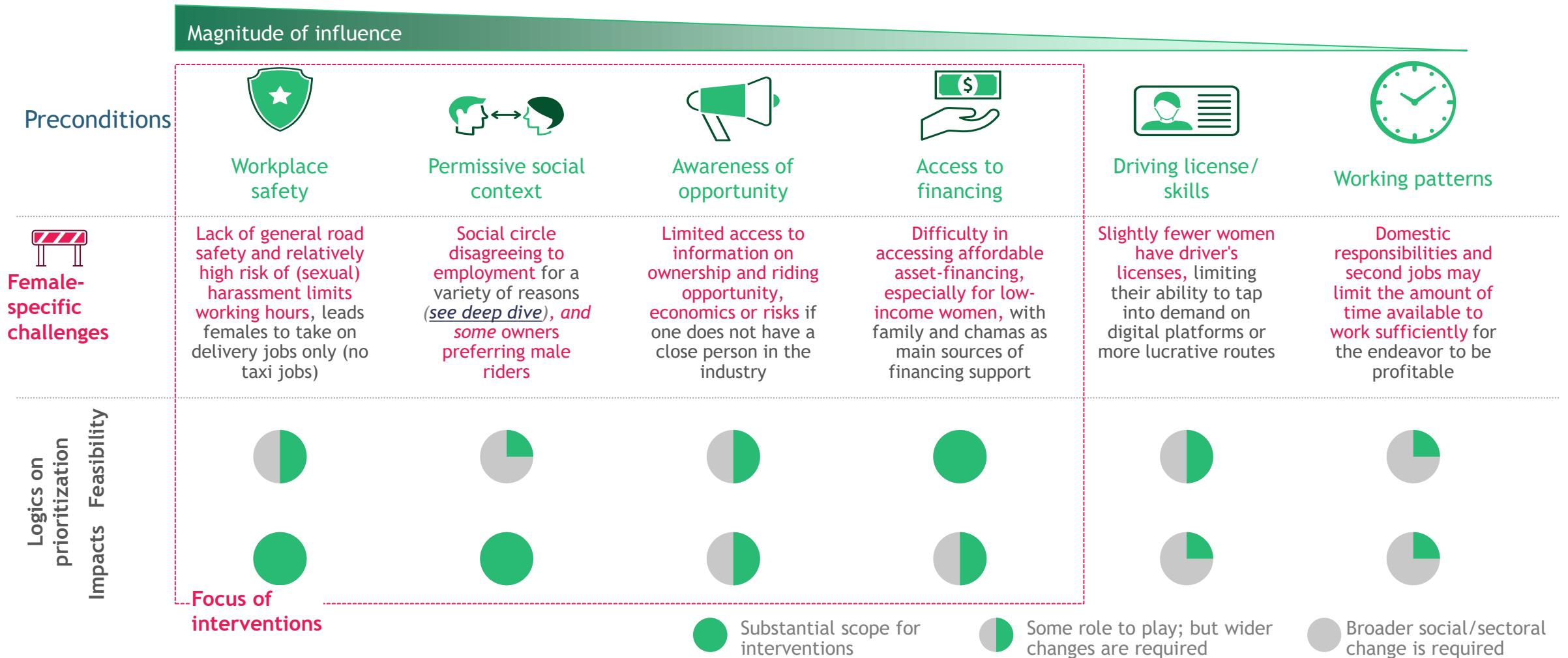
Enablers | For unrestricted and successful participation in the 2W market as a rider and/or owner, six key preconditions must be met along the journey



Female-specific challenges | Ride-alongs and focus groups highlighted female-specific challenges around a permissive social context, financing & safety

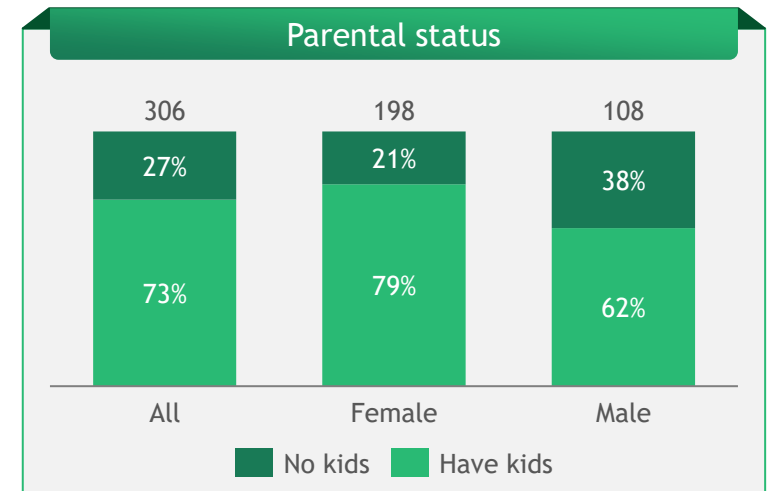
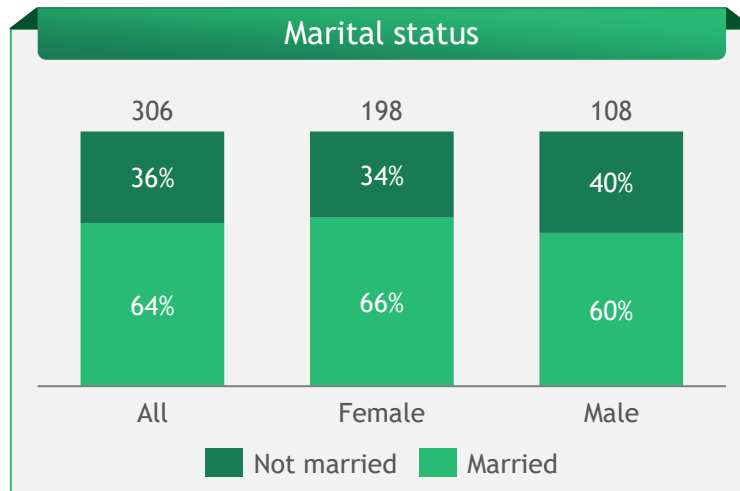
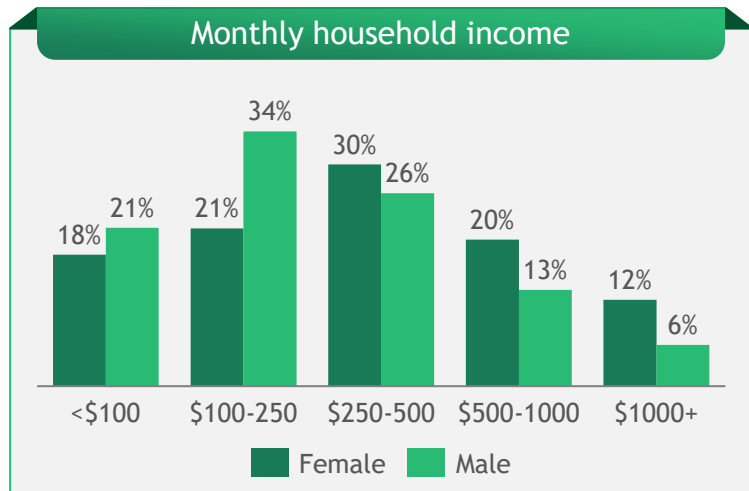
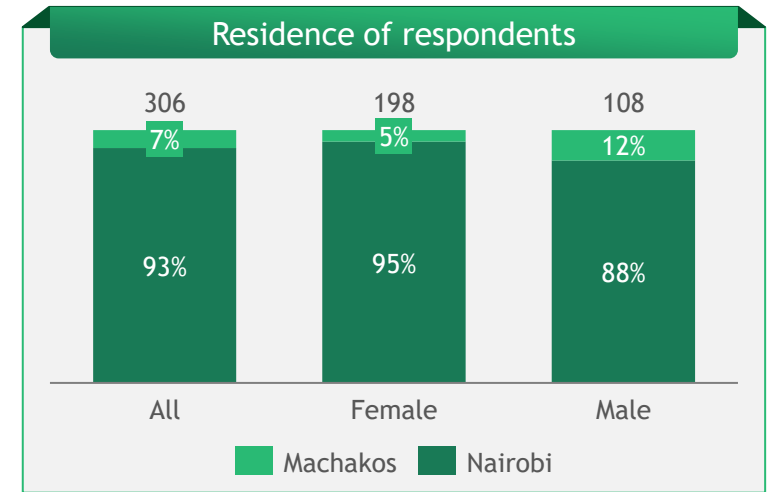
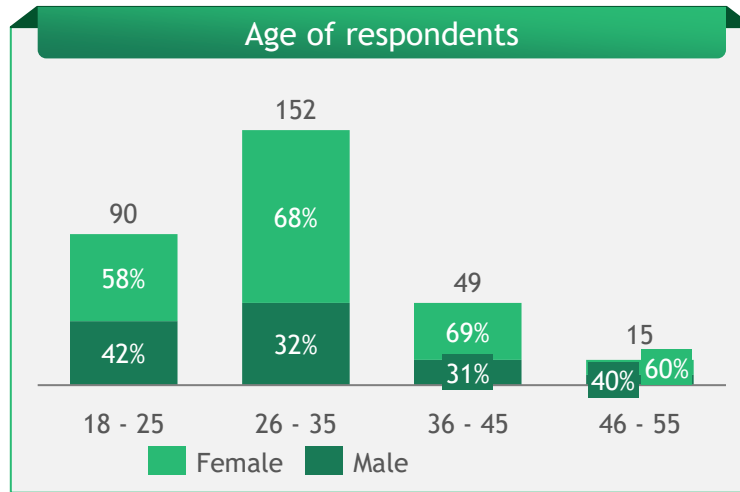
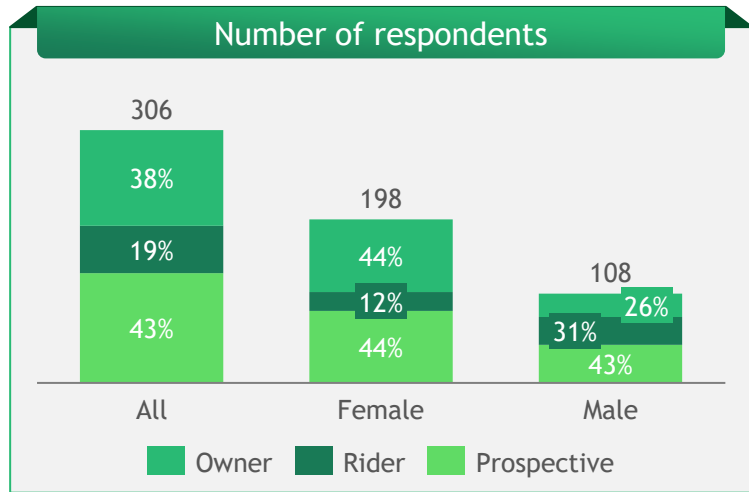


Challenges | Four types of female-specific challenges identified for the focus of interventions



Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); BCG analysis

Demographics | Summary of the 300+ quantitative survey respondents



Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Higher incomes in 2W industry | Female respondents skewed more affluent than male respondents and than default survey population

Distribution of respondents across monthly household incomes may reflect that women of slightly higher income feel more empowered to enter the 2W industry

Survey respondents



Broader SAGACI Nairobi pool

Note: Broader SAGACI Nairobi pool is the distribution of SAGACI app users into SAGACI's household income social economic categories. SAGACI Nairobi pool is more than 30,000 people
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Industry personas | Predictable revenue, inspiration from a close person and skills inform owning or riding decisions

Segment

Female owner



Akinyi

Profile

- Age 26-35, urban/peri-urban
- More likely to be married and a parent
- Monthly household income 100-500 USD
- Most likely to have 2nd job as a seller, cooking/baking or running a general business

“ Sentiment of riding or owning decisions

I wanted to be **independent** by starting my own business. A **close family member inspired** me to save up and own my motorbike. I enjoy being able to **predict how much I will earn** by the end of the day.

Female rider



Brenda

- Age 26-45, urban/peri-urban
- More likely to be married and a parent
- Monthly household income 250-1000 USD¹
- More likely to have 2nd job than male riders, works in selling, hair & beauty or online jobs

I **knew how to ride** a motorcycle before I even started working. **Someone close to me had inspired** me to become a rider. I love **being able to predict my daily income** and I find this riding job easier than other jobs.

Male owner



Charles

- Age 26-35, urban/peri-urban
- Less likely to be married and a parent
- Monthly household income 100-1000 USD
- More likely to have 2nd job than M/F riders, works as a seller, in IT or e-commerce

I wanted to be **independent** by starting my own business. Owning a bike **is much easier** to start compared to doing other jobs. My bike is a convenient means of transport, also helps me to **finish other errands**.

Male rider



Duncan

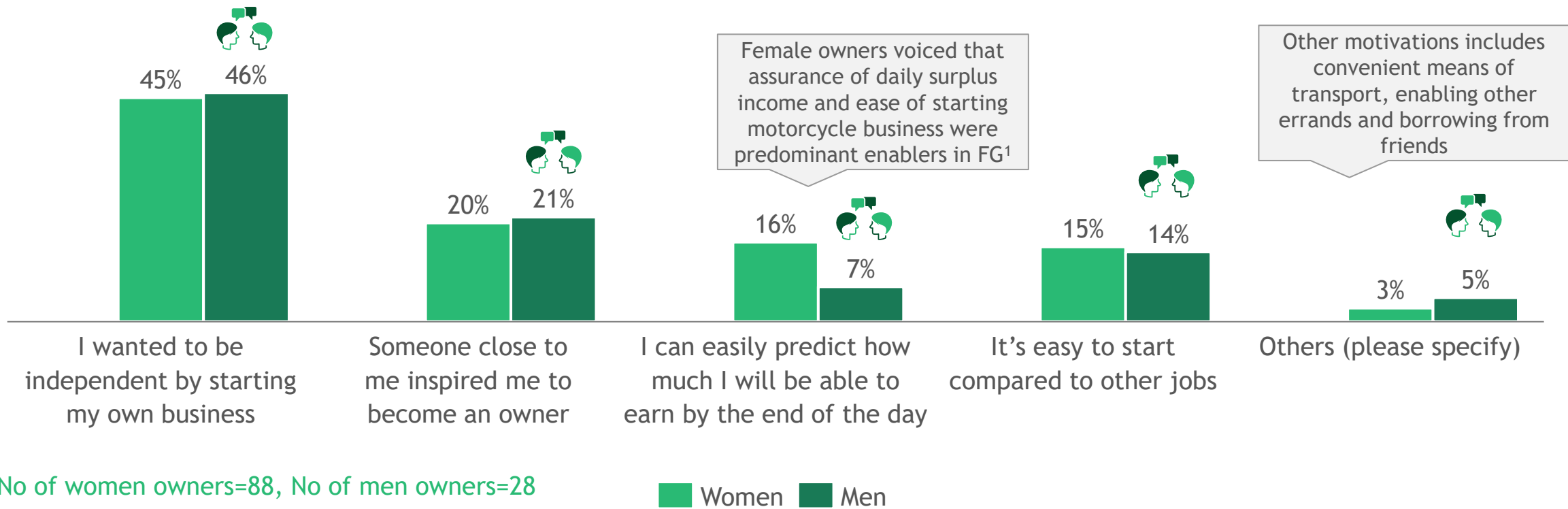
- Age 18-35, urban/peri-urban
- Less likely to be married and a parent
- Monthly household income <100-500 USD
- Less likely to have 2nd job than owners or female riders, works as a seller, in food services, online or in distribution

I **knew how to ride** a motorcycle before I even started working. I'm motivated to ride because I can **easily predict my daily income**. I **love riding**. I started riding as a **side hustle**- it was the **only opportunity** left for me.

1. Survey likely captured affluent riders in the female rider category skewing the data
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Owner motivations | Gaining independence, a close inspiring person and predictable revenue are main motivators for women to own motorcycles

Percent of owners for whom this is the biggest motivation



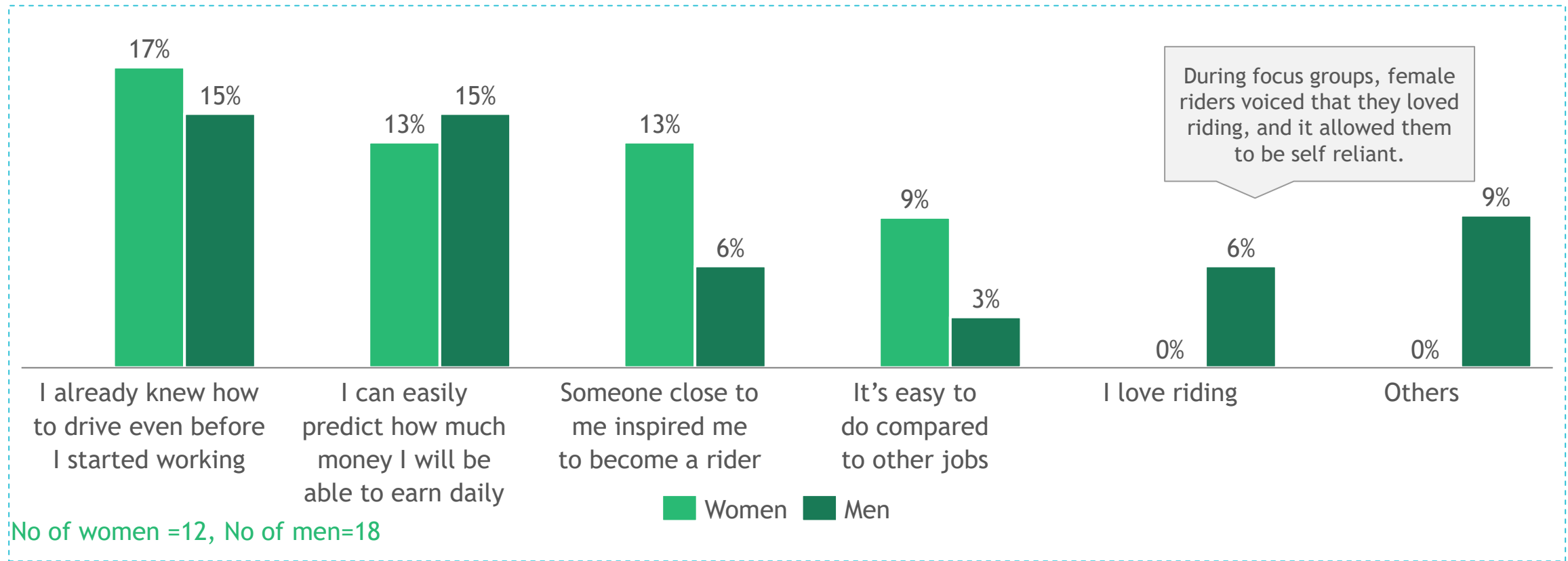
Q13: Why did you become a motorcycle owner? Select one main reason. Choose one of the following answers

1. FG= Focus Group
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

Rider motivations | Riding know-how, predictable revenue and a close inspiring person are main motivators for women to start riding

