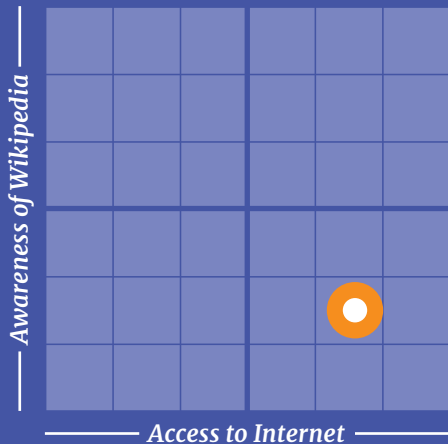


NAME: **Shilpa Bothra** AGE: **48**

FROM **Bhilwara, India**

LIVES: **Jaipur, India**

OCCUPATION: **Homemaker/Tutor/Artist**



## BIOGRAPHY

Shilpa is an artist who taught herself how to paint in the traditional style of the Bhilwara region, where she grew up. She moved to the state capital, Jaipur, after marrying a clothing salesman. She supplements the family income by working as an art tutor for the neighborhood children. Her husband owns a desktop computer and has an Airtel WiFi modem at home.

Shilpa is very social, and it was her friends who first convinced her to go online. They installed Facebook and WhatsApp on her phone so that they could all stay in touch. She has also found the internet useful for her art. Her husband installed the YouTube app on her phone and showed her how to search for video tutorials on new painting techniques. A few loyal customers successfully encouraged her to sell her paintings on Facebook.

Shilpa speaks Hindi and Marwari, a regional language spoken by her family; but her main sources of news are in Hindi, which was her medium of education. She watches Hindi news on TV and reads the *Rajasthani Pathrika*, a Hindi newspaper. Her husband can read English newspapers but subscribes to the Hindi versions for her and her mother-in-law, who lives with them.

Shilpa is very proud of her two children: Gagan, who is studying commerce in 12th grade to become a businessman like his father, and Savita, who is completing her Bachelor's in History at JNU in Delhi. She stays in touch with Savita usually via WhatsApp chat and voice calls. Her children don't have the patience to teach her how to make better use of her phone, so she sticks to familiar apps.

Last year, Shilpa's husband installed UC Browser Mini on her phone and told her that it is the fastest search engine, but she rarely uses it. She found the UC Browser notifications annoying, so he did something to minimize their appearances. Her husband used to help the children with school projects on the desktop computer at home; and by watching them, Shilpa learned how to search on Google. But today, if she needs to find information online, she still asks her husband for help because his English is much more advanced than hers, and he knows which links to click.

She has never heard of Wikipedia and cannot recall ever using it.

## DEVICE USE



### Xolo Era smartphone

**PRIMARY USE:** Social networking via WhatsApp and Facebook. Selling artwork via Facebook. Learning painting techniques on YouTube.

**NETWORK:** Only uses her phone to go online while at home, when she can connect via the Airtel modem. Rarely leaves her home, so she does not have data on her phone.

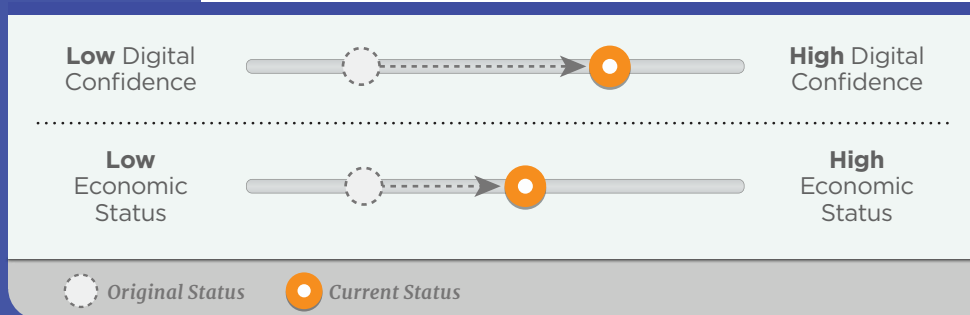
**DETAILS:** Her husband bought her a phone with a large screen to make it easier for her to type and view images.

