Technical Report

Ghana FSP Survey 2014 – Wave 1

InterMedia

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world within reach

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Acronyms

GSS – Ghana Statistics Service

PAPI-Pen and Paper interviews

HH - Household

QC-Quality Control

PSU-Primary Sampling Unit

EA-Enumeration Area

DFS- Digital Financial Services

1.0 INTRODUCTION

InterMedia has been commissioned to undertake a mixed - method, multi-country study in Asia and Africa to explore the uptake and usage of Digital Financial Services [DFS] among adults over the next two years. Ipsos Ghana was mandated to carry out the fieldwork for the study in Ghana. The study specifically aims to:

- Measure adoption and use of DFS among specific target groups (e.g., poor, rural and unbanked);
- To track citizens' access to financial services in general and the uptake and use of DFS in particular;
- Evaluate service performance amongst DFS agents and customers , and;
- Produce consumer insight to support product and service development and delivery.

– A nationally representative sample of 3,000 adults aged 15 and above was randomly selected to participate in the study. The study was carried out in all the 10 regions in Ghana namely Northern, Upper East, Upper West, Brong-Ahafo, Ashanti, Central, Eastern, Western, Volta and Greater Accra. This document contains the technical report for Wave I of the study conducted in December 2014.

2.0 SAMPLE

The Mobile Financial Service Survey (MFSS) comprised a nationwide probability sample survey of all the households in Ghana. The sampling frame for the household-based sample was the list of all 37,674 Enumeration Areas (EAs) from the 2010 population and Housing Census of Ghana with corresponding data on number of households.

The household sample survey was based on a two-stage stratified cluster design. The frame was stratified into urban and rural localities of residence and by the 10 administrative regions in the country.

Sample Allocation and Selection of Primary Sampling Units

The target sample of 3000 respondents was first allocated to the 10 regions of the country proportionally to their estimated population of 15 years old and over. Within each region, the resulting sample allocation was proportionally distributed to urban and rural areas.

. At the first stage, 300 (EAs) (156 urban and 144 rural EAs) were systematically selected with Probability Proportional Size (PPS) , the measure of size being the population age 15+. At the second stage, 10 households were selected from each of the 300 EAs to produce an overall sample size of 3,000 households.

The final sample size to be achieved in each region was adjusted (rounded off) to the nearest number that is divisible by 10 (Table 1). This was all done by the Ghana Statistical Service (GSS).

Table 1: Sample distribution

Region	Total Population (15+ years)	% Total Sample Proportion	Sample allocation	Urban Proportion	Rural Proportion	Urban sample size	Rural Sample size	Total EAs	Total HHs
Western	1,449,507	10	286	42.4	57.6	121	165	29	290
Central	1,330,029	9	262	47.1	52.9	124	139	26	260
Greater Accra	2,756,422	18	544	90.5	9.5	492	52	54	540
Volta	1,305,427	9	258	33.7	66.3	87	171	26	260
Eastern	1,622,100	11	320	43.4	56.6	139	181	32	320
Ashanti	2,976,462	20	587	60.6	39.4	356	231	59	590
Brong Ahafo	1,378,292	9	272	44.5	55.5	121	151	27	270
Northern	1,368,848	9	270	30.3	69.7	82	188	27	270
Upper East	611,926	4	121	21	79.0	25	95	12	120
Upper West	409,412	3	81	16.3	83.7	13	68	8	80
Total	**15,208,425**	**100**	**3,000**	**50.9**	**49.1**	**1,560**	**1,440**	**300**	**3000**

Household and Respondent Selection

In the second stage, households were selected using the random walk method.

In each of the sampled enumeration areas, prominent landmarks were identified to mark the single starting point for the random route walk. Maps of the selected enumeration areas detailing the number and location of landmarks such as mosque, school, market, church, cattle dip and dispensary's factory etc. were provided to all field teams. To a smaller extent the field teams acquired assistance from local community leaders/guides and elders to clearly indicate the prominent landmarks in addition to those provided in the maps.

With the help of land marks provided in the enumeration area maps, field teams identified different landmarks in a specific enumeration area and in case they came across more than 1 land mark, the team leader/supervisor would list all the landmarks in the EA starting with the nearest and working down to

the furthest away from the designated meeting point within the area. The team leader considered the questionnaire at the top of the pile for the day and identified the last digit of the serial number, that correspond to the same number in the top row of the land mark table, where both numbers intersect.