Percent of riders for whom this is the biggest motivation

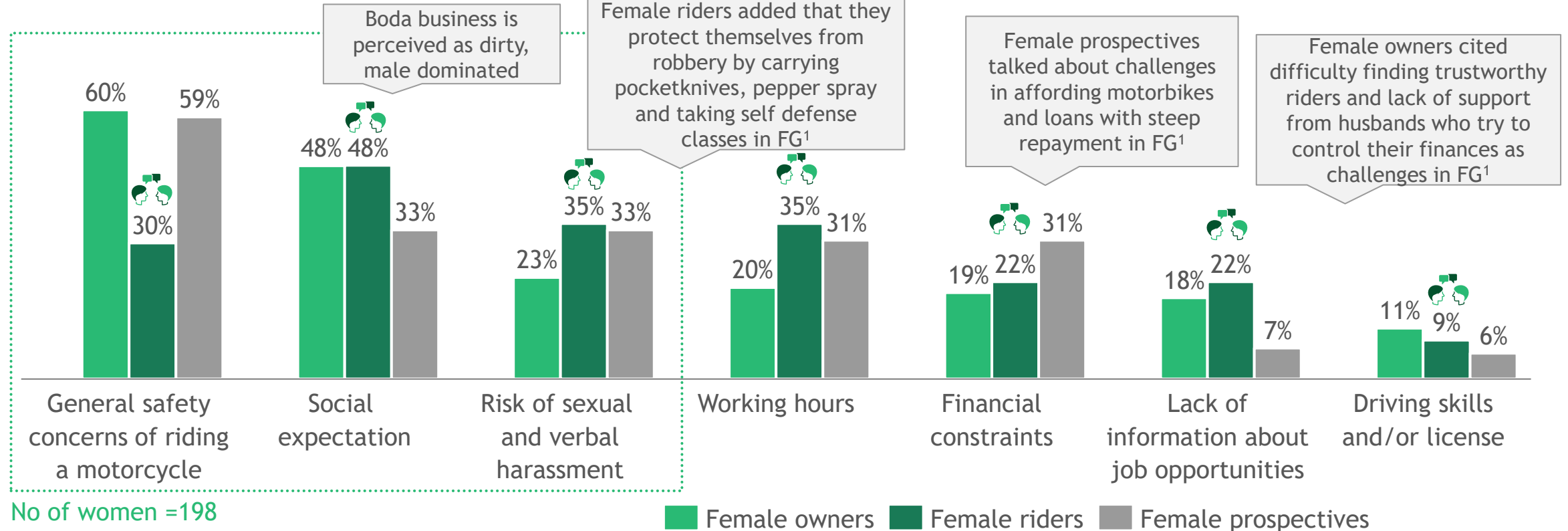


Q12: Why did you become a motorcycle rider? Select one main reason Choose one of the following answers



Challenges | Female owners concerned about road safety, social expectations, while riders more concerned with social expectation and harassment risk

Percent of respondents for whom this is the biggest challenge



No of women =198
(88 owners, 23 riders, 87 prospectives)

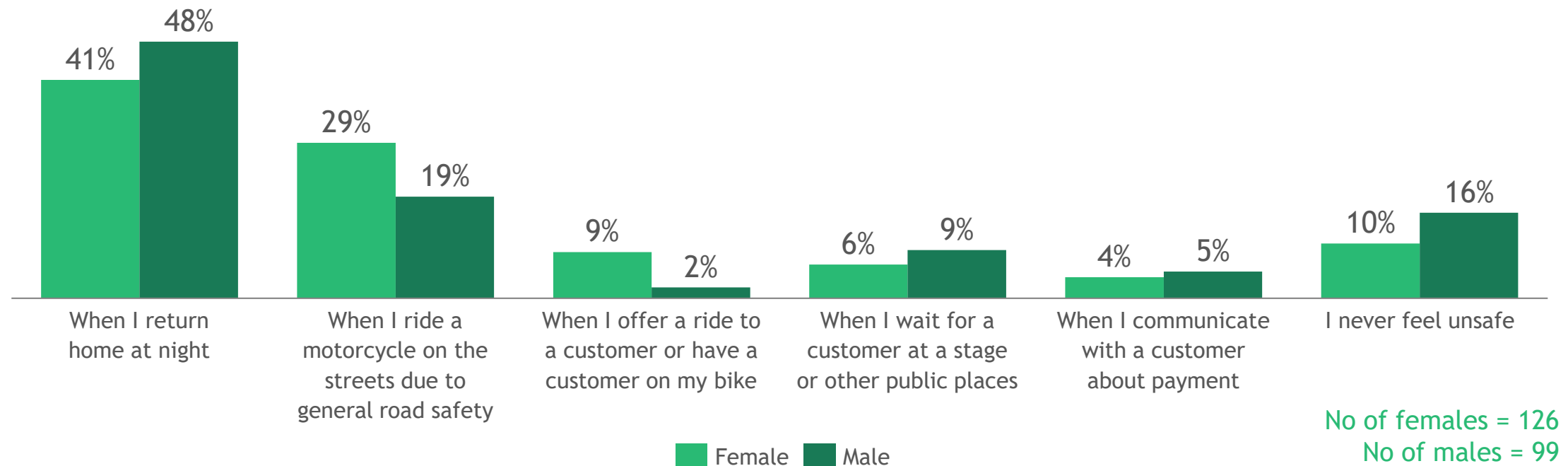
Q15: What do you think are the biggest challenges you might face or faced in deciding to become a motorcycle rider or owner? Please select the top 2 challenges.

1. FG= Focus Group
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

Safety | Respondents felt most unsafe at night and when riding in the streets

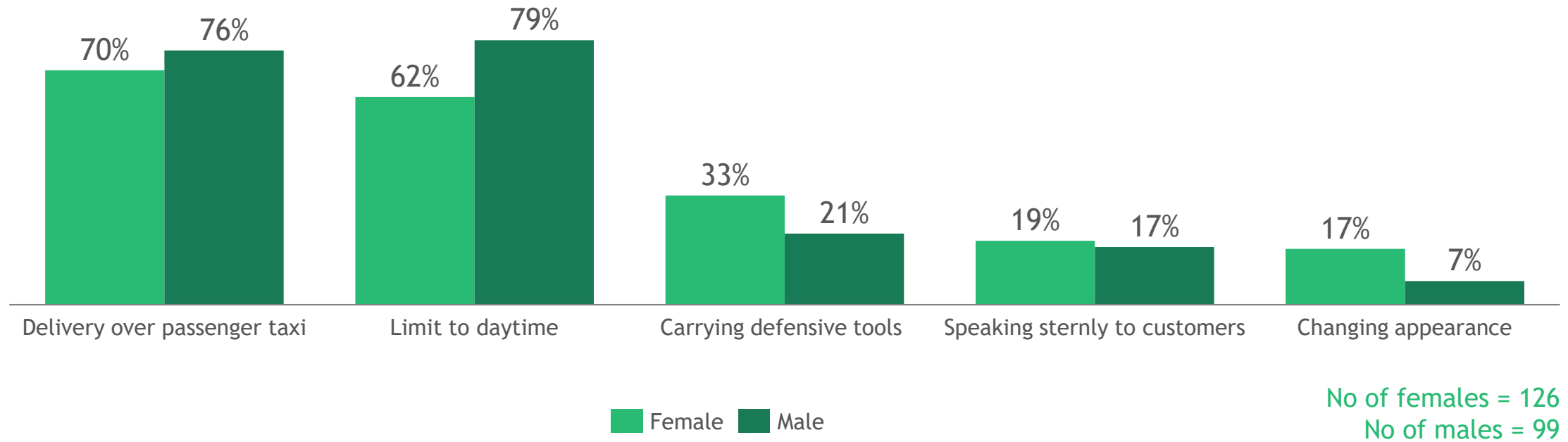
Percentage of riders, owners and prospectives feeling most unsafe in the given situation



Q25: When do or would you feel MOST unsafe when riding a motorcycle? Choose one of the following answers

Safety measures | Delivery work and daytime hours are the preferred safety measures

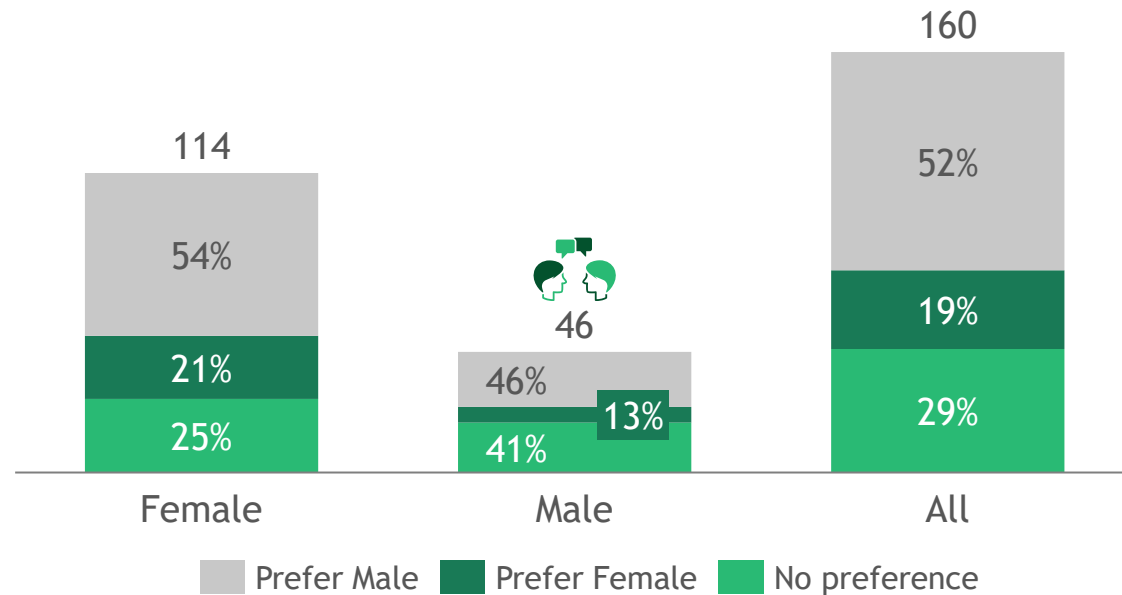
Percentage of respondents who selected each safety options. Each responded selected two answers



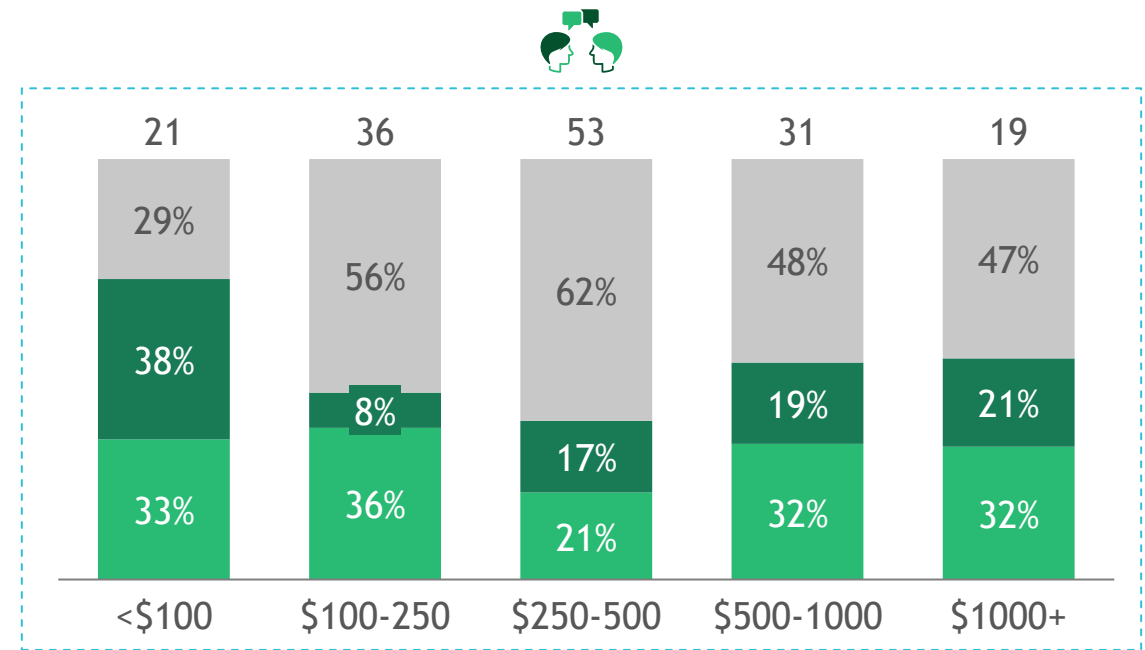
Q26: If you are/were working as a motorcycle driver, what actions do you take or would you consider taking to ensure your safety? Please select 2 answers

Owner preference | More than 40% owners are indifferent or prefer female riders, reflecting the opportunity to increase female rider-renters

Percent of owners who prefer male or female riders



Percent of owners by socio-economic cluster who prefer male or female riders



No of owners= 160 (114 women, 46 men)

Q18: As a motorcycle owner, do you prefer hiring female or male drivers to use your motorcycle? Choose one of the following answers

Owner preference | Owners' preference for female riders qualitatively linked to better communication, property care and timely rental payment

Percent owners giving reason for preferring male or female riders

Prefer female riders



No of responses=90 (30 respondents * 3 responses)
 Q19: Why do you have this preference? Select 3 answers

Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Prefer male riders



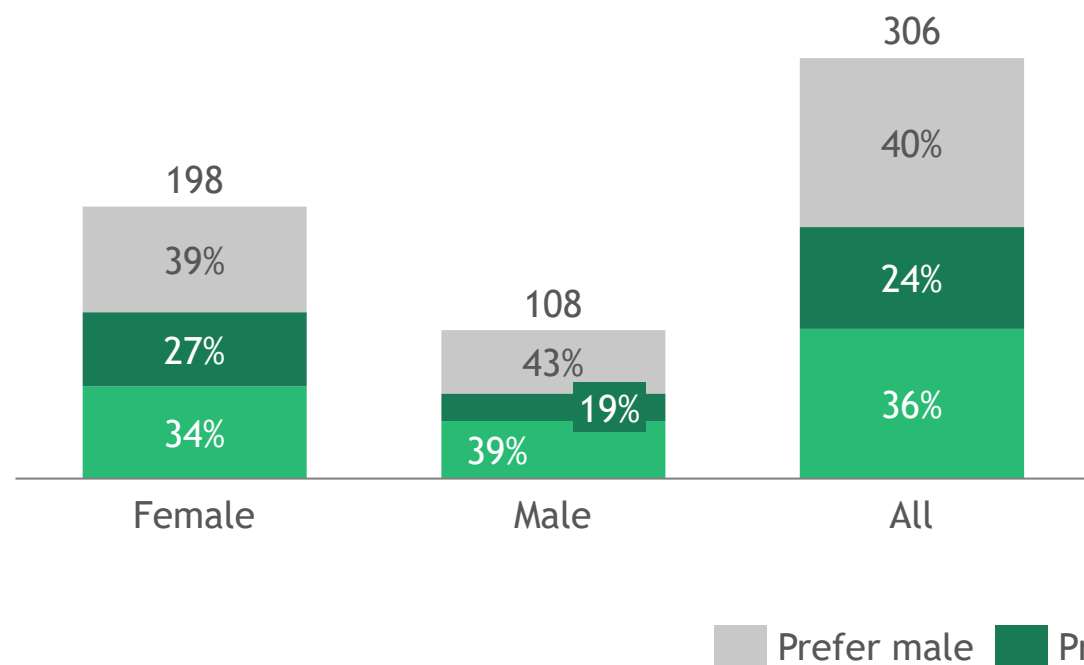
No of responses=249 (83 respondents * 3 responses)



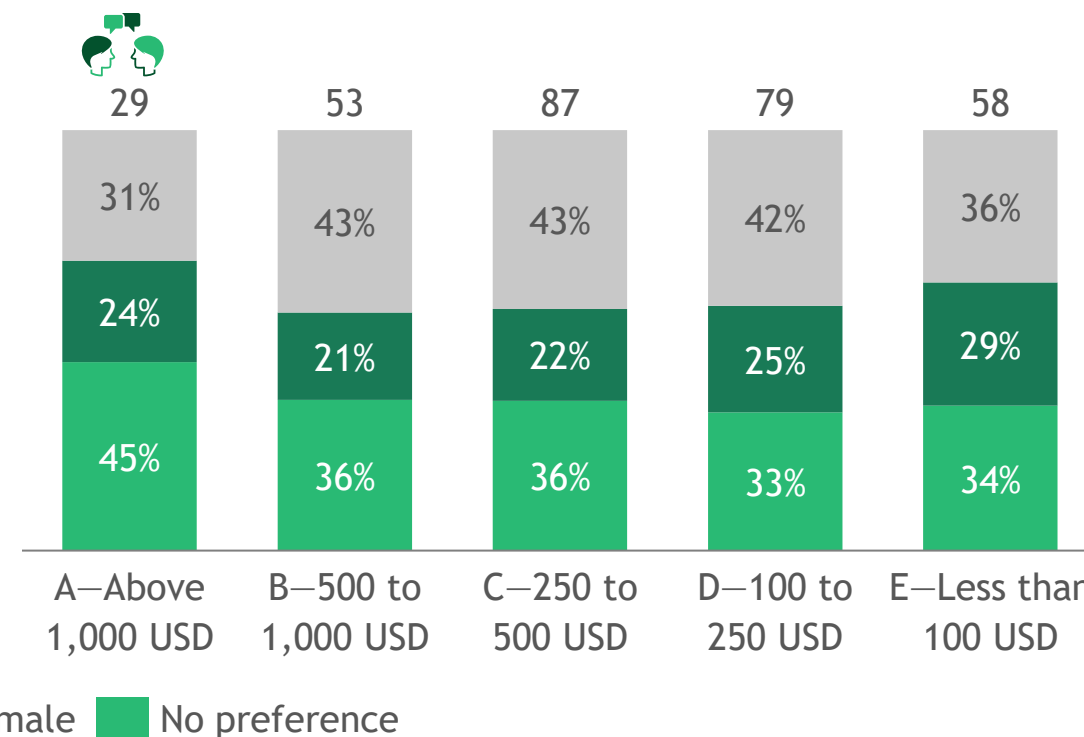
Detailed qualitative, not statistically significant

Passenger preference | ~60% passengers prefer female riders or are indifferent to rider gender, reflecting an openness despite social norms

Percent of passengers who prefer male or female riders



Percent of passengers by socio-economic cluster who prefer male or female riders



No of respondents= 306

Q17: As a passenger, would you prefer to take a ride with a female or male rider?

Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

Permissible social context deep dive | Among the key reasons for a critical stance from family members are gender stereotyping and safety concerns

Reason for disapproval in social context	Frequency in interviews	Illustrative quote	Source of reluctance to work as driver
Cultural gender stereotype		"I cannot even dare mention owning or riding a motorcycle in front of my husband. He would never support me because it's a man's field"	Self, Family, Society
Safety from harassment		"I once had a customer who took my number and ended up harassing me at night with unnecessary calls. My husband had to intervene and stop him"	Society
Safety from theft		"As a female rider, my husband is weary of my safety. I cannot operate in the evenings and in some areas where my motorcycle can be snatched from me in broad daylight "	Self, Family, Society
Safety from traffic danger		"I am aware of how dangerous riding a motorcycle on the highways can be. I am constantly intimidated and bullied by reckless motorists and bus drivers such as Forward Travellers bus drivers "	Self
Lack of confidence in their capability		"When female passengers come to the waiting station, they often choose male riders over us because they feel like we can't get them to their destination safely"	Society
Religious bias		"I once had a customer request from Eastleigh but the customer cancelled the ride when he realized I was female. He explained that in the Islam religion, women should not ride motorcycles"	Society

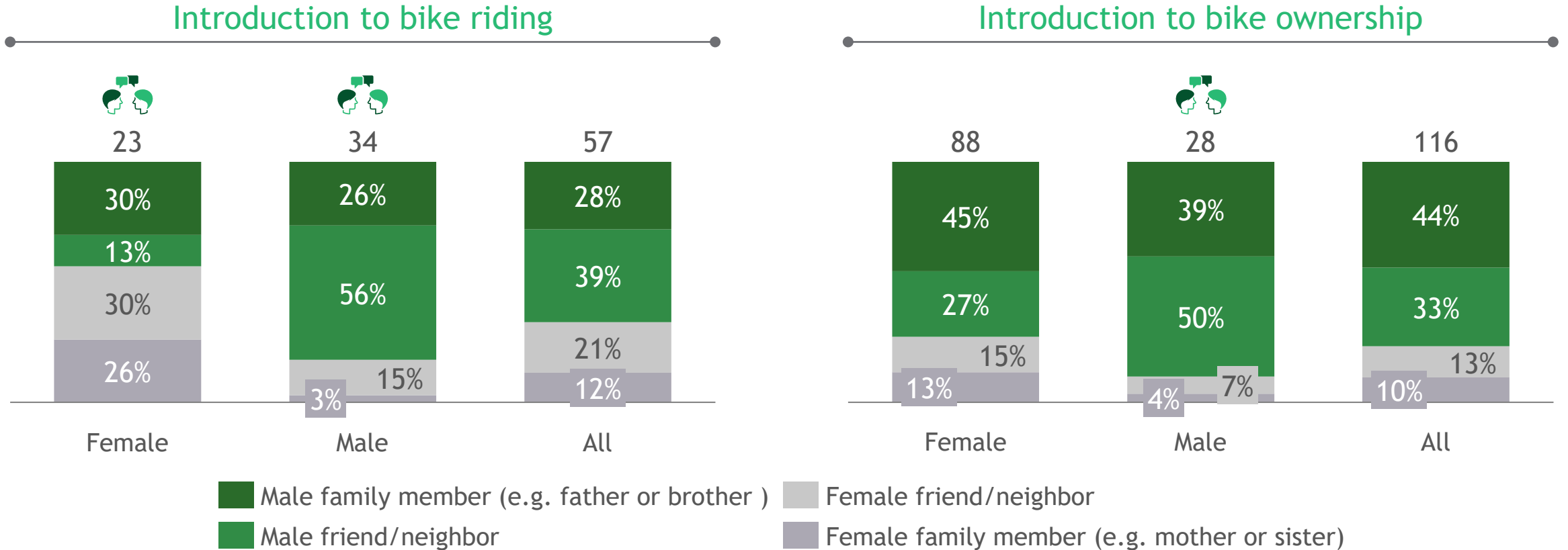
Frequency of being mentioned

Often Not often

Self Family Society

Source: Customer interviews (Ride-alongs and focus group interviews); BCG analysis

Allyship | 43% of female riders are introduced to bike riding by male friends or family. Female owners rely even more on male introductions



Q14: Who inspired you to enter the motorcycle business? Choose one of the following answers

No of riders = 57 (23 female, 34 male)
 No of owners=116 (88 female, 28 male)

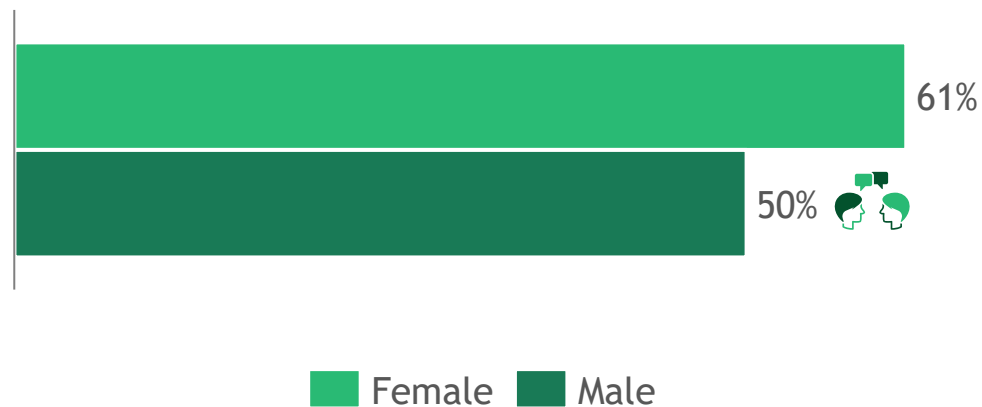
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

General access to finance | Men were more likely to self-finance, and lower-income women were 27% more likely than higher income women to take a loan

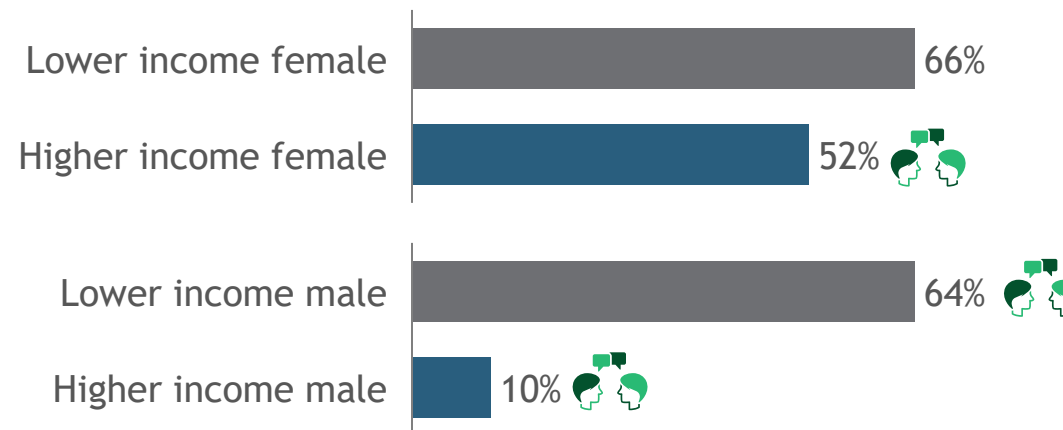
Percentage of respondents who received financing by...

Overall Males vs Females Owners



Females
 N of lower income = 64
 N of higher income = 17

Males and Females owners separately by income



Males
 N of lower income = 24
 N of higher income = 11

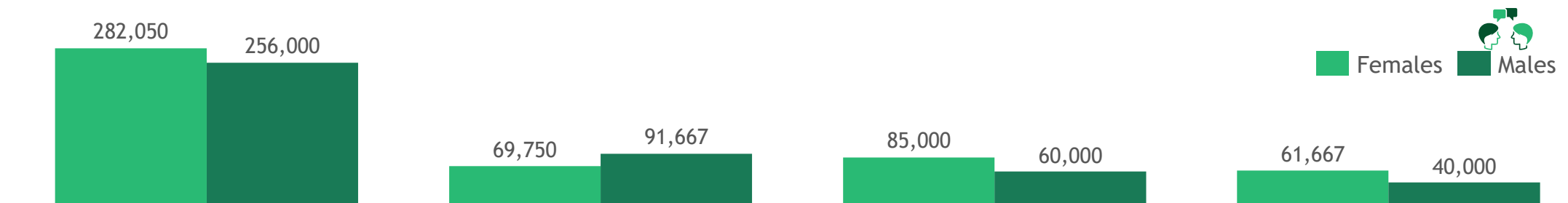
Q27: Did you receive any financial support or loans when you purchased a motorcycle?

Note: Lower income is defined as under 500 USD per month, or SAGACI's C-E social-economic categories
 Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

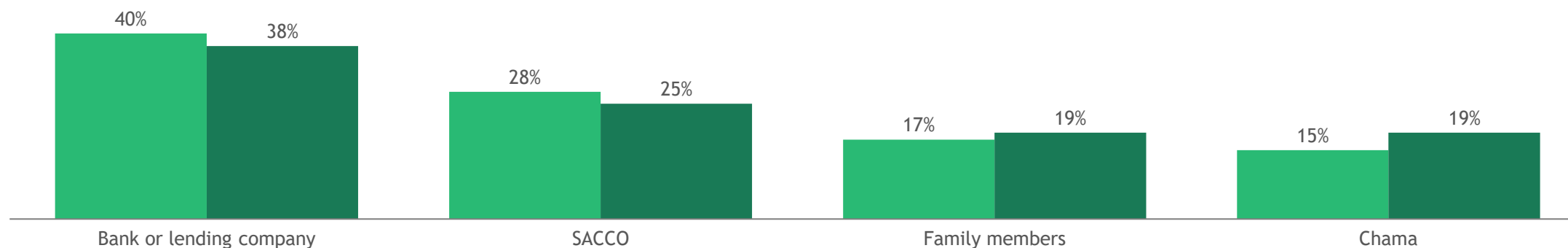
Detailed qualitative, not statistically significant

Financing sources and sizes | Banks and SACCOs issued the most and the largest loans. (Small sample) Peri-urban loans are much smaller

Average size of loans (in KES) by gender



Source of loans by gender



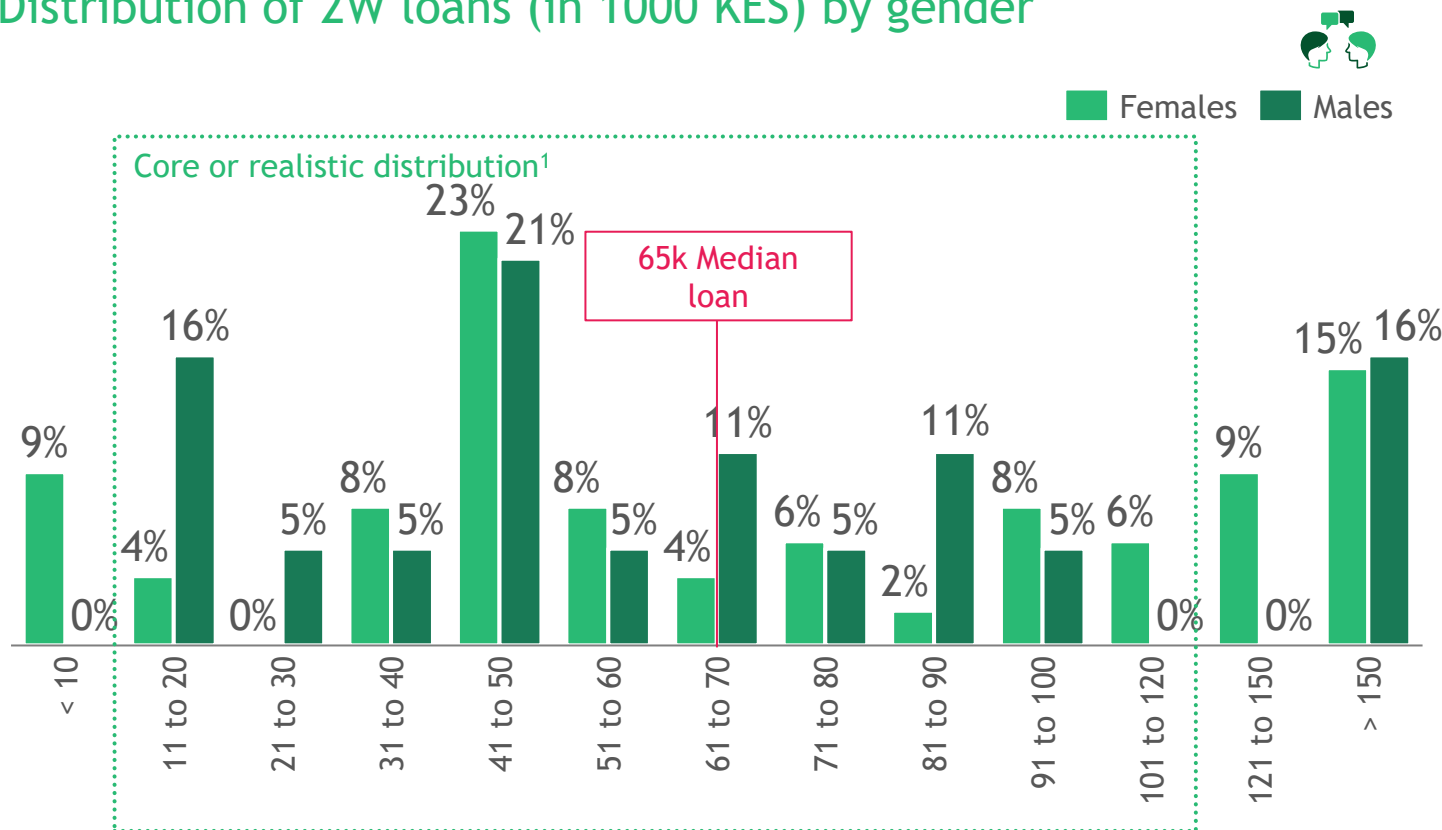
Q28: Which financial sources do/did you rely on to buy a motorcycle? Check all that apply

No of females = 53
No of males = 19

Q29: How much financing did you receive from those sources? Please answer (KES)

Financing distribution | Median 2W loan is 65,000 KES and average loans sizes were much smaller in peri-urban locations

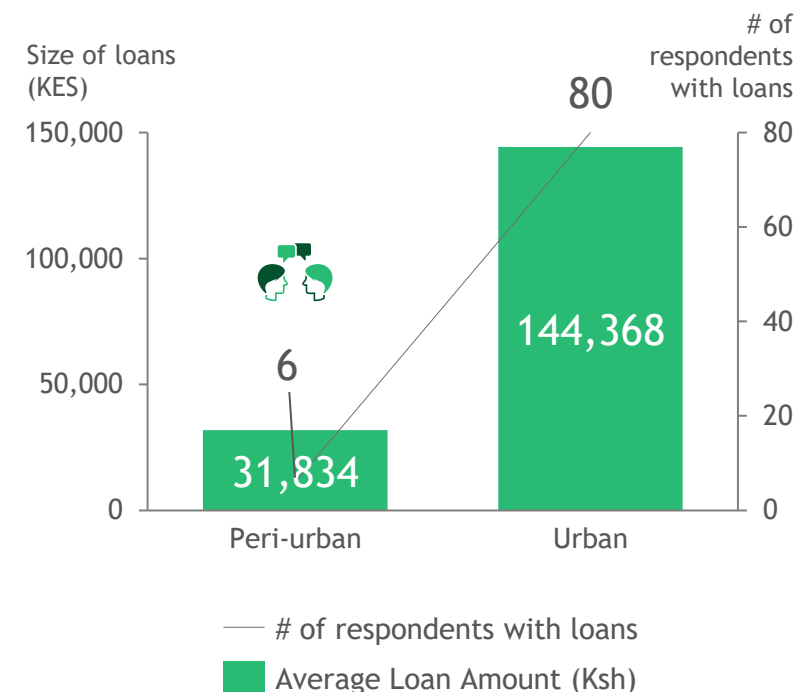
Distribution of 2W loans (in 1000 KES) by gender



No of females = 53
No of males = 19

Q29: How much financing did you receive from those sources? Please answer (KES)

Number and average size of loans by location



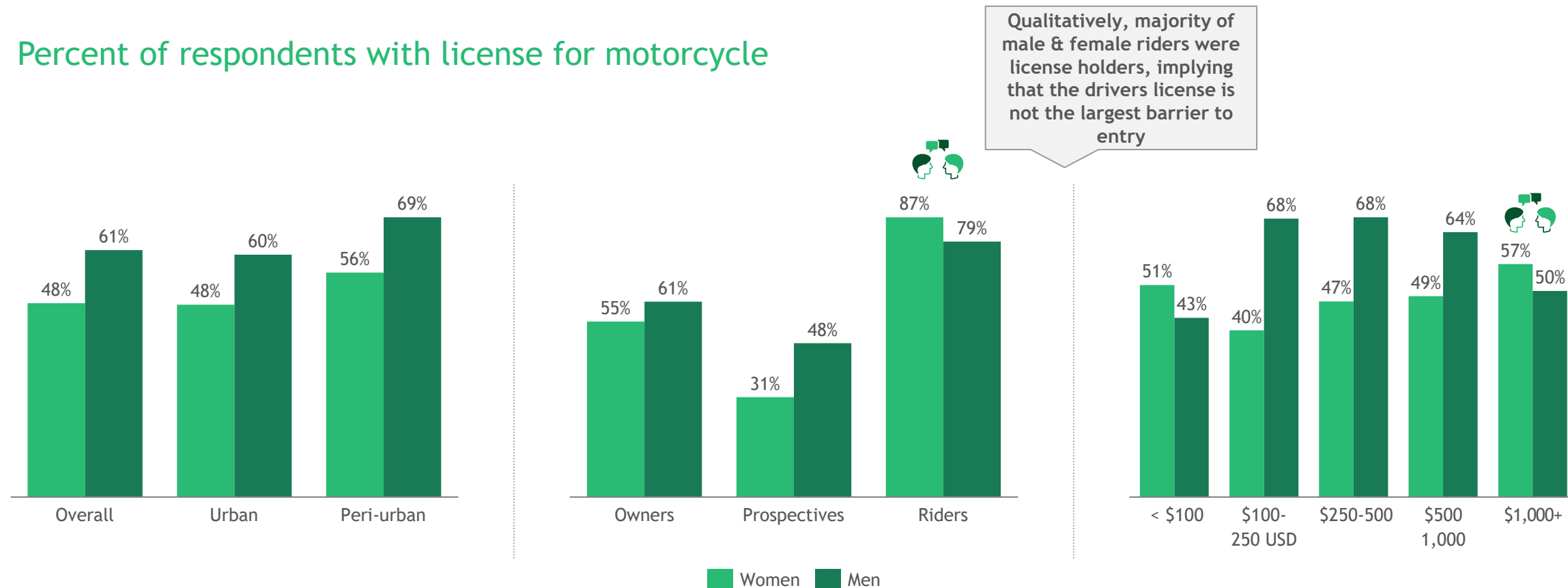
Q29 (see left) and Location

1 . Loans over 120,00 KES not realistic based on purchase prices of motorcycles
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

Licenses | Nearly half of female respondents had a motorcycle license, but men were >20% more likely to be license-holders

Percent of respondents with license for motorcycle



No of respondents = 306

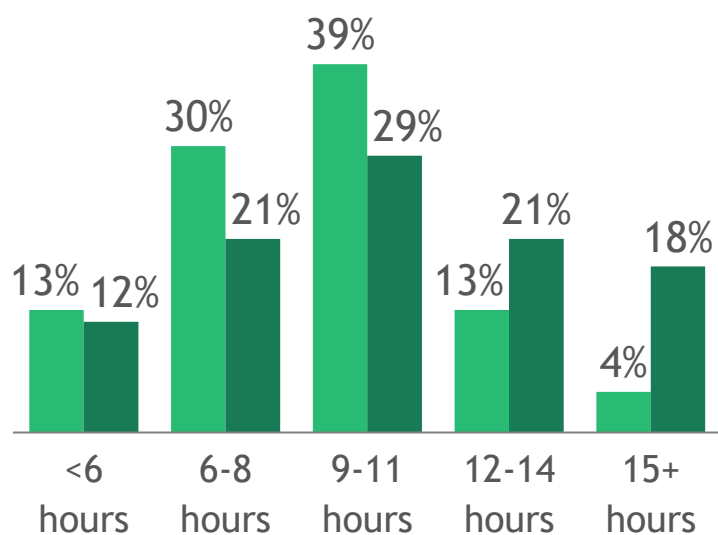
Q6: Do you have a driver's license for a motorcycle? Choose one of the following answers. (Yes/No)