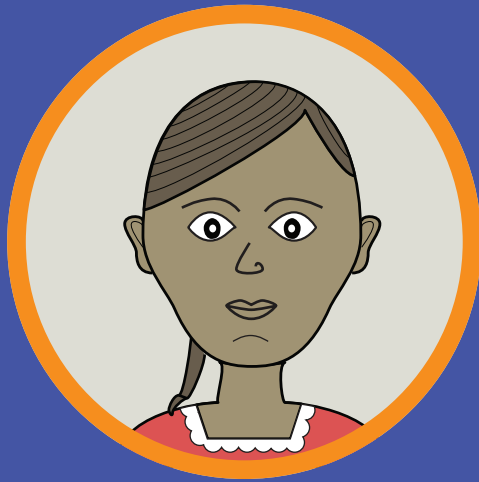


### Desktop computer

**PRIMARY USE:** Husband used it to help their children with school projects.

**DETAILS:** Husband uses it to search for information for her when asked.



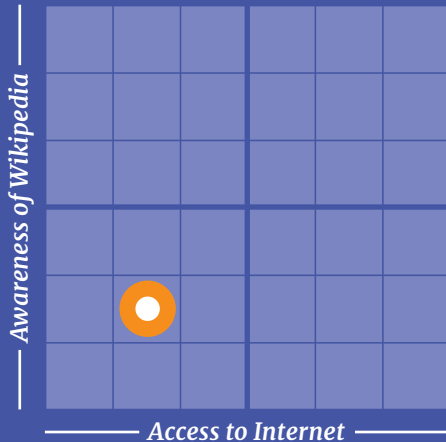


NAME: **Kumari** AGE: **19**

FROM **Nearby Village**

LIVES: **Madanpur Khader, India**

OCCUPATION: **Recently enrolled at Computer Center**



## BIOGRAPHY

Kumari is a new student at an NGO-run computer center in a re-settlement colony on the outskirts of New Delhi. Her family was relocated to the colony seven years ago from their home on banks of the Yamuna River. When they first arrived, there was no water or electricity, and the school was nothing to write home about. Now, there is electricity most of the time, but Kumari or her mom still have to wait in long lines to buy water from water tankers. One day, while waiting in line, a neighbor told them about a community organization starting a three-month computer training program for only Rs 200 (\$3.00). Kumari was interested in the program and had free time now that she was out of school. She mentioned this to her grandmother, who in turn encouraged her parents to enroll her, citing the low cost and increased job potential.

Kumari is shy and seeks information from her family and close friends. She lives with her parents, two grandparents, and two younger brothers, who are 5 and 10 years old. She gossips about neighbors with her mother and gets life advice from her grandmother.

Kumari's father gave her his old smartphone, which she shares with her 10-year-old brother. Her brother and his friends play games on their phones all the time; once in a while, he will teach her a few games. Her favorite is a farm simulation game. If she asks, her mother will usually buy her a small data plan to chat with friends on WhatsApp and Facebook—it's the primary way they update each other on what is new. She also browses clothing stores online, but does not buy anything because no one in her family owns a credit card—her grandmother and parents are wary of getting scammed. She enjoys shopping for clothes at the mall and in the market.

Kumari is excited to learn how to use computers because she knows such skills can help her get a good job. She hopes the NGO will employ her at the end of her training, like they did her neighbor. The computers in the center are WiFi-enabled, so she hopes to learn more about the internet and what else it can do. After a few classes, she has already learned how to use Google and search for any English word. Her English is very limited, but her classmate showed her how to type "in Hindi" at the end of every search to get information in Hindi. She's now been doing this to find information on Shahrukh Khan, her favorite movie star, and read about his new movie *Fan*.