After identifying the starting point, a pen (or a stick) was spun on the ground and interviewers started the random walk in the opposite directions (nearest path/road) indicated by the pen neck and the bottom of the pen. During this process the interviewer adhered to the left hand rule thus selecting houses to the left hand side, sticking to the left when turning at each intersection.

From the starting point, the interviewer identified the first household to be interviewed using the left hand rule and the last digit of the serial number of the questionnaire. For example, if the questionnaire serial number is 2012, the interviewer skipped first 2 households and approached the 3rd household on the left.

From that point, in urban EAs an interviewer skipped 4 households and selected the 5th household and in rural EAs interviewers skipped 2 households and considered the 3rd household for the interview. The difference in the number of skip steps between households ensured an adequate distribution of respondents across the EA while taking into consideration differences in population density in urban and rural areas.

In the third and final stage of selection, one eligible respondent in each household was selected using the Kish grid method where all people aged 15 years and above were listed with their ages from the eldest to the youngest.

3.0 QUESTIONNAIRE

The questionnaire was developed by Intermedia and translated by IPSOS Ghana into the required languages namely; Ga, Twi, Ewe and Dagbanli. The translated questionnaires were approved by Intermedia before commencement of fieldwork. They were not back translated into English.

The questionnaire consisted of the 7 sections, detailed below:

    a. **SECTION AA**: **Respondent information**

        -Respondent information

b. SECTION AB: Interview information

-Date and day of the interview, Interview start and end time and interview duration, Interviewer and supervisor details, Introduction, Kish grid, Parent/guardian consent form.

c. SECTION I: Demographics

- Subsection 1: General Demographic characteristics
    - Age, Gender, Marital status, Level of education, Documented/undocumented status
- Subsection 2: Livelihood
    - Employment status, source of income, occupation, Residency contract and migration patterns, Progress out of poverty index or level of individual daily consumption, Income, Vulnerability

d. SECTION II: Access to and ownership of mobile technology

- Mobile phone ownership and access
- Mobile phone usage

e. SECTION III: Financial Instruments

- Subsection I: Formal financial instruments
    - Ownership, access
    - Test filters
- Subsection II: Digital Financial services/mobile money
    - Mobile money awareness, sources of information
    - Mobile money adoption, use, barriers, drivers
    - Point of service (POS)/ mobile money agent related experiences of mobile money users
- Subsection III: Satisfaction with financial service providers and products
- Subsection IV: Other Financial services
    - Access and use

f. SECTION IV: Optional Modules

- Module 1: Financial Literacy
- Module 2: Digital literacy

g. **Literacy and Numeracy**

4.0 RECRUITMENT AND TRAINING OF FIELD STAFF

Ipsos Ghana recruited **95 interviewers**, **19 supervisors** and **8 QC representatives** from a pool of qualified candidates. The field staff was chosen based on their experience in various studies conducted across the country and their languages. Recruited field staff had ordinary diploma, bachelor's degree and post graduate degree and diploma.Each team comprised of 5 interviewers and 1 supervisor.

Table 2: Breakdown of the number of interviewers and supervisors per region

Regions	Number of interviewers	Number of supervisors	Number of teams
Western	10	2	2
Central	10	2	2
Greater Accra	15	3	3
Ashanti	10	2	2
Eastern	10	2	2
Volta	10	2	2
Brong Ahafo	10	2	2
Northern	10	2	2
Upper East	5	1	1
Upper West	5	1	1
TOTAL	**95**	**19**	19

Training

A central training of interviewers was conducted during 5 days from 17th November, 2014 to 21st November, 2014 to ensure uniformity in understanding the study objectives, methodology and questionnaire administration.

Key sessions covered during the training included:

- Study purpose and objectives
- Sampling methodology
- Fieldwork rules and regulations (roles and responsibilities of both the interviewers and supervisors; reviewing all the relevant forms to be filled)
- Quality control guidelines

- Guide to questionnaire administration (a detailed study of all the questions). This session was done with the interviewers taking turns to read out the questions to the hearing of everyone.
- Reading and interpreting EA maps
- Capturing GPS coordinates using the GPS gadgets

Training also included role play sessions where one interviewer acted as a respondent while another asked questions while the rest of the teams observed.