Detailed qualitative, not statistically significant

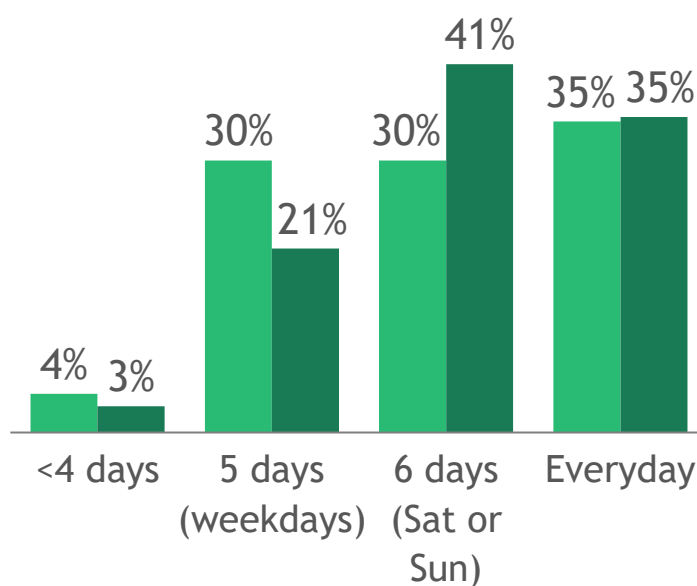
Hours per day | Women riders work ~10 hours less per week, earlier in the week and less per week compared to men



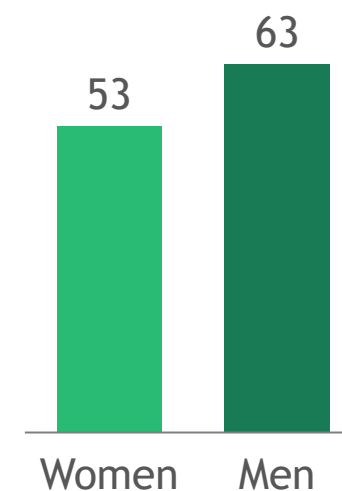
Percent of riders working specific hours



Percent of riders working specific days



Average hours worked per week (hours/day x days)



Women Men

No of women = 23
No of men = 34

Q22: What are your typical working hours in a day? Choose one of the following answers

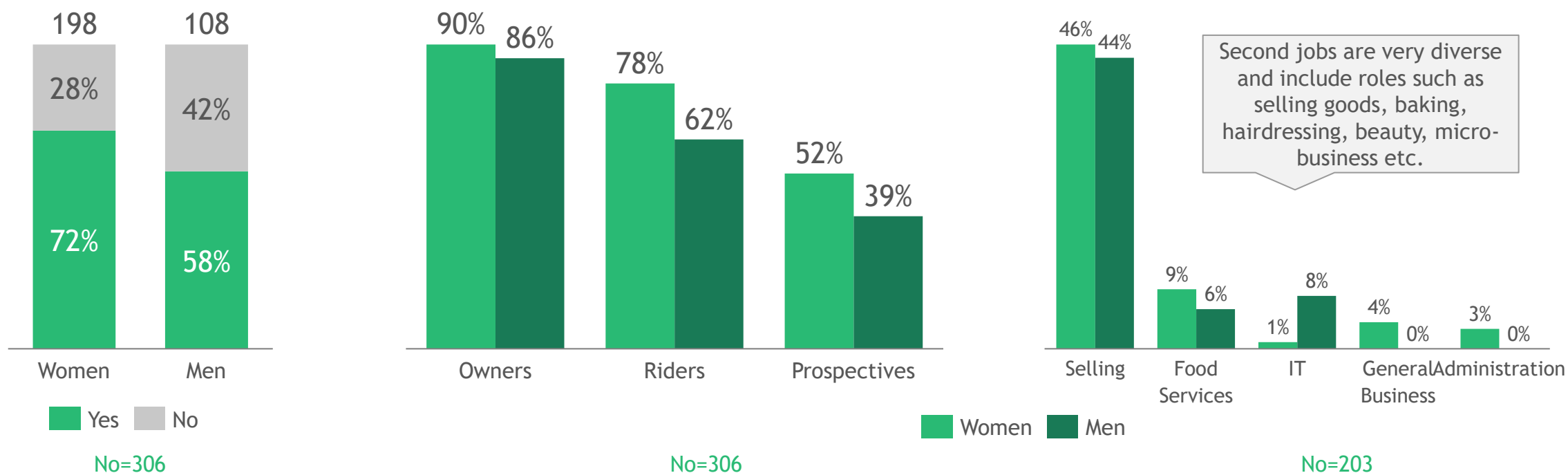
Q24: How many days do you work in a week? Choose one of the following answers



Detailed qualitative, not statistically significant

Second jobs | ~25% more common among women than men, and more frequent among both women owners and riders than their male counterparts

Percent of respondents with second jobs



Second jobs are very diverse and include roles such as selling goods, baking, hairdressing, beauty, micro-business etc.

Female riders are 27% more likely to have a second job compared to male riders

Q9: Do you have any 2nd job? Choose one of the following answers (Yes/No)

Agenda

- 1 Executive summary
- 2 Context
- 3 Research approach
- 4 Insights and key findings
Combined for qualitative and quantitative research
- 5 Recommendations for possible interventions

Macro interventions | Wider efforts are required to fully resolve the workplace safety and permissive social context challenges to female 2W participation



Workplace safety



Addressing need for **comprehensive road upgrades and lighting infrastructure** e.g., streetlights, guard rails



Supportive **law enforcement**: education on road traffic rules, deterrent fines, aggressive enforcement of traffic laws



Elimination of sexual harassment risks: social education, highly visible campaigns, reporting hotlines and enforcement by police (as well as ensuring police are not perpetrators)



Protection from theft of assets, e.g., snatching of motorcycles



Permissive social context



Driving a **change in cultural that limits opportunities for women and girls broadly** via massively coordinated efforts e.g., awareness campaigns, influencers, subsidies



Increasing champions and visible **allyship by all males** (top leadership and police included) to challenge stereotypes and educate passengers on equal capacity of women to ride

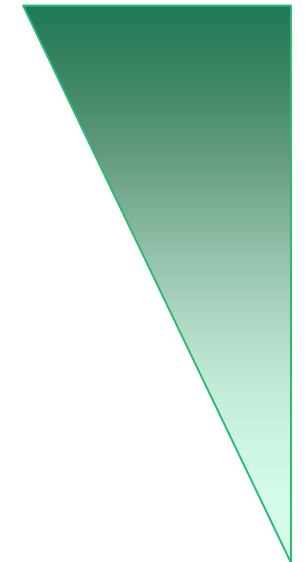


Public dialogue on **gender norms to change 'dirty' perception of industry** and normalize female employment in "male dominated industries" (including 2W)



Provision of **reliable, affordable childcare**, to enable equitable participation in the workplace and at home

Transformational impact



Despite the ambitious transformation required on safety and social norms, the research revealed many opportunities for quick actions remain across all 4 enablers to recruit the next wave of female 2W riders/owners into the industry. Interventions in the following section focus on actions one or a few aligned stakeholders can do together in 12-18 months to drive progress in 2W inclusion.

To drive meaningful 2W gender inclusion, each stakeholder should prioritize the most impactful interventions within their sphere of influence



Government

Tackle the foundational barriers in safety and social norms by prioritizing massive road infrastructure upgrades, road safety enforcement and run widespread campaigns on gender equity



Associations, MFIs and Chamas

Educate female members on the economic benefits of 2W ownership and ridership, as well as partnering with 2W companies/platforms/financiers to onboard female members into the industry



Financiers

Partner with chamas to recruit female customers; partner with funders to test flexible loan products that target strong female “prospects” who can’t enter the industry without financing



E-commerce platforms

Leverage platform entry points to drive female participation by giving targeted information, dedicated recruitment / referral codes and preferential position in app-service options; use marketing to profile female riders



Grant funders

Fund effective coalitions / campaigns on safety and dispelling gender bias; fund experiments in recruiting female riders/owners, including product design and debt structures

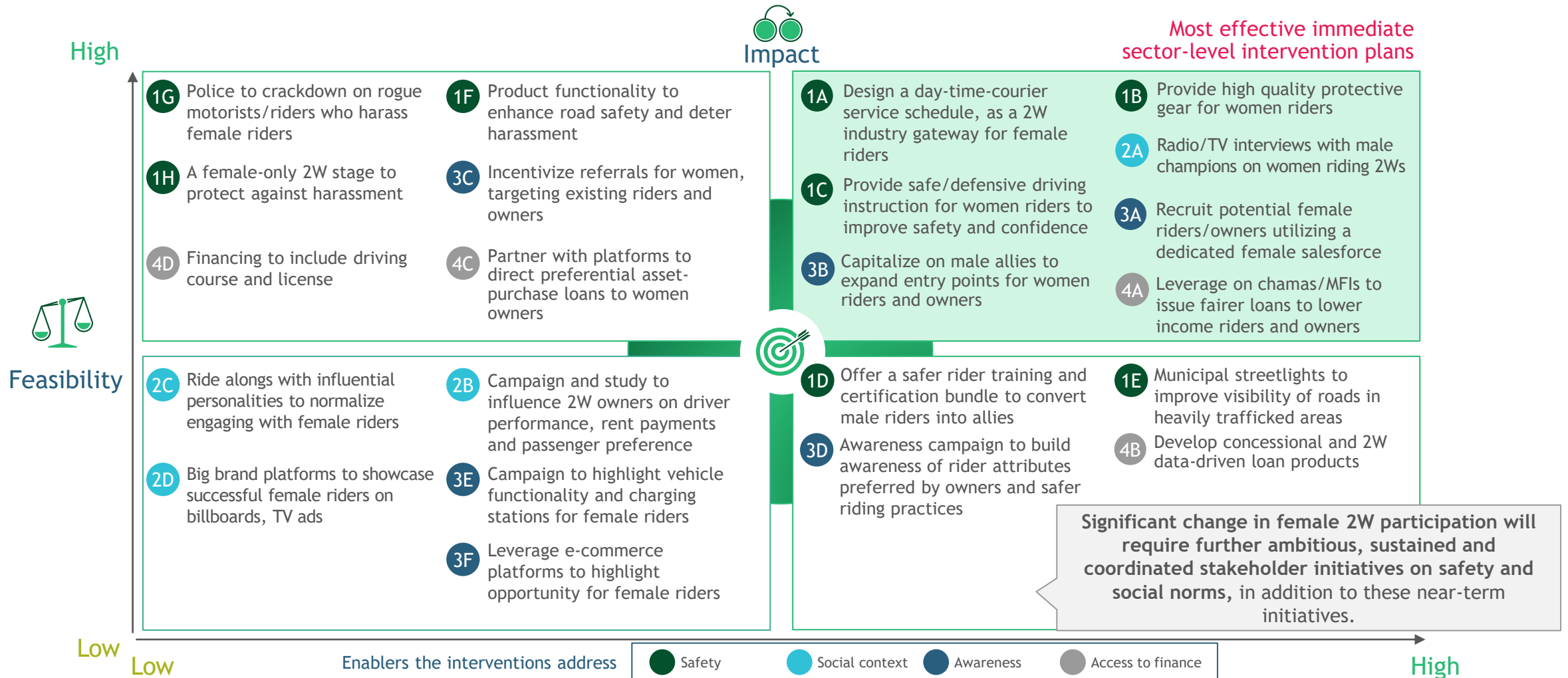


2W Manufacturers

Employ marketing campaigns to impact social perceptions and raise awareness among female prospectives; develop and educate owners / riders on features that enhance safety

Impact will require ambitious, sustained and coordinated multi-stakeholder initiatives on safety and social norms

Priority near-term interventions | Impact-Feasibility Matrix shows 7 near-term interventions for increasing female 2W inclusion



Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Safety interventions | Targeted 2W job profiles, equipment & training offer short-term mitigations while broader road safety/harassment is transformed

Need to implement alongside broader workplace safety interventions

Enablers	Possible intervention	Leading stakeholder/players						Prioritization	
		Government	Association	Financiers	E-commerce platforms	Grant capital	2W manufacturers	Impact	Feasibility
			Malkia motors association	M-KOPA	Uber	Shell Foundation			
<p>Workplace safety</p>	<p>Examples of stakeholders</p> <p>1A Design a day-time-courier service schedule, as a 2W industry gateway for female riders</p>		✓	✓	✓	✓		High	High
	1B Provide high quality protective gear for women riders, including reflective jackets, helmets, etc.	✓		✓		✓		Medium	Medium
	1C Provide safe/defensive driving instruction for women riders to improve safety and confidence on the road	✓			✓	✓		Medium	Medium
	1D Offer a safer rider training and certification bundle (incl. first aid, anti-harassment training, safe riding skills) targeting male riders to convert them to allies	✓	✓		✓	✓		Medium	Medium
	1E Municipal streetlights to improve visibility of roads in heavily trafficked areas for 2Ws or crime “hot spots”	✓				✓		Medium	Medium
	1F Product functionality: Develop features of 2W to enhance road safety (wider wheels, stronger headlights) and deter harassment (trackers, panic button, rider and passenger subdividers)			✓		✓	✓	Low	Low
	1G Police crackdown on rogue motorists/riders who harass female riders and publicize the stern action taken to deter future harassment	✓						Medium	Medium
	1H A female-only 2W stage to protect against intimidation and harassment by male riders	✓	✓			✓		Low	Low

Qualitative ranking of impact and feasibility High Medium Low

Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Social context interventions | Near-term actions include campaigns to breakdown bias and champion women’s participation, leveraging male allies

		Need to implement alongside broader social norms interventions							
Enablers	Possible intervention	Leading stakeholder/players						Prioritization	
		Government	Association	Financiers	E-commerce platforms	Grant capital	2W manufacturers	Impact	Feasibility
	Examples of stakeholders		Malkia motors association	M-KOPA	Uber	Shell Foundation			
<p>Permissive social context</p>	2A Radio/TV interviews (in Swahili and local language stations) with female riders/owners and their husbands/fathers on benefits and dynamics of women riding/owning to raise awareness and reduce stigma	✓	✓	✓	✓	✓	✓	High	High
	2B Campaign to influence 2W owners based on a study that collects data on driver performance, rent payments and passenger preference; share with owners to build confidence renting to female riders		✓	✓		✓		Medium	Medium
	2C Publicized ride alongs with influential leaders and media personalities to normalize engaging with female riders	✓	✓		✓	✓	✓	Medium	Low
	2D Big brand platforms to showcase successful female riders on billboards, TV ads (potentially target influential audiences to include husbands, 2W owners, etc.)	✓	✓	✓	✓		✓	Medium	Medium

Qualitative ranking of impact and feasibility High Medium Low

Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Awareness interventions | Engaging male and female allies, targeted campaigns via rider platforms and chamas can raise awareness of 2W benefits

Need to implement alongside workplace safety interventions

Enablers	Possible intervention	Leading stakeholder/players						Prioritization		
		Government	Association	Financiers	E-commerce platforms	Grant capital	2W manufacturers	Impact	Feasibility	
	Examples of stakeholders		Malkia motors association	M-KOPA	Uber	Shell Foundation				
Awareness of opportunity/recruitment	3A Recruit female riders/owners utilizing a dedicated female salesforce at 2 nd job (e.g. at markets) with messaging on independence, job ease, predictable income	✓	✓	✓	✓			High	High	
	3B Capitalize on male allies through media campaigns since the entry point of most women was through male relatives, friends and neighbors				✓	✓	✓	Medium	Medium	
	3C Incentivize referrals for women through dedicated referral codes, referral discounts and gifts targeting existing riders and owners (male or female)		✓	✓	✓	✓	✓	Medium	Medium	
	3D Awareness campaign conducted in female riders' / owners' groups and chamas to build awareness of rider attributes preferred by owners and safer riding practices		✓			✓	✓	Medium	Medium	
	3E Campaign by 2W manufacturers to highlight vehicle functionality benefits (e.g., economics, safety) for female riders			✓				✓	Medium	Medium
	3F Leverage e-commerce platforms to highlight opportunity for female riders, position them preferentially in apps, set up women-only operations					✓			Medium	Medium

Qualitative ranking of impact and feasibility High Medium Low

Source: BCG experts' interview; Desktop research; Customer interviews (Ride-alongs and focus group interviews); SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Finance interventions | Using chamas/MFIs to offer fairer finance products and enhanced E2W unit economics can help to increase access to finance

Need to implement alongside workplace safety interventions

Enablers	Possible intervention	Leading stakeholder/players						Prioritization		
		Government	Association	Financiers	E-commerce platforms	Grant capital	2W manufacturers	Impact	Feasibility	
	Examples of stakeholders		Malkia motors association	M-KOPA	Uber	Shell Foundation				
 Access to financing	4A Leverage chamas/MFIs to understand credit history, especially for lower income owners and riders: offer targeted loans with better unit economics, arising from switching to E2Ws with M-KOPA financing		✓	✓				High	High	
	4B Develop loan products, with concessional terms e.g.: lower interest rates; flexible repayment terms, longer loan term; and lower deposit requirement to increase access to fairer finance, and which utilizes E2W ride and e-commerce platform partners' data and to develop an understanding of riders' revenue generation patterns and related credit default risks	✓	✓	✓	✓	✓	✓		High	High
	4C Partner with rider platforms to direct preferential asset-purchase loans to women owners / riders and answer FAQ on how to be a rider or owner			✓	✓	✓			Medium	High
	4D Financing to include driving course and license (Kes 8,000) cost to get a driver's license and all trainings. Use grant financing to test loan viability.				✓		✓		Medium	High

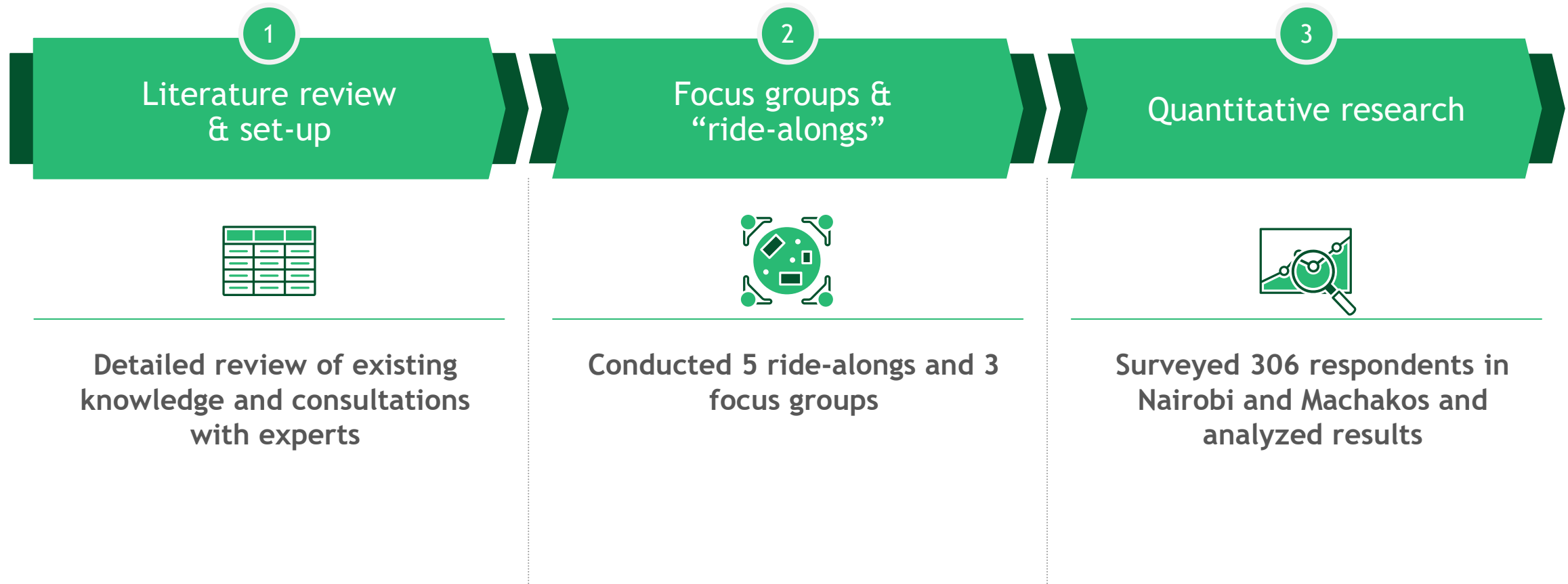
Qualitative ranking of impact and feasibility High Medium Low