## DEVICE USE



### Forme Discovery P9

**PRIMARY USE:** WhatsApp, Facebook, and occasionally browsing clothing stores. She can text, but prefers voice calls.

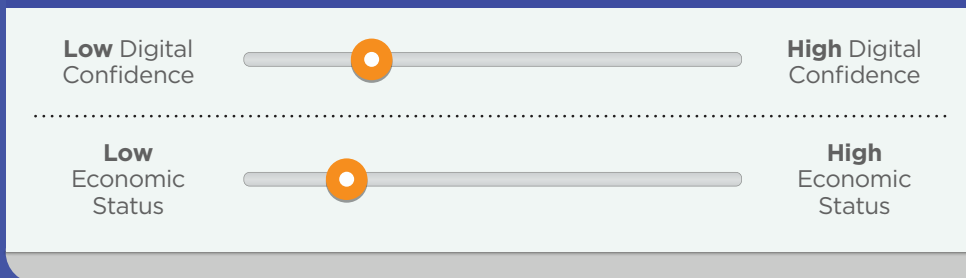
**DETAILS:** Shares her phone with her 10-year-old brother. Mother will buy her Rs 28 (\$ 0.30) of data every few weeks to a month so that she can use social networking sites.



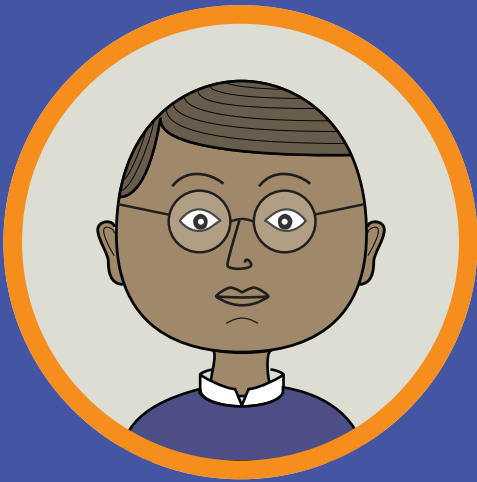
### Computer in her classroom

**PRIMARY USE:** Learning basic computer and internet skills.

**DETAILS:** WiFi-enabled and free to use when she is in class, since the cost is included in her tuition.



She does not know what Wikipedia is but has seen the name come up in her recent searches. She would need significant guidance in navigating any of Wikipedia's features.

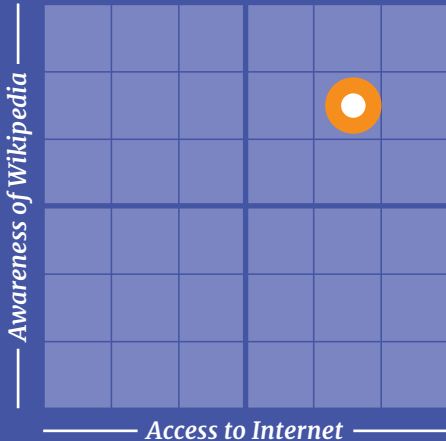


NAME: **Sandeep** AGE: **28**

FROM **Maharashtra, India**

LIVES: **Delhi, India**

OCCUPATION: **Research Scholar**



## BIOGRAPHY

Sandeep is a PhD student at Jawaharlal Nehru University (JNU), a leading liberal arts university located in Delhi. He has always been dedicated to his studies because he believes in the value of a good education. He enjoys spending time with his professors and even thinks of them as friends.

Sandeep was introduced to computers in secondary school. He attended one of the most reputable English-medium private schools in his state, one for the children of military parents. There, he learned to type, conduct online research, and create high-quality reports and presentations.

His parents gave Sandeep a feature phone when he moved to Delhi to pursue a Bachelor's in History, because his mother wanted a means to stay in touch with him. After graduation, he enrolled in a Master's at JNU, and his friends convinced him to buy a smartphone so they could communicate on WhatsApp. Sandeep was initially hesitant to spend his meager JNU research stipend (Rs 3,000 or \$45 a month), but agreed to buy it after one of his professors hired him for a research project. His friends recommended he buy an LeEco Le 1s Android phone (Rs 12,000 or \$180) because it was a good value.