Pilot Interviews

A pilot study was carried out in the following areas: Odorkor, Kaneshie and Teshie on 21st November, 2014 during which the teams tried out the questionnaire and the methodology of the study in close supervision by the Field coordinator, QC executive and the team of supervisors. After that pilot, a review of the tool was done and some of the issues that arouse were addressed so as to ensure that everybody masters it very well. A total of 100 interviews were conducted. Below is a summary of the feedback from the pilots;

- Average interview duration was 95 minutes.
- Respondents complained on long interview time affecting their work.
- Interviewers had a good understanding of the questionnaire
- Some changes were amended as the tool was tested / piloted

5.0 FIELDWORK

- Fieldwork was conducted during 1st December 2014 - 2nd January 2015. Total number of interviews conducted was 3,000.
- Each interviewer had a target of 3 interviews per day. The questionnaire was read word for word in respective local languages or English.
- The coordinate readings were captured using GPS machines at the end of every interview and recorded on the questionnaire.

- There were 3 consent forms that were administered for this study:
- ✓ Parent/guardian consent form for all respondents who were between 15-17 years of age;
- ✓ Photography consent form administered to all respondents; and
- ✓ Informed consent form to participate in a separate follow-up study.

– In addition to the study questionnaire, the following research instruments were also used

   ✓ Interviewer & Supervisor training Manual

   ✓ Show cards

   ✓ Interviewer contact sheet

   ✓ Supervisor observation form, issue log, filed log, and back check sheet

   ✓ Introduction letter

   ✓ ID cards

   ✓ GPS record forms

   ✓ Start point selection forms

Substitution process

Household substitutions

– The household substitution was done after 3 unsuccessful call-backs at the household from the first attempt. Below are the reasons that warranted a household substitution.

- selected respondent terminates the interview before it is completed
- All call-backs have failed
- No one in the household speaks English or required local language.
- Selected respondent identified but not at home of calling
- House is lived in but no one home at the time of calling (no response)
- Selected respondent refuses to be interviewed

– The substitution was done as explained during the training

– For unsuccessful interviews, the household to the immediate right of the initial household is selected. If that too is unsuccessful the household to the immediate left of the initial household is selected, followed by second right, second left, third right and so on. Attempts can be made at up to 9 households (alternating between houses on the right and on the left as described above).

– However, after getting a successful interview, the interviewer resumes the normal skip from the furthest household reached in the process of substitution.

Table 3: Summary of the total number of households substituted for a specific reason

Reasons for substitution	Western	Central	Greater Accra	Ashanti	Brong Ahafo	Eastern	Volta	Northern	Upper East	Upper West	TOTAL
Selected respondent terminates the interview before it is completed	3	0	1	0	0	0	0	0	0	0	4
All call-backs have failed	0	0	0	0	0	0	0	0	0	0	0
No one in the household speaks English or required local language	0	0	0	0	0	0	0	0	4	17	21
Selected respondent identified but not at home of calling	6	2	0	2	0	0	0	0	0	0	10
House is lived in but no one home at the time of calling (no response)	0	0	0	0	0	0	0	0	0	0	0
Selected respondent refuses to be interviewed	15	8	12	28	7	13	17	12	7	15	134
TOTAL	**24**	**10**	**13**	**30**	**7**	**13**	**17**	**12**	**11**	**32**	**169**

6.0 QUALITY CONTROL

Supervisor/ team leader QC processes

– Final Questionnaire editing and approval was done at the end of every day by supervisors.

– The supervisor met with the enumerators every morning to debrief them on issues identified in the questionnaires and plan for the day's field work.

– Coordinated and supervised all enumeration activities in the EA during the data collection process.

– Ensured that GPS coordinates are recorded clearly on the questionnaire and on the GPS record sheet.

– The supervisor accompanied, observed and back checked (both physical and telephonic) some interviews conducted.

7.0 DATA CAPTURE AND PROCESSING

Data Capture

Data Capturing was done via a Dimensions link developed by the Ipsos Kenya DP Hub. Intermedia provided Ipsos Ghana with a codebook along which the data was structured. Data capturing was done in the Ipsos Ghana office and begun on 18th December, 2014. An interim data of the first 100 cases was shared with the Intermedia team on 8th January, 2015. Data capturing ended on 2nd February, 2015.