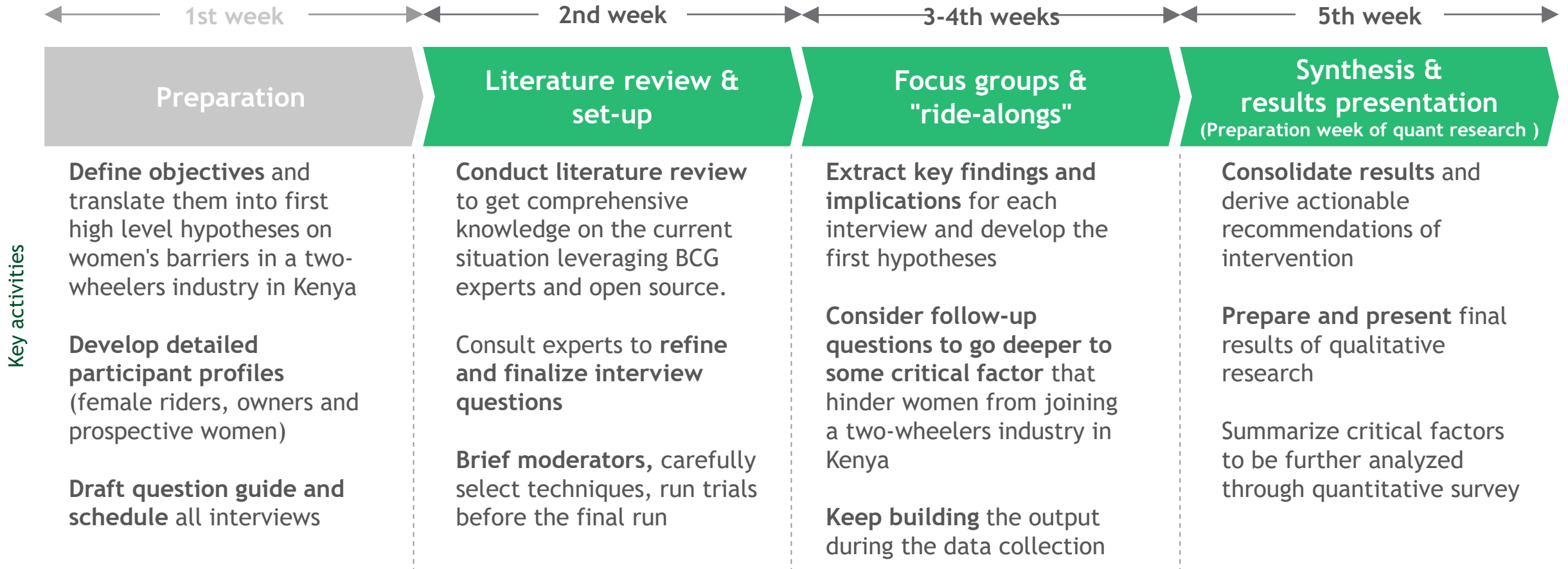
Appendix

Appendix: Research Approach

Research approach | We adopted a three-step approach to understand the key issues affecting women in 2W industry

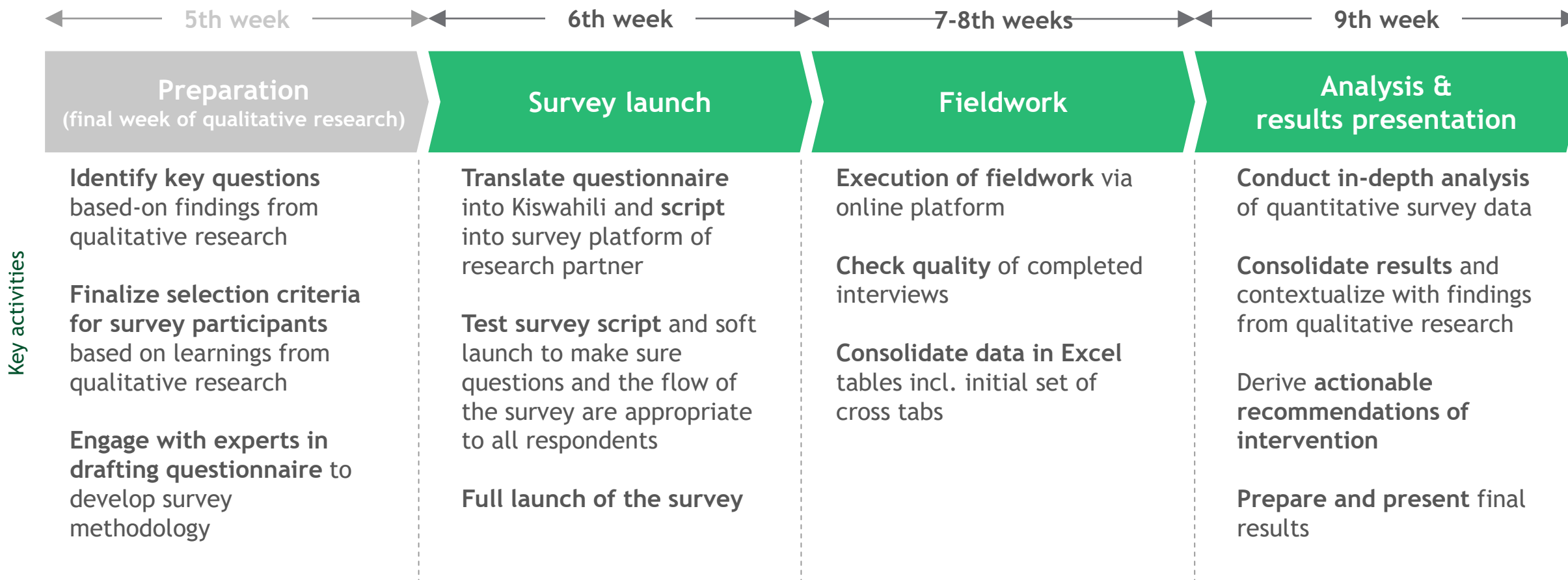


Research approach | Qualitative analysis | Delivery of outcomes along 4-week timeline plus 1 week for preparation



1. Based on insights from "ride-alongs" and focus groups vs. findings from existing 2W customer research (e.g., Dalberg, 2021) 2. Date of publication tbd, likely after 4-week project timeline

Research approach | Quantitative survey | Substantiating insights through quantitative fieldwork, building on learnings from preceding qualitative research



Note: Research partner will most likely be leading African data and analytics firm Sagaci, final confirmation after project contracting

Qualitative research | Designed for focus groups to understand preferences, and "ride alongs" to understand subconscious decision-making

Research design details

Key questions to be addressed



1 "Shop-alongs² / ride-alongs" to understand decision-making rationale

5 "shop-alongs / ride-alongs" to contextualize focus group insights

- ½ -day per shadowing
- Selection of women different to focus group participants
- Engagement with female participant plus people in their immediate surrounding e.g., partner, parents, children

- ? Barriers to women's participation in 2W-market, focusing on factors impacting women in their everyday environment
- ? Similarities and differences in women's vs. men's behavior
- ? Influencers of women's decision-making, e.g., partner, parents, children
- ? Factors potentially preventing women's adoption in the future

2 Focus groups to collect in-depth data on preferences and perceptions

3 focus groups (n=6)

- ~2.5h per focus group
- Segmentation of participant by most defining criteria for behavior e.g., income level, current vs. prospective rider/owner¹
- Application of BCG's *InsightBooster* methodology

- ? Current drivers/owners: current earning profiles, loan payment characteristics and safety experiences
- ? Prospective drivers/owners: current transportation behavior
- ? Perspective on barriers to women's participation in 2W-market
- ? View on approaches to improving women's access
- ? Product and technical design preferences

Sequence: 3 "ride-alongs" to develop and strengthen first hypotheses, 3 focus groups to test hypotheses, 2 more "ride-alongs" to validate and contextualize findings

1. To be determined in alignment between the client and BCG prior to invitation of participants 2. Qualitative research method where researcher observes participants and "shops along" in order to understand, amongst other things, customer behavior, preferences, and decision-making rationale

Research design | 3 targeted focus groups: riders, owners, prospective women



Group1. Female 2W drivers (for FGDs and Ride-along)

- Target use case: commercial use (taxi/delivery) but may also include personal use if sufficient commercial drivers cannot be identified
- Strive for widest diversity of education levels, marital status, parental status, income level, occupation
- Age 18-55 (but likely 18-35 based on 2W driving use case), and based in Nairobi



Group2. Female 2W owners (for FGDs and Ride-along)

- Target use case: 2W owners leasing to taxi/delivery drivers and outsource the driving, and if they can be identified small business owners who own at least one 2W for logistics/delivery, but outsource the driving as well
- Strive for widest diversity of education levels, marital status, parental status, income level, occupation
- Age 18-55, and based in Nairobi and Machakos












Group3. "Prospective" women (only for FGDs)


- Target use case: Women who previously worked for 2W markets but not anymore, or who purchased a motorbike for commercial use but ended up not using it for a business
- Strive for widest diversity of education levels, marital status, parental status, income level, occupation
- Age 18-55, and based in Nairobi

Research design | We conducted 5 ride-alongs and 3 focus group sessions across Nairobi and Machakos

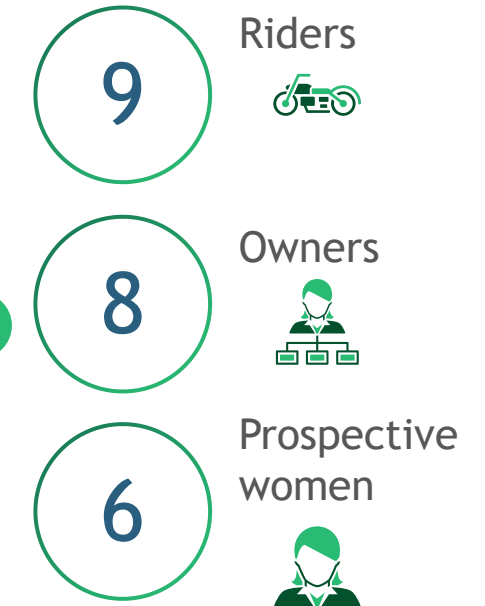
Qualitative surveying schedule

	Mon	Tue	Wed	Thu	Fri
September	19	20	21	22	23
			 Nairobi	 Nairobi	 Nairobi
	26	27	28	29	30
October			 Nairobi	 Nairobi	 Machakos
	3	4	5	6	7
		 Nairobi	 Nairobi		
	10	11	12	13	14

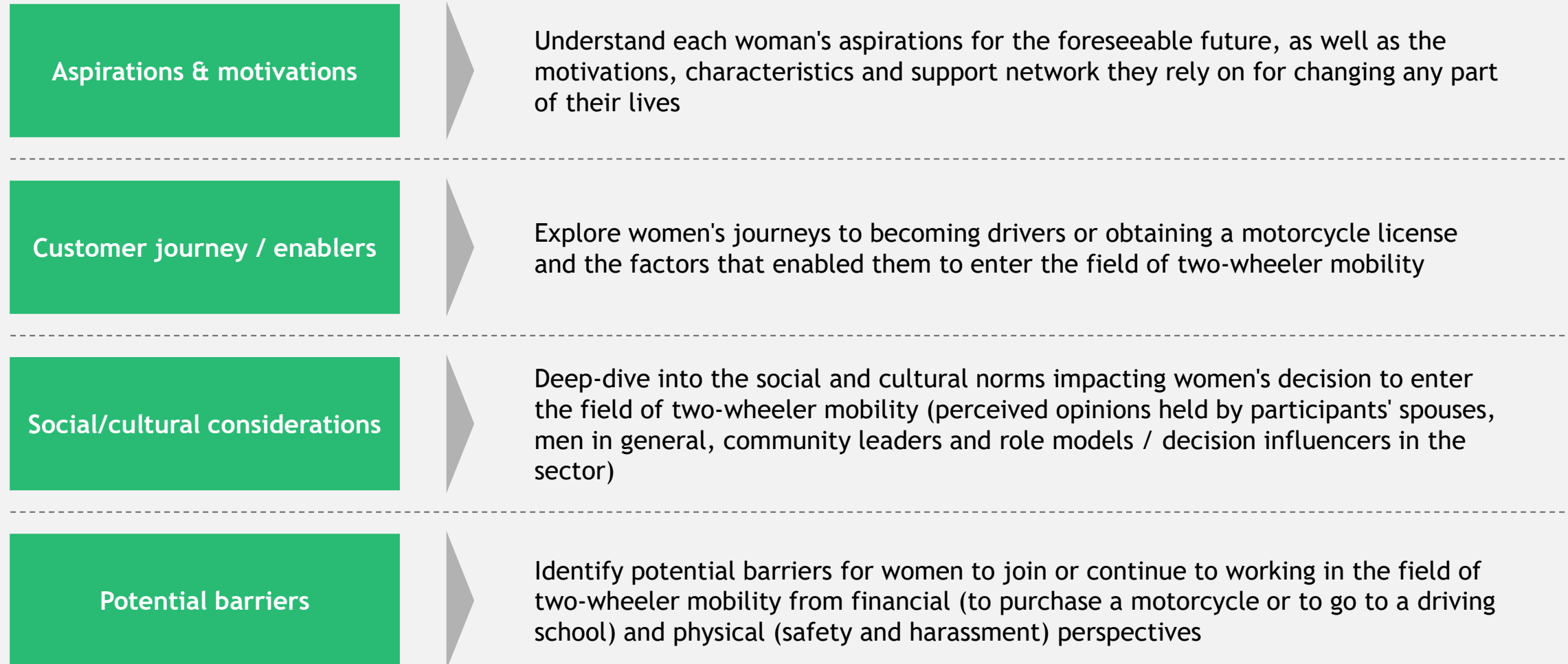
 Ride-along completed

 Focus group completed

The number of participants



Research design | The aim of the focus groups is to get an understanding of each woman's unique journey in the 2W industry and its barriers



Research objectives of ride-alongs

- To observe real lifestyles of female 2W drivers/owners to understand their underlying difficulties or needs
- To identify individual characteristics or environmental factors that are conducive to women participating in 2W activity
- To identify influencers on their decision-makings and behavior

Research outlines



- Going to a participants' house to see their family dynamics and morning routine
 - Responsibility and divisions of housework among family members
 - Talk with family members to understand their reactions to the rider/owner's 2W activity



- Riding with them to follow their working styles
 - Working patterns (e.g., customer selection preference, routine, work vs downtime, operating routes, etc.)
 - Safety measurements
 - Employee / employer engagement



- Wrap-up questions
 - Interview to understand specific individual characteristics and environmental factors and to get personal backgrounds to become a driver/owner

Research approach | Quantitative survey | Questions (1/7)

Question (type)	Detail
Demographic Qs	Country
Demographic Qs	Selected Gender: Male; Female
Demographic Qs	Age group Selected: 18 - 25 yrs; 26 - 35 yrs; 36 - 45 yrs; 46 - 55 yrs
Demographic Qs	Location Selected: Urban; Rural*
Demographic Qs	Sec selected: A - Above 1,000; USD B - 500 to 1,000; USD C - 250 to 500; USD D -100 to 250; USD E - Less than 100 USD
Q1	Please select your association with a motorcycle Choose one of the following answers
	I own one or more motorcycle & I know how to drive a motorcycle
	I own one or more motorcycles, I do not know how to drive a motorcycle
	I do not own one or more motorcycle, but I know how to drive a motorcycle
	I neither own a motorcycle nor do I know how to drive a motorcycle
Q2	Are you married? Choose one of the following answers: Yes; No
Q3	Do you have kids? Choose one of the following answers: Yes; No
Q4	Please tell us your current or previous (within 5 years) job experience Choose one of the following answers
	I am (or have previously been) working as a motorcycle rider to offer services (e.g. taxi and/or delivery)
	I am (or have previously been) working as a motorcycle owner
	I am (or previously was) neither working as a motorcycle rider nor an owner
Q5	Are you currently renting the motorcycle you're driving or do you own it? Choose one of the following answers:
	I rent the motorcycle from someone
	I am (or previously was) neither working as a motorcycle rider nor an owner
Q6	Do you have a driver's license for a motorcycle? Choose one of the following answers: : Yes; No
Q7	Do you drive yourself for commercial purposes (e.g. offering a taxi or delivery service) ? Choose one of the following answers: : Yes; No

Note: Note that all urban respondents were in Nairobi. All rural respondents were in Machakos and so peri-urban

Research approach | Quantitative survey | Questions (2/7)

Question (type)	Detail
Q8	Have you leased out your motorcycle to someone? Choose one of the following answers: : Yes; No
Q9	Do you have any 2nd job? Choose one of the following answers: Yes; No
Q10	If you have a 2nd job, what kind of job? Please describe your 2nd job (e.g. selling fish)
Q11	How many hours in a day do you spend on your 2nd job ? Choose one of the following answers
	Over 10 hours
	6-10 hours
	3-5 hours
	1-2 hours
	Less than an hour
Q12	Why did you become a motorcycle rider? Select one main reason Choose one of the following answers
	Because I love riding
	Because I can easily predict how much money I will be able to earn by the end of the day
	Because it's easy to do compared to other jobs
	Because I already knew how to drive even before I started working as a motorcycle rider Because someone close to me inspired me to become a rider
	Others (please specify)
	As a side hustle
	It was the only opportunity left for me, and I knew how to ride and to drive because I've already attended a driving school at my teenage age
	Quick movement
Q12	Why did you become a motorcycle rider? Select one main reason Choose one of the following answers
	Specify other.
Q13	Why did you become a motorcycle owner? Select one main reason. Choose one of the following answers
	Because I wanted to be independent by starting my own business
	Because I can easily predict how much I will be able to earn by the end of the day
	Because it's easy to start compared to other jobs
	Because someone close to me inspired me to become an owner

Research approach | Quantitative survey | Questions (3/7)

Question (type)	Detail
	Specify other.
	Additional source of income
	Because it was not mine but it was helping me to carry me everywhere I want
	I don't own a motorcycle but I always borrow my friend's bike to go shopping around
	It was a convenient means of transport
	My boyfriend is the rider so I get to be driven anywhere
	To supplement my income and help with transportation
Q14	Who inspired you to enter the motorcycle business? Choose one of the following answers:
	Male friend/neighbor
	Female friend/neighbor
	Male family member (e.g. father or brother)
	Female family member (e.g. mother or sister)
	Specify Other
Q15	What do you think are the biggest challenges you might face or faced in deciding to become a motorcycle rider or owner? Please select the top 2 challenges.
	Social expectation of riding or owning a motorcycle (e.g. riding is not for women or working with a motorcycle is a male thing)
	Financial constraints (e.g. going to a driving school or purchasing/leasing a motorcycle is too expensive)
	General safety concerns of riding a motorcycle
	Risk of sexual and verbal harassment
	Lack of information about the job opportunities to become a motorcycle rider or owner
	Limited available working hours to balance between domestic duties and a business activity
	Difficulties of acquiring driving skills and/or driving license

Research approach | Quantitative survey | Questions (4/7)