When on campus, Sandeep uses JNU's WiFi—he even has a private WiFi connection in his hostel room. When he's off campus, he has a data plan to access the internet on his phone. He uses a Dell laptop for research, writing, and studying for exams. He relies on his professors for academic information, but also supplements what they provide through Google searches and reliable sources (including JSTOR.org and EPW.in, Economic and Political Weekly) recommended by his professors and peers.

For any research project, Sandeep begins by searching on Google. He typically starts with relatively broad search terms and, based on the results they yield, will make his queries more targeted over time. During his Master's program, he learned what types of sources can be trusted. As a result, he will only use Wikipedia for topic overviews and as a source for references.

Sandeep's English is at near-native proficiency; as a result, he usually has no problem finding what he needs online. He uses a translation app for esoteric and unfamiliar English words, but those are few and far between. The only time he remembers searching in a language other than English was when he was doing a project on a local political movement in rural Maharashtra.

## DEVICE USE



### LeEco Le 1s Android smartphone

**PRIMARY USE:** Voice calls. WhatsApp, following conversations between friends but rarely participates himself.

**NETWORK:** Internet usage is mostly via WiFi on university campus because it is free. Maintains data on his phone in case WiFi on campus is too slow or goes out. He pays Rs 288 a month for his plan.

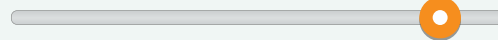


### Personal Dell laptop

**PRIMARY USE:** Uses it for research, writing papers, etc.

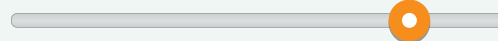
**DETAILS:** Goes online in his hostel, and carries it to campus where he accesses the university's internet.

Low Digital Confidence



High Digital Confidence

Low Economic Status



High Economic Status

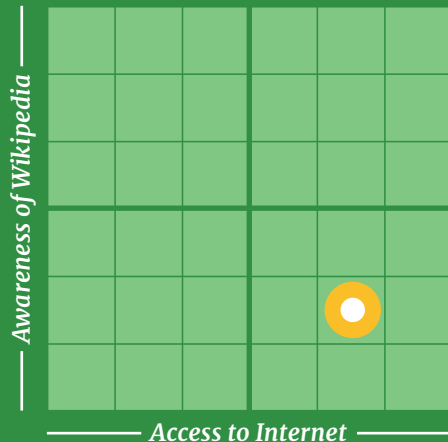


NAME: **Tolu** AGE: **23**

FROM **Epe, Nigeria**

LIVES: **Lagos, Nigeria**

OCCUPATION: **Student (Geology)**



## BIOGRAPHY

Tolu is a third-year geology student at UNILAG and lives in the campus dorm. She is very social and is always connected to the internet via her mobile phone and instant messaging with friends. She usually has her tablet with her as well and uses it to take photos, do research for school, and watch South Korean romance shows and TED talks.

Tolu is looking forward to graduating and getting a job. For school, she uses WhatsApp group chats to trade notes on assignments with classmates—each course has its own group, which come alive with conversation around exam periods.

She uses Google as the starting point for any assignment. She recently wrote a paper on the causes of land erosion. To start, she opened Opera Mini—her preferred browser because it uses less data—and typed the topic as her search term into Google. She then opened all the links on the first page of search results, including Wikipedia, and started to compile information from each of them. She doesn't pay attention to the links' domains; but once she opens them, she spends more time on pages from well-known academic sources. An eager student, Tolu likes to supplement her education by searching for things her lecturers may mention in passing, finding interesting content on MIT Open Coursework, and using Quizlet (an online community for exam-prep flashcards).

Tolu believes that Wikipedia is a good source of information “for people, places, and things.” Her professors have told her that Wikipedia is not “referenceable,” but she still uses it to get topic overviews. She likes how pages have summaries and are “broken down by section” so she can jump to what she needs. She believes that Wikipedia is unreliable since anyone can put information on it.