Ipsos Ghana employed a data plotter whose sole responsibility was to plot the GPS coordinates generated from field after each day's work to ensure that they plotted the correct coordinates. Where errors were found, the respective supervisor was alerted and they went back to the location to record the coordinates again.

Data processing

Data Processing was fully handled by the Ipsos Kenya DP team. Data processing is set to end by 20th March 2015.

8.0 CHALLENGES FACED AND HOW THEY WERE ADDRESSED

The table below summarizes the challenges that we faced in the course of fieldwork and how we resolved them.

Table 7: Project Challenges and how they were dealt with

	Challenge	Resolution
1	**Data collection methodology and questionnaire length**. We used Pen and paper interviews. This coupled with the questionnaire length presented several challenges during data collection including respondent fatigue, interviewers having challenges with skip routines etc.	A debrief section was organized again for the teams and this helped them to get a better understanding of the questionnaires and this helped them to master the skip patterns.

2	A few GPS coordinates appeared in wrong locations because the coordinates were picked at higher feet.	The team went back to re-pick them at lower feet.
3	Difficulties in locating some EA bases (which is the main landmark in the respective Enumeration areas that serves as a starting point for a census). We had so many EAs whose EA base couldn't be located. House numbers and Land marks given on the maps as EA base couldn't be traced.	With the help of the people living in the communities, we were able to identify some. Also the coordinators together with the supervisors were able to get new EA bases using prominent land marks.
4	**Terrain** – It was a bit hard to reach some villages especially in Northern, Upper East and Upper West regions where the means of transport leaves the localities at specific (inconvenient) times i.e. either late in the evening or midday.	The teams had to sometimes move on trucks, motor bikes, walk or hire cars in order to get to these EAs on time and achieve their quotas.
5	**Poor weather** – In the Western region they experienced heavy rains during the survey period and this hindered the teams in going to field earlier.	They managed to walk to the respondents' houses each time the rains came down rather than waiting for it to stop totally.
6	**Language Barrier** – In some of the EAs we found quite a number of people who could not communicate in translated local languages or English	We had to keep substituting till we had respondents who understood the languages for interviews.
7	Refusal to endorse the follow-up consent and photograph consent forms by some respondents.	We tried to clearly explain the details of the survey though they refused; hence we were not able to take their photos.
8	Refusals by some respondents to participate in the survey. This happened mainly in some urban areas where some people wanted to be paid first and others pretended to be busy.	Had to explain clearly the purpose and the objectives of the study but for those who totally refused, we had to substitute.
9	**Sampling Intervals.** In some EAs in the Northern, Upper East and Upper West, the 1 to 5 sampling interval to be observed in urban locations; and 1	This was resolved by using a 1 to 3 sampling interval in the urban locations and 1 to 1 in the rural locations

	to 3 in rural locations didn't work. This is because the communities were too small and if these were to be observed, lots of dwelling structures will be missed and the teams won't be able to achieve their quotas.	
10	**Size of EAs**. Another issue had to do with the size of some EAs. Using the maps and the boundaries, some EAs were very small and also less populated.	We used a 1 to 3 sampling interval instead of 1 to 5 in such urban locations; and 1 to 1 in such rural EAs.
11	Majority of the EAs were very far and the teams weren't going to be able to travel there and return the same day. Majority of these EAs were also far from each other and working in two EAs a day didn't look achievable.	EAs were changed across the regions. A new set of EAs were generated with the assistance of GSS.
12	We had lots of the team members dropping out of the project by the time we were set to begin fieldwork. In the Volta and Brong Ahafo regions, we had only 3 interviewers each. The Northern and Western Regions also had 5 interviewers each. This delayed us in starting field work in the Volta and Brong Ahafo regions	We resolved this by having the Upper West team (after completing their fieldwork) join the Northern team to complete the quota in the latter. New teams were trained in the Volta and Brong Ahafo regions to speed up field work.
13	Observing the right hand rule became a problem in some of the rural locations in the Northern region. Dwelling structures were far from each other and they also did not follow on a line along which the teams could easily use road paths to observe their sampling procedures.	The team had to do a sampling of 1 to 1; and also use inlets so that they could pick dwelling structures at random.
14	Upon our checks the QC who had been assigned to Upper West and Eastern region fell ill, at a point during fieldwork, and so was unable to be on field.	Our head of QC reassigned another QC representative to Eastern region.

		As the questionnaires came in from Upper West, 100% QC checks were done.