Question (type)	Detail
Q16	What do you think the average woman would say is their biggest challenge in deciding whether to become a motorcycle owner or rider? Choose one of the following answers
	I believe riding or owning a motorcycle is inappropriate because I am a woman
	Society or people close to me discourage me from riding or owning a motorcycle because I am a woman
	Riding can be dangerous and I cannot cope
	I'm worried that I can be sexually harassed by customers or peers and it's too dangerous
	A motorcycle can easily be stolen
	I cannot ride as well as other drivers
	According to my religion, I should not ride a motorcycle
Q17	As a passenger, would you prefer to take a ride with a female or male rider? Choose one of the following answers: Female; Male; No preference
Q18	As a motorcycle owner, do you prefer hiring female or male drivers to use your motorcycle? Choose one of the following answers: Female; Male; No preference
Q19	Why do you have this preference? Select 3 answers
	They know how to communicate better with customers
	They are more capable of driving
	They are more timely with rental payments
	They take better care of my property
	They are more eager to have many customers
	They are easy to communicate with and trustworthy
Q20	Which option do you prefer as your business activity? Choose one of the following answers: Taxi; Deliveries; No preference
Q21	When you offer a motorcycle taxi service, do you have a customer preference? Choose one of the following answers: Male; Female; School-going children; No preference
Q22	What are your typical working hours in a day? Choose one of the following answers: More than 15 hours; 12-14 hours; 9-11 hours; 6-8 hours; Less than 6 hours

Research approach | Quantitative survey | Questions (5/7)

Question (type)	Detail
Q23	What is the most important factor in determining your working hours? Choose one of the following answers
	It's enough time to complete my work and earn my target income
	I need to balance household/family duties and my business activity
	I do not want to work at night due to safety concerns
	There's no time limit; I can work at any time of day
Q24	How many days do you work in a week? Choose one of the following answers: Everyday; 6 days (week days + Saturday or Sunday); 5 days (weekdays); Less than 4 days
Q25	When do or would you feel MOST unsafe when riding a motorcycle? Choose one of the following answers
	When I wait for a customer at a stage or other public places
	When I offer a ride to a customer or have a customer on my bike
	When I ride a motorcycle on the streets due to general road safety
	When I return home at night
	When I communicate with a customer about payment I never feel unsafe
Q26	If you are/were working as a motorcycle driver, what actions do you take or would you consider taking to ensure your safety? Please select 2 answers
	Reduced working hours - limited to daytime
	Opting for delivery services instead of passenger taxi
	Changing appearance to appear "tough" or to resemble male counterparts
	Carrying defensive tools such as pepper sprays and pocket knives
	Speaking sternly to customers

Research approach | Quantitative survey | Questions (6/7)

Question (type)	Detail
Q27	Did you receive any financial support or loans when you purchased a motorcycle? Choose one of the following answers Loans from financial institutions (bank OR lending company) I did not receive any support or loans
Q28	Which financial sources do/did you rely on to buy a motorcycle? Check all that apply Financial support or loans from family members Loans from financial institutions (Bank or lending company) Support from SACCO Support from Chama
Q29	How much financing did you receive from those sources? Please answer (KES)
Q30	What is your average daily revenue from a motorcycle business? (Revenue is the total money earned before you spend any money on fuel and other costs) Choose one of the following answers: Over 2,500 Ksh; 2,000-2,499 Ksh; 1,500-1,999 Ksh; 1,000-1,499; Ksh 500-999 Ksh; Less than 499 Ksh
Q31	If you rent your motorcycle, how much do you pay daily? Choose one of the following answers: Over 1,000 Ksh; 700-999 Ksh; 400-699 Ksh; 200-399 ksh; 50-199 Ksh; Less than 50 ksh
Q32	How much do you spend on average on fuel on a daily basis? Choose one of the following answers: Over 1,500 Ksh; 1,000-1,499 Ksh; 700-999 Ksh; 400-699 Ksh; 200-399 ksh; 50-199 Ksh; Less than 50 ksh; I do not know because my owner/driver pays for it
Q33	What is your average maintenance costs on a monthly basis? Choose one of the following answers: Over 3,000 Ksh 2,500-2,999 Ksh 2,000-2,499 Ksh 1,500-1,999 Ksh 1,000-1,499 Ksh 500-999 Ksh Less than 499 Ksh I do not know because my owner/driver pays for it
Q34	How many kilometers do you drive daily on average (this includes to and from work) ? Choose one of the following answers: Over 300 km; 250-299 km; 200-249 km; 150-199 km; 100-149 km; 50-99 km; 20-49 km; Less than 20 km
Q35	How many trips do you normally make everyday? Choose one of the following answers: Over 30 trips; 25-29 trips; 20-24 trips; 15-19 trips; 10-14 trips; 5-9 trips; less than 4 trips

Research approach | Quantitative survey | Questions (7/7)

Question (type)	Detail
Q36	If you could change anything about existing motorbikes in the market to make them more suited for your driving preferences, what top 2 things would you change?
	Performance (speed limit)
	Have a larger carrier
	Fuel consumption
	Space between the passenger and rider
	Stronger headlights
	Wider wheels
Q37	If there was an electric bicycle that can go 40km / hr and travel 75km on a battery, is it something you would consider buying instead? Choose one of the following answers: Yes; No
Q38	If so, at what price would you pay for it? Please answer (KES)
Q39	What would be most important to you in an electric motorcycle? Please select 3 answers
	High top speed
	Powerful motor
	Low cost of maintenance/spare parts
	Long lasting battery/self charging batteries
	GPS/tracker
	Higher carrying capacity
	High resale value
Q40	What is one thing you would like to change about your motorcycle business? Choose one of the following answers
	I wish I could change the social perception that riding or owning a motorcycle is not for women
	I wish I could access more flexible financial services
	I wish I got more rides or got paid more per ride
	I wish fuel prices would go down
	I wish fuel prices would go down

Appendix: Insights

Female 2W drivers (1/3)



Basic information

Geography: Nairobi

Education: Primary school

Age: 28

Marital Status: Married (Her husband is a teacher)

No. of children: 2

SEC: Low income (< Kes 27k per month)

Background

- Initially worked as a roadside food vendor
- Became a rider for a higher income after asking male riders about their daily earnings
- Her father taught her how to ride 10 years ago
- She also sells fish as her second job mainly at night

Life/work style

- Works for a boda rider, serving her customers both taxi and delivery services
- Lives in one of the largest slums in Africa with her husband and 2 daughters
 - Balancing with her boda business and housework has been tasking for her, she says "I need to wake up at 4am everyday to get my daughters ready for school and prepare breakfast for all."
- Had strong opposition from her husband about working as a boda rider initially, but he was later convinced after she explained it pays well
- Faced difficulties in her recruiting processes; her employer(male) thought it was impossible for women to be as good as men in driving because he didn't know any female riders, but he now feels otherwise



I felt awkward when she first told me she wanted to become a boda rider, but I chose to support her if it would supplement our household income . -her husband

Working patterns

- Works daily between 6am-7pm as she prefers to work during the day as it is safer
- Operates only in Kibera to avoid getting caught by the police and she does not have a driver license
 - She believes it's expensive to go to a driving school and take a test
- No customer preference but she once had a male customer who asked for her number then pestered her to go out with him



I hired her and a guy, but I can trust her more because she takes care of my motorcycle well and pay rental fees without delay. I would like to have more female drivers in my business. -her employer

Implications

- Both social and financial barriers can considerably hinder women from joining 2W market
 - Social barriers:** strong opposition from her husband or challenges in recruiting processes due to lack of representation of female boda drivers
 - Financial barriers:** Difficulties in getting a driver license, which limits her operating areas, and even can put her in danger
- Despite there being a few female boda riders, there's a high demand for them from both customers and employers due to good impressions of working behaviors
- Safety measures are still required (E.g., Rules of disclosure of personal information of female drivers)

Female 2W drivers (3/3)



Basic information

Geography: Nairobi

Education: Secondary

Age: 27

Marital Status: Married (Her husband is a private taxi driver)

No. of children: 0

SEC: Mid income

Background

- Initially worked as a M-PESA sub-dealer
- Became a rider to realize her dream of owning her business as a M-PESA sub-dealer as her second job
- Had a (male) friend who taught her how to drive and how a delivery business works well to get paid well
- Purchased a motorbike using her own savings and started to work for Carrefour to do delivery for them

Life/work style

- Works for a delivery service only for high predictability of daily income/routes and for less-stressful working environment
 - Get paid 1,800 ksh per day for minimum daily quota (13 deliveries) and more for extra deliveries
 - Not prefer to do a taxi service not to be stressed from disrespectful communication of customers
- Her working location was chosen because of good access from her house
- Mingles with other male/female drivers to exchange information on the work they do
 - She never felt uncomfortable when co-working with colleagues even though most drivers are male
 - However, she feels her husband is not happy that she works with a lot of male colleagues

“ All my family members were strongly against my decision of becoming a rider saying "The society just doesn't feel that its okay for a female to be a rider" - she says ”

Working patterns

- Works daily between 9am-7pm as compared to her male colleagues working between 9am- 10pm
 - Prefers to work during the day as it is safer
- She covers an average distance of 100km a day like her male colleagues
- The deliveries are basically done within a 10km radius of the shopping mall with routes she's familiar with
- Rides a motorcycle brand known as Top Rich that is not high so that she can easily ride it with her height

“ I really enjoy working with her. Working as a female driver is not easy but, they get higher customer satisfaction, so the employer is more eager to hire female riders. -her colleague ”

Implications

- Double social stereotypes expressed by people close to her hinder women from joining in 2W
 - A. Stereotypes of working as a motorcycle rider: "Dangerous", "Not well paid", "Not decent job" even through sometimes delivery service get paid better than other office work
 - B. Stereotype of "female" or "male" jobs: "Female riders are not socially welcomed", "Clerical jobs are more appropriate women" even though some employers are eager to hire more female riders
- Delivery services can be a good start for female drivers rather than taxi services due to safety reasons
- Lack of information channels for women to get trained for riding a motorcycle
 - she was luckily enough to have someone who taught her how to ride a motorbike; however, she was one of few women in a driving school

Female 2W drivers (3/3)



Basic information

Geography: Nairobi

Education: Secondary

Age: 35

Marital Status: Married (Her husband works in the Jua Kali industry)

No. of children: 4

SEC: Low income

Background

- Initially worked as in customer care
- Became a rider to provide for her family
- Taught **herself how to drive** and got to learn how a delivery business works
- Currently **leasing a motorbike** and she pays a daily rate of **Kes 400**
- Also got an **electric motorcycle** from **Fika mobility** which she uses to make deliveries for Carrefour

Life/work style

- Alternates between doing deliveries and ferrying passengers but prefers doing deliveries
 - Currently renting out her motorcycle, she makes **Kes 1200-1500/day** and spends **Kes 300-400/day** on fuel
 - Uses her electric motorcycle from Fika mobility for deliveries paid **Kes 1,800 per day** for minimum daily quota (**13 deliveries**)
- Sets her preferred delivery location based on her waiting area
- She wakes up at 5:50 am, does her chores and prepares her kids for school before getting ready for work
- Mingles with other riders but is part of **a group of female riders** in Nairobi
 - She **never felt uncomfortable when co-working with colleagues** even though most drivers are male

“Just like any job, there are challenges but if you have the will to push through, you will succeed” - she says

Working patterns

- Her riding pattern is unpredictable, but she mostly works 5 days/week between 8am-8pm
 - She often quarrels with her husband **over the late working hours**
 - Most of her clients are male**, female clients usually doubt her capability to transport them safely
- Thoughts on electric motorcycles
 - The electric motorcycle pose accident risks because of the **stiff suspension system, sharp brakes** and **absence of a clutch**.
 - They **can't be used to ferry passengers** due to their small size
 - Charging stations are very few** and this poses a huge limitation to the distance they can cover
 - They are also quite uncomfortable because of the metallic structure between the handlebars and the seat

Implications

- Double social stereotypes expressed by people close to her hinder women from joining in 2W**
 - A. Stereotypes of working as a motorcycle rider:** "Dangerous", "Dirty job", "Not decent job", with the stigmatization mostly coming from fellow women
 - B. Stereotype of "female" or "male" jobs:** "Female riders are not socially welcomed", with lessors' hesitating to hire them because they doubt their capability
- Delivery services can be a good start for female drivers** rather than taxi services due to safety reasons
- Affordability of motorcycles is still a huge barrier**
 - She is currently saving to own her motorcycle a loan from Holy Cross and Echoff sacco because they payment plan is flexible with a deposit of Kes 30,000 and weekly amount of Kes 880 for 6 months

Female 2W owner (1/2)



Basic information

Geography: Nairobi

Education: Secondary

Marital Status: Married (Her husband is a teacher)

No. of children: 1

SEC: Upper income (> 54K)

Background

- Is a **motorcycle owner** and works as a fish monger
- Has employed a male driver
- Learned about the business from **friends** who run a similar business
- **Purchased a motorbike at Kes 60,000** and financed this 50% through her savings group and 50% through her husband who took a loan from Equity bank
- The motorcycle had been repossessed from a Watu Credit customer who had failed to complete payments

Life/work style

- Is a motorcycle owner and runs an alternate business as a fish monger(selling omena)
 - Can't ride a motorcycle so she hired a male rider who manages the bike and sends her cash daily
 - She assesses the motorcycle on Saturdays which is the rider's off-day
- She finds having the motorcycle business easier to run than the fish monger one but needs more support in managing her business and her finances
- Has been telling her female friends about the motorcycle business
 - She **however acknowledges that raising Kes 60,000 is not easy**
 - She would be **happy with her daughter being an owner of a motorcycle business**

“ If you have friends, its easy-to-get information and learn about motorcycles It is great to own a business and depend on yourself” - She adds

Working patterns

- Has hired a male rider who manages the motorcycle, and she runs her fish monger business between 2pm-8pm
 - He sends her **Kes 350 per day.**
- She incurs the cost of maintenance of the motorcycle. This cost is incurred **every 2 weeks at Kes 550, this has risen from Kes 250.** However, the cost can get to **Kes 3500 in case there are several things to be repaired.**
- **Her goal is** to get an extra motorcycle and join ride hailing apps such as Uber and Safeboda, which she finds more profitable because there is more business
- She would be interested in hiring a female rider if she gets one
- Her husband was supportive of her owning a motorcycle and is okay with most of her colleagues being male.
 - He takes care of the child when schools close and picks him from her stall when he gets off work

Implications

- **High cost of purchasing and maintaining a motorcycle could hinder women from joining 2W business**
 - **She was fortunate to have a husband who is formally employed and thus could take a loan from Equity bank to help with the acquisition of her motorcycle, otherwise she agrees not many women can afford to raise the amount**
- Ride-hailing apps could be **more profitable** than independent informal boda businesses
- **Lack of information channels** for women to get more knowledge on starting and running a motorcycle business.

Female 2W owner (2/2)



Basic information

Geography: Nairobi

Education: College

Marital Status: Single

No. of children: 3

SEC: Upper income (more than 54K)

Background

- Is a **motorcycle owner** and owns a beauty shop
- Has employed male drivers
- Learned about the business from **her sister** who run a similar business
- **Purchased a motorbike at Kes 65,000** and used it to buy her **other 2 motorcycles**
- The motorcycles were all second hand

Life/work style

- Is a motorcycle owner and but also runs a beauty shop
 - Can't ride a motorcycle so she hired a male rider who manages the bike and sends her cash daily
 - She assesses the motorcycle on Saturdays which is the rider's off-day
- Got motivated to join the boda business once she saw her sister who also owns bodas flourishing
- Has been telling her women friends about the motorcycle business
 - She **however acknowledges that raising Kes 60,000 is not easy**
 - She would be **happy to employ a female rider because she finds them more trustworthy**

“Its good to challenge yourself to put something on the table. However, you need to be tough to run this business because the cops can really harass you because you are a woman” - she says

Working patterns

- Has hired male riders who manage the motorcycle, and she runs her beauty shop between 7am-6pm
 - They each send her **Kes 300 per day.**
- She incurs the cost of maintenance of the motorcycle, but they pay the fuel costs
- Her goal is to **get an extra motorcycle** and join ride hailing apps such as Uber and Safeboda, which she finds more profitable because there is more business
- She also wants to see her riders grow to buy motorcycles of their own
- Before leaving for her beauty shop, she prepares her children for school and ensures that she also prepares a snack and dinner because she returns home very late

“I just like this business because it gives me income at the end of each day and as much as I'm getting something, some other family is getting something as well” - she adds

Implications

- **High cost of purchasing and maintaining a motorcycle could hinder women from joining 2W business**
 - **Lilian has not been able to afford a brand-new motorcycle, but she is currently saving to ensure she can do it by the end of next year. She would love to have access to a loan tailored for women, with flexible payment plans**
- Ride-hailing apps could be **more profitable** than independent informal boda businesses
- **Difficulty in getting trustworthy male riders**, female owners end up employing their relatives because of this

Female prospectives (1/3)



“ I always wanted to ride a boda, I was so motivated especially by my brother who was able to buy plots of land and build rental houses using income from the boda business ”

Customer journey

- They were taught how to ride by male friends/family members or neighbors, and they even have driver's licenses
- They want to get into the boda business because it would allow them to be self employed and its also quite easy to establish
- They chose to save and buy their own motorbikes instead of leasing because their freedom for movement and working hours would otherwise be limited
- In the meantime, they run other businesses such as green grocers and hair dressing salons as they save up to buy their own motorcycles

“ One time, while dropping a passenger in Maasai land, all people stood at the road, watching me in awe. They had never seen a female rider before, and they wanted to ride with me. I felt so powerful ”

Enablers

- Interventions to boost ownership e. g., loans tailored for women
 - Flexible payment terms (weekly/monthly)
 - Kes 10,000-15,000 deposit with daily payments of Kes 250-300 (they are currently paying Kes 500 daily and a deposit of >Kes 20,000)
- They want to own motorcycles because this would enable them to be self-reliant
- Some
- are very supportive of their journey into the boda business
- Convenience and flexibility - they can maneuver traffic easily

“ I want to be my own boss plus I just love riding, it makes me feel really good. ”

Barriers

- Affordability of bodas - loans have very steep payment plans
- Unsupportive partners - their spouses are cautious of them riding bodas because of the possibility of getting into accidents and sexual harassment from customers
- Driver's licenses are very expensive, they currently cost Kes 8000
- Accidents caused by reckless motorists
- Intimidation from other men in the business
- Absence of other women in the boda business- they would love to have support from fellow women by even having women-operated Saccos, this would motivate them to get into the business.

Female riders (3/3)



“ I get rowdy to protect myself. I cut my hair to look like male boda riders and became rough to ensure my safety, just so passengers know not to mess with me. ”

Customer journey

- They are all fulltime riders, they learnt how to ride from their male relatives and friends
- They became riders due to unemployment, yet they had families to support
- Aside from the bodas, they also run their own businesses such as green groceries and salons. These allow for flexibility
- Initially, their husbands were apprehensive about them working as riders but after their financial situation started improving, they became their biggest cheerleaders

Working patterns

- They make Kes 300-500/day and are currently saving in sacco and banks to expand their boda businesses
- None of them operates at night due to insecurity
- Maintenance costs are approximately Kes 1500-2000/month with major repairs cost Kes 3000-4000
- They have no customer preference but and rely only on intuition when selecting customers

Enablers

What they like the most about the boda business

- Assurance of surplus income
- Sense of adventure - they get to explore different places daily
- They interact with different people
- Flexible - they can get anywhere fast

“ I love how flexible boda business is. I can alternate between carrying passengers and making deliveries. ”

Barriers

- Insecurity - they carry pocketknives, pepper spray and have even had taekwondo classes as protective measures
- Motorbikes are very expensive, and the loans have steep repayment plans
- Affordability of driver's license - they end up operating without them
- Stigma - boda riders are constantly demeaned in the society
- Gender bias - female passengers often question their capability and pick male riders over them
- Traffic accidents caused by reckless motorists
- Religious bias- in Muslim religion they don't like women riding on bodas

Female owners (2/3)



“Boda business is a job like any other. As long as it pays well its fine. Besides, it’s very empowering to see that as a woman you can start saving cash in a bank and employ men too.”