## DEVICE USE



### Tecno L8 Android Smartphone

**PRIMARY USE:** Instant messaging, social media, and web browsing.

**NETWORK:** Airtel: Spends N1,500 (~\$5.30) on a 3GB monthly plan for her smartphone and to tether her tablet.

**APPS USED:** *In order of preference:* Instagram, WhatsApp, Twitter, Facebook.



### Nokia N100

**PRIMARY USE:** Voice calling, and SMS.

**NETWORK:** Etisalat: Spends between N500 and N1000 (\$1.75 to \$3.50) each month via prepaid top-up cards. Tops up 2 to 4 times a month.



### LG Tablet

**PRIMARY USE:** Research for school assignments. Watching videos and movies.

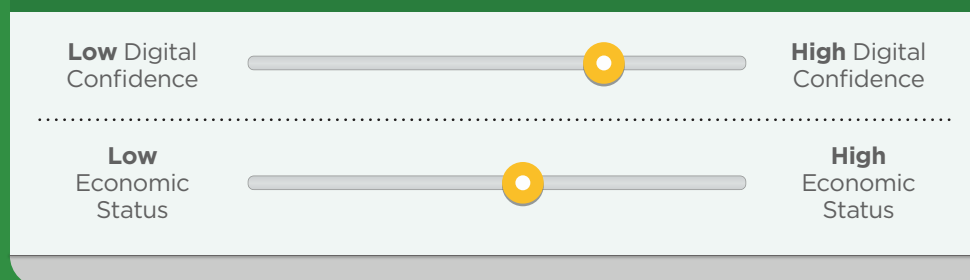
**DETAILS:** Not data-enabled, only accesses internet through WiFi and tethering. LG brand was a splurge but was worth it because it's a status symbol.



### Acer desktop computer at UNILAG computer lab

**PRIMARY USE:** Typing school assignments.

**DETAILS:** Limited use, only for typing and printing school assignments. When not busy, may also watch movies with a group, but generally prefers the privacy of her own mobile device.





NAME:

**Helen**

AGE:

**35**

FROM

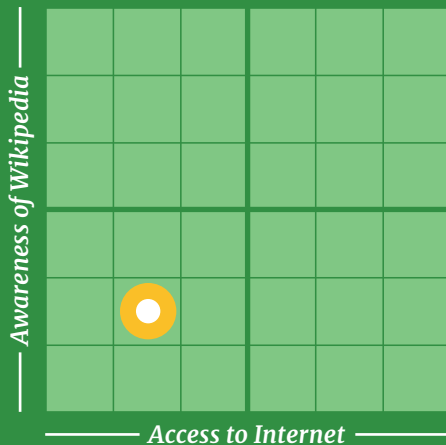
**Anambra, Nigeria**

LIVES:

**Epe, Nigeria**

OCCUPATION:

**Tailoring**



## BIOGRAPHY

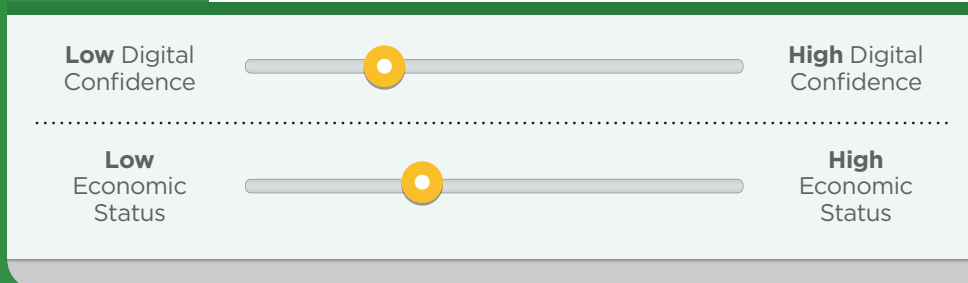
Helen lives in a small town, Epe, with her husband, a laborer at the nearby noodle factory, and their three young children. Although her family struggles to make ends meet, Helen is very economically resourceful. After giving birth to her first child 10 years ago, she became a seamstress to supplement her family’s income.

Helen keeps track of local happenings by chatting with neighbors or listening to her husband and his friends when they come to chat in the evenings. She’s most interested in news that impacts her and her family: gossip about teachers at her children’s school, rumors of possible protests or strikes, and other community news.