Customer journey

- Owners lease the motorbikes to riders after agreeing on the terms and conditions of operation.
- They check the background of the people they want to lease to ensuring these riders are trustworthy
- An element of trust must go both ways, so **the owners portray trust to their riders by letting them stay with the bikes overnight**. This also **promotes efficiency by cutting down on travel time to fetch the bikes in the morning** thereby risking on missing out on potential customers.
- The motorcycles are fitted with **trackers thus you can monitor the motorcycle from your phone**

Working patterns

- Aside from the bodas, **they also run their own businesses such as boutiques**
- They make Kes 600-1200/day and are currently saving in saccos and banks to expand their boda businesses

“As women we need to have something of our own. We no longer want to depend on our men like in the past, we also want to work hard as women. You don’t have to be employed; you can be self-employed.”-

Enablers

What encouraged them to join boda boda business

- Assurance of surplus income
- Motorcycle business is easy to start
- Motorcycles are small, thus can be parked anywhere
- Convenience - bike is readily available in case of an emergency

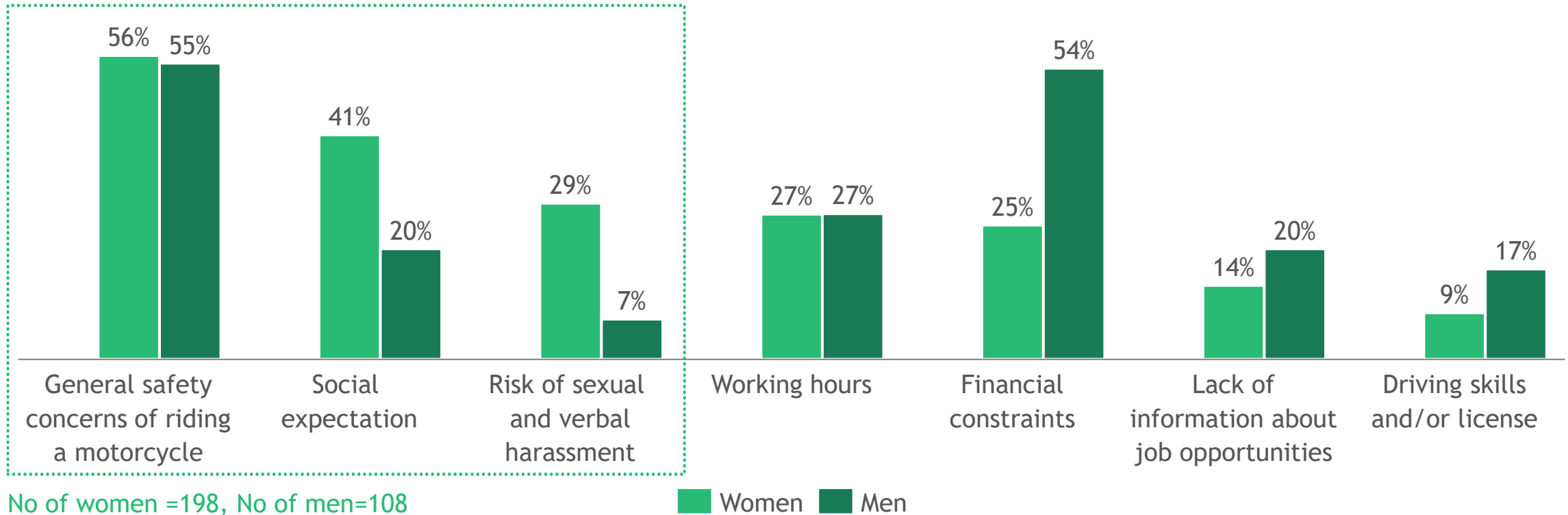
“I run my machine and I do the maintenance myself; I do not trust anybody to do it for me. Hard work pays, this business has helped me to grow more self-reliant”-

Barriers

- Controlling male riders can be difficult, **they merely see you as a woman even if you’re their boss**
- **Getting a trustworthy male rider is hard**, they prefer renting from their relatives / known associates
- Male riders sometimes give trainees your bike for them to learn at your cost
- **Income from the boda business is quite small and to service the loan you need cash, so it takes longer to acquire the bike and payback**
- Boda business is considered **a dirty job**
- Some husbands are unsupportive, **they try to control the woman’s finances thus limiting her financial freedom**
- Other women have a negative opinion of women who own bodas e.g., women in the business will not get married

Challenges | General safety, socially permissive environments and risk of harassment are main concerns for women surveyed

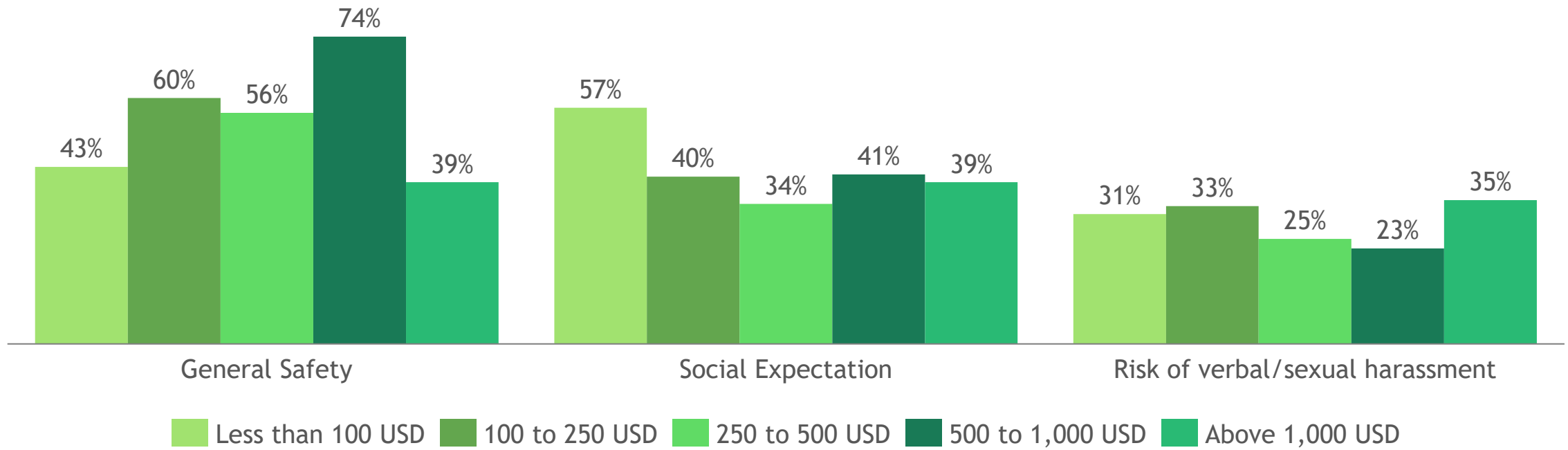
Percent of respondents for whom this is the biggest challenge



Q15: What do you think are the biggest challenges you might face or faced in deciding to become a motorcycle rider or owner? Please select the top 2 challenges.

Challenges | Across all social economic groups, women face challenges in safety, social expectations and risks in verbal/sexual harassment

Percent of women respondents by household income for whom this is one of two biggest challenges

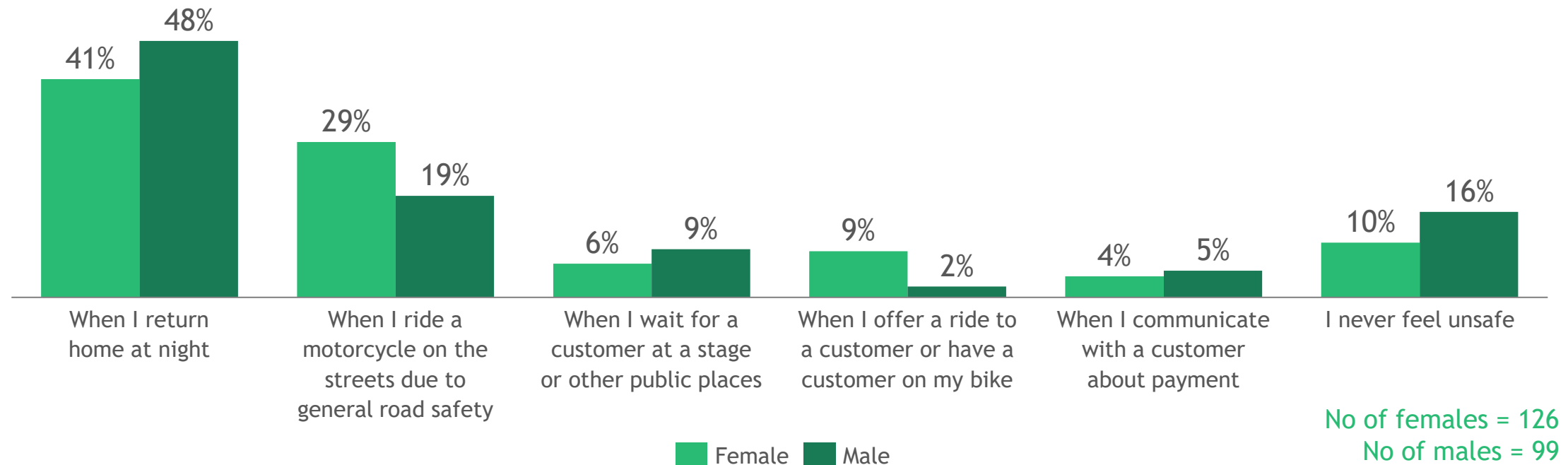


No of respondents=198

Q15: What do you think are the biggest challenges you might face or faced in deciding to become a motorcycle rider or owner? Please select the top 2 challenges.

Safety | Respondents felt most unsafe at night and when riding in the streets

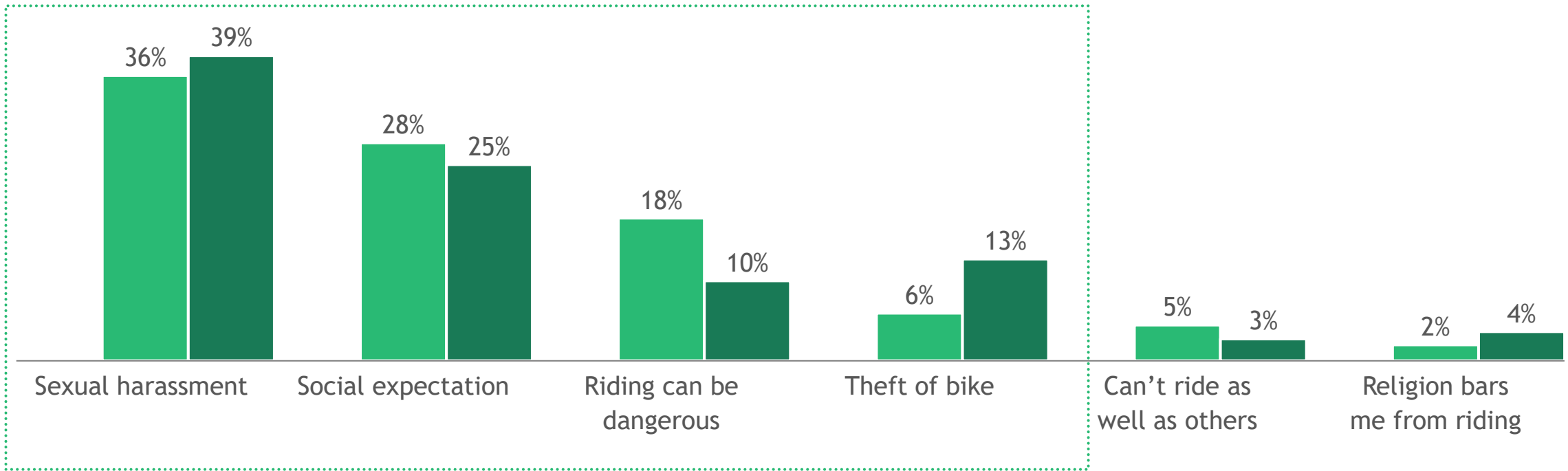
Percentage of respondents, across riders, owners and prospectives



Q16: When do or would you feel **MOST** unsafe when riding a motorcycle? Choose one of the following answers

Challenges | Women's safety and social expectations are cited as the biggest factors in a woman's decision be a rider or owner

Percent of respondents by gender who think this is the biggest challenge for women riders or owners



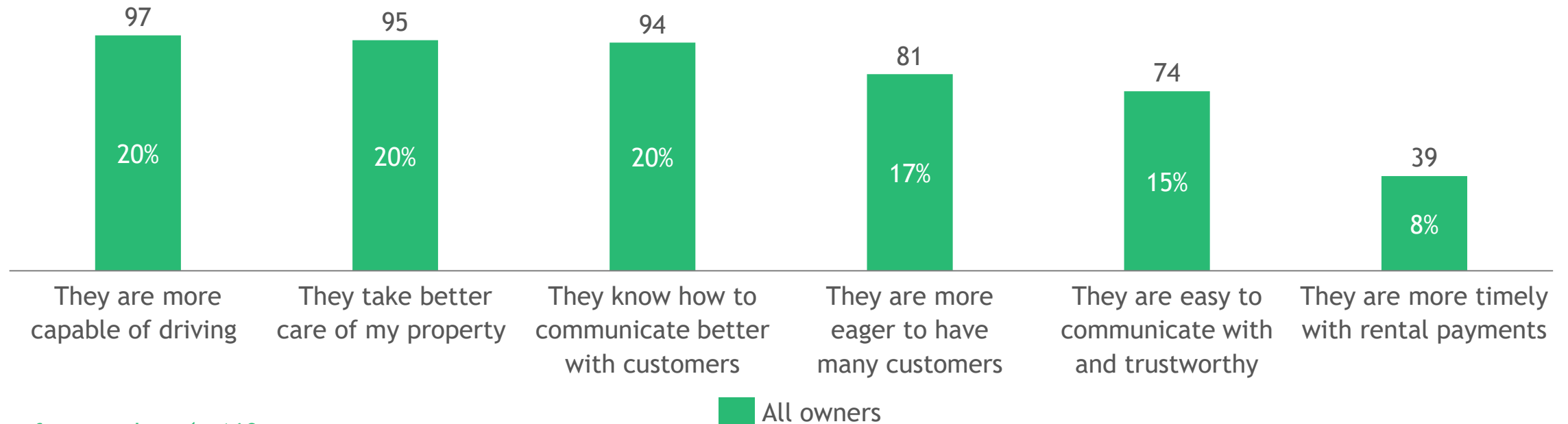
No of women =198 No of men=108

■ Women ■ Men

Q16: What do you think the average woman would say is their biggest challenge in deciding whether to become a motorcycle owner or rider?

Owner preference | Owners generally prefer riders who are better skilled, take care of property, communicate better and want more customers

Owners giving reason for preferring either male or female riders



No of respondents¹= 160

Q19: Why do you have this preference? Select 3 answers

1. Data had 160 respondents with 3 responses each

Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Allyship | Reliance on male allyship apparent across all income levels



Q14: Who inspired you to enter the motorcycle business? Choose one of the following answers

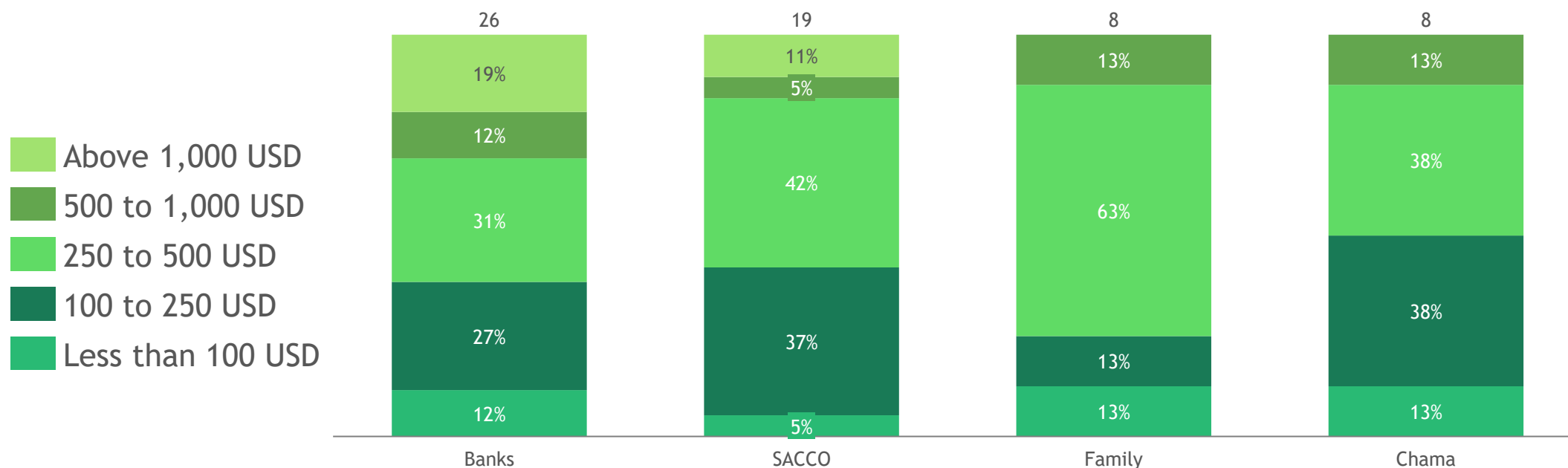
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis



Detailed qualitative, not statistically significant⁸¹

Social-economic factors in source of finance | Those with lower incomes relied more on family and chamas' financial support

Average size of loans by source and social economic class



Q28: Which financial sources do/did you rely on to buy a motorcycle? Check all that apply

Q29: How much financing did you receive from those sources? Please answer (KES)

No of females = 49
No of males = 12

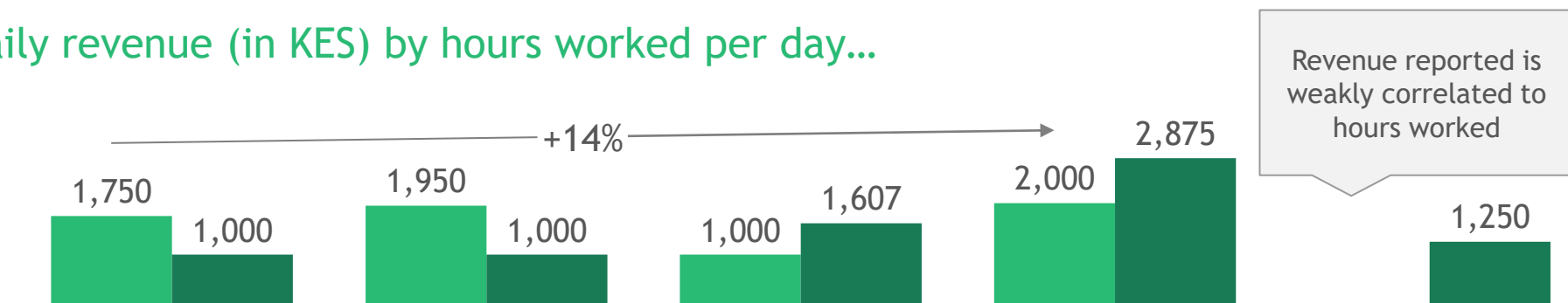
Note: Only included single source loans, because it was not possible to identify the amount of from by source for multi-source loan responses
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Hours and revenue per day | Women typically reported more revenue per day; indicating other factors are a bigger determinant in daily revenue

Average reported Daily revenue (in KES) by hours worked per day...

Rider-renters only

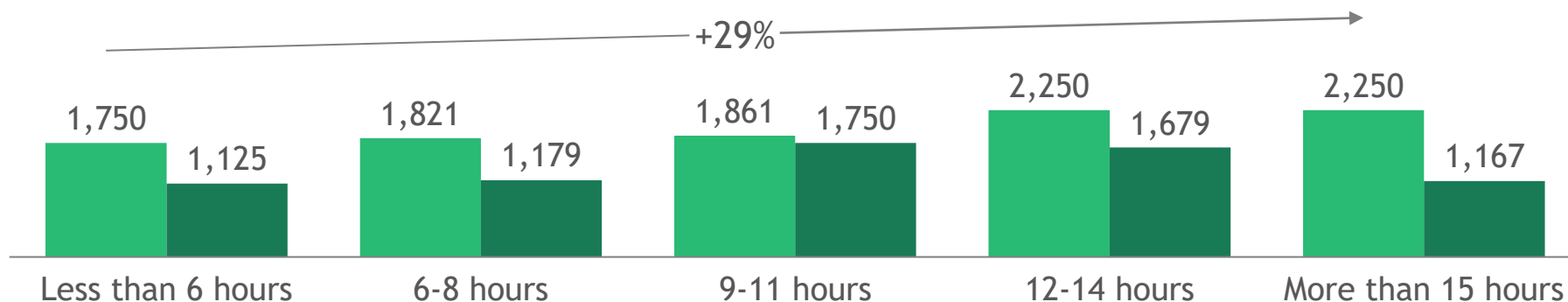
No of women = 12
No of men = 18



All riders

No of women = 23
No of men = 34

Female Male



Q22: What are your typical working hours in a day? Choose one of the following answers

Q30: What is your average daily revenue from a motorcycle business? (Revenue is the total money earned before you spend any money on fuel and other costs) Choose one of the following answers

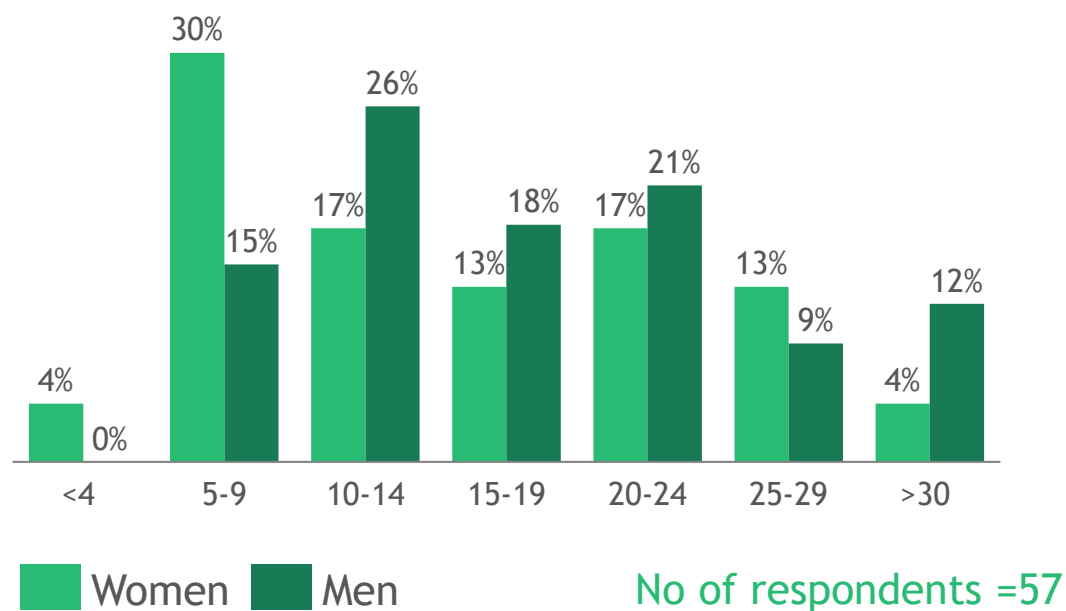
Note: The weak relationship between hours and revenue raises questions over the accuracy of respondents' reporting
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Detailed qualitative, not statistically significant

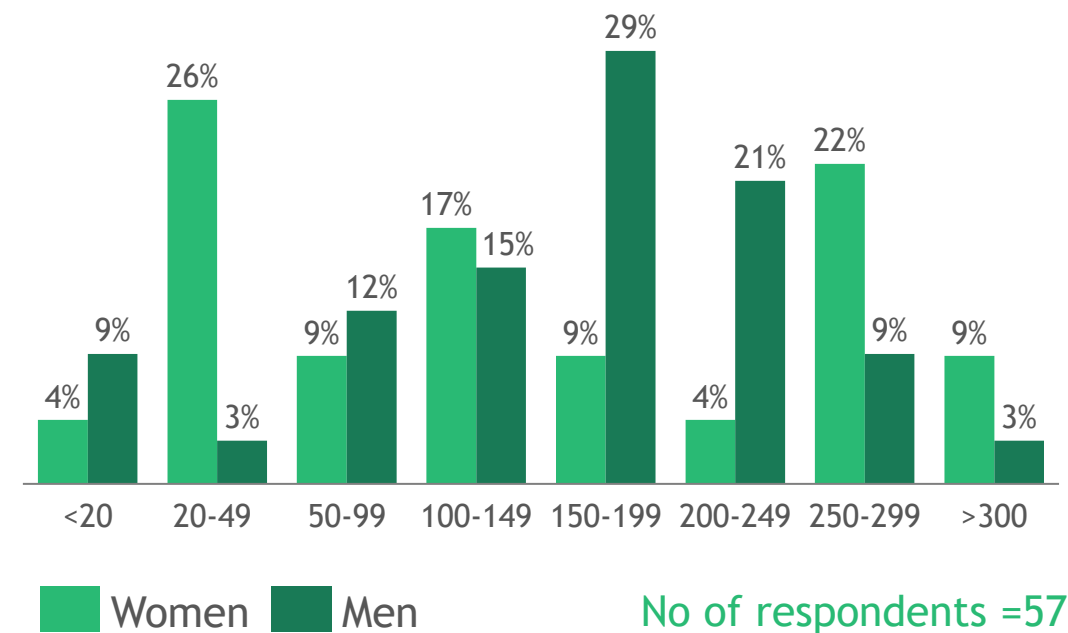
Trips and distance | Qualitatively, women riders drive slightly fewer trips daily than men riders



Percent of riders driving given number of trips daily



Percent of riders driving specific distance(km)



Q35: How many trips do you normally make everyday?
Choose one of the following answers

Q34: How many kilometers do you drive daily on average (this includes to and from work) ? Choose one of the following answers

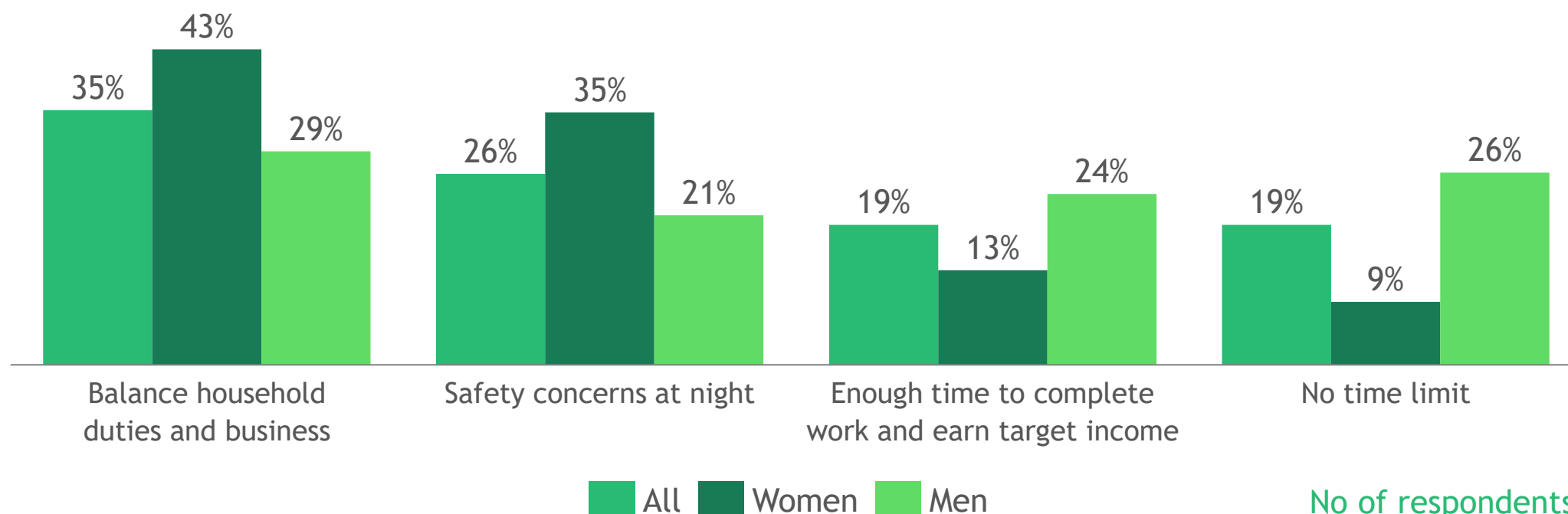


Detailed qualitative, not statistically significant

Safety | Safety concerns and family responsibilities dominate female riders' considerations when deciding working hours



Percent of riders giving factor as most important



Q23: What is the most important factor in determining your working hours? Choose one of the following answers

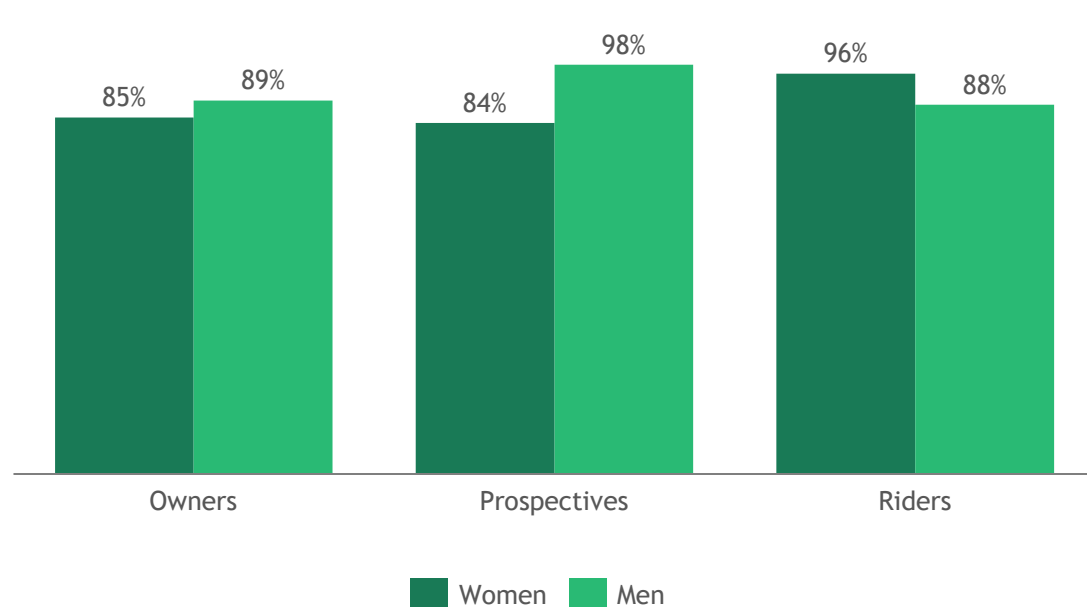
Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis



Detailed qualitative, not statistically significant

Electric bicycle | There is very high willingness to consider buying an electric bicycle, but the preference was equally held by men and women"

Percent of respondents willing to buy electric motorcycle



No of respondents=306

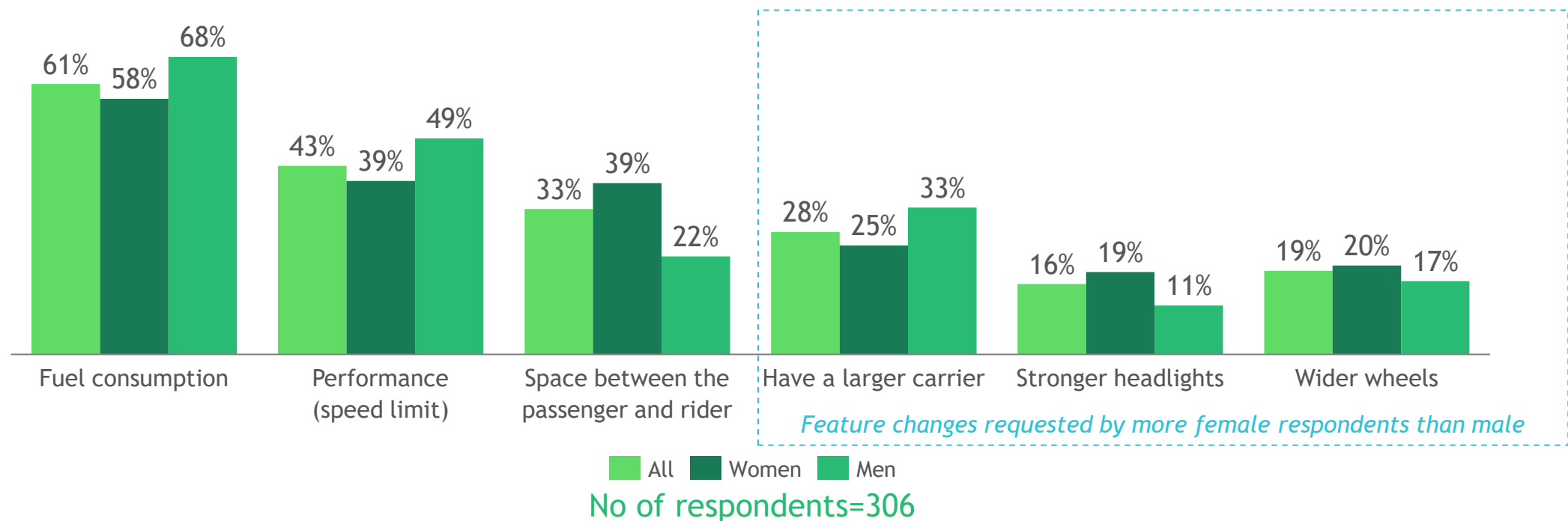


Q37: If there was an electric bicycle that can go 40km/hr and travel 75km on a battery, is it something you would consider buying instead? Choose one of the following answers (Yes/No)

Q38: If so, at what price would you pay for it? Please answer (KES)

Existing features | More women are looking to change safety-related features, even as all respondents want to lower fuel consumption

Percent of respondents who would change feature

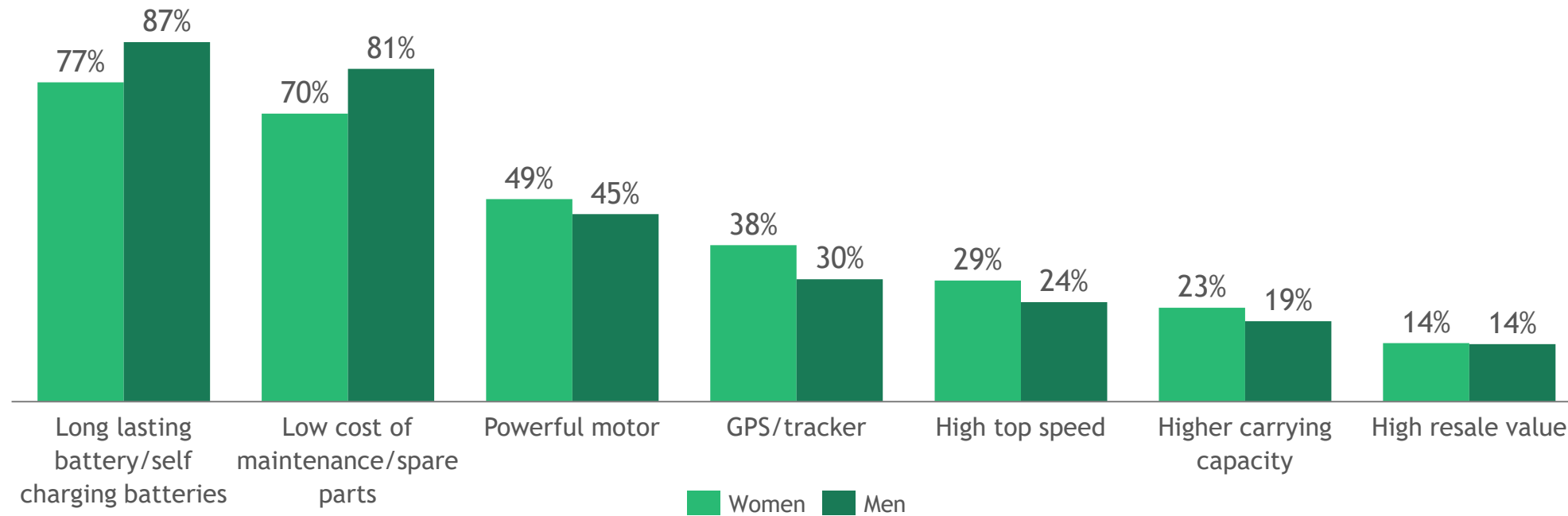


Q36: If you could change anything about existing motorbikes in the market to make them more suited for your driving preferences, what top 2 things would you change?

Source: SAGACI Research survey conducted in November 2022 in Nairobi and Machakos, BCG analysis

Potential features | Low maintenance cost and long-lasting/self-charging batteries appeal most to potential motorbike buyers

Percent of respondents who say feature is important



No of respondents=306

Q39: What would be most important to you in an electric motorcycle? Please select 3 answers

Disclaimer

The services and materials provided by Boston Consulting Group (BCG) are subject to BCG's Standard Terms (a copy of which is available upon request) or such other agreement as may have been previously executed by BCG. BCG does not provide legal, accounting, or tax advice. The Client is responsible for obtaining independent advice concerning these matters. This advice may affect the guidance given by BCG. Further, BCG has made no undertaking to update these materials after the date hereof, notwithstanding that such information may become outdated or inaccurate.

The materials contained in this presentation are designed for the sole use by the board of directors or senior management of the Client and solely for the limited purposes described in the presentation. The materials shall not be copied or given to any person or entity other than the Client ("Third Party") without the prior written consent of BCG. These materials serve only as the focus for discussion; they are incomplete without the accompanying oral commentary and may not be relied on as a stand-alone document. Further, Third Parties may not, and it is unreasonable for any Third Party to, rely on these materials for any purpose whatsoever. To the fullest extent permitted by law (and except to the extent otherwise agreed in a signed writing by BCG), BCG shall have no liability whatsoever to any Third Party, and any Third Party hereby waives any rights and claims it may have at any time against BCG with regard to the services, this presentation, or other materials, including the accuracy or completeness thereof. Receipt and review of this document shall be deemed agreement with and consideration for the foregoing.

BCG does not provide fairness opinions or valuations of market transactions, and these materials should not be relied on or construed as such. Further, the financial evaluations, projected market and financial information, and conclusions contained in these materials are based upon standard valuation methodologies, are not definitive forecasts, and are not guaranteed by BCG. BCG has used public and/or confidential data and assumptions provided to BCG by the Client. BCG has not independently verified the data and assumptions used in these analyses. Changes in the underlying data or operating assumptions will clearly impact the analyses and conclusions.



[bcg.com](https://www.bcg.com)