Helen uses a low-grade smartphone mostly for calls and some web browsing. Her internet access is limited by the frequent power cuts—her family doesn’t own a generator—and her ability to pay for data. To get online she relies almost exclusively on the free data that comes as a bonus with airtime purchases. Helen switches on her data only when necessary. She’s frustrated that the connection is often unreliable—even the rain seems to affect it. When she is online, her top priority is staying connected with family and friends. Facebook is her favorite app, which she joined at the urging of a cousin who studies abroad. This was also the beginning of her internet usage.

Since then, she has found many other uses for the internet: she looks up confusing phrases from the Bible, searches for ideas to grow her business, and gets outfit inspiration before big social events. She is amazed at the seemingly never-ending amount of information “Mr. Google,” her favorite search engine, can provide.

Helen recognizes the Wikipedia icon on her mobile phone but doesn’t know what it is—she thinks it may have come with her phone. She has opened the app before out of curiosity but was uncertain of what she should do and quickly closed it.



## DEVICE USE



### Infinix Android Race Eagle X50 Smartphone

**PRIMARY USE:** Voice calling, Facebook, and internet browsing.

**NETWORK:** Airtel: Tops up N100 to N200 (\$0.35 to \$0.70) every week or two, which gets her data bonus of 10 to 20 MB. This is her primary line.

**APPS USED:** *In order of preference:* Facebook, WhatsApp.



### Tecno T410 (dual sim)

**PRIMARY USE:** Voice calling.

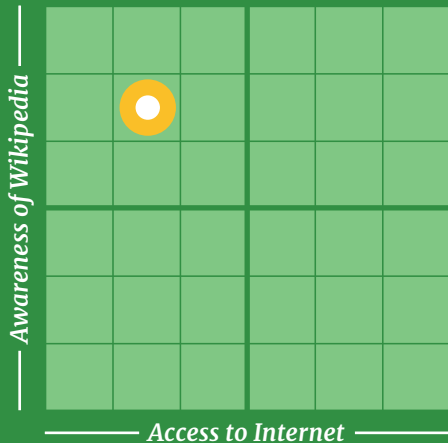
**NETWORK:** Glo & Etisalat, as it is difficult to depend on one network given patchy connectivity. Uses both as backups when the Airtel network is down, so doesn’t always have credit on them. Tops up N50 (\$0.18) at a time, as needed.



NAME: **Chris** AGE: **22**

FROM **Epe, Nigeria**  
LIVES: **Rural Epe, Nigeria**

OCCUPATION: **Student (Final Year)**



## BIOGRAPHY

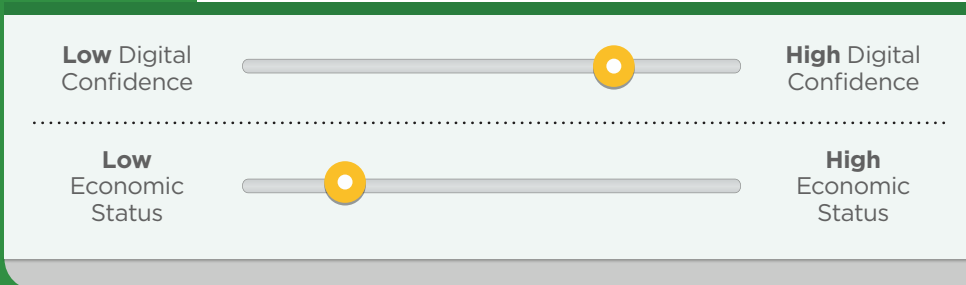
Chris has lived in rural Epe his entire life and now attends the local satellite campus of Lagos State University, where the entrance requirements were less rigorous. He is studying mathematics but would like to one day teach history. Chris enjoys discussing politics and history with friends and would like to share this interest with others.

Heated debates about politics are a key reason Chris goes online—he wants to be informed in order to show off his knowledge and win arguments. His other main motivation is sports. He loves chatting with his Epe Arsenal supporters group on WhatsApp and uses Live-scores to get updates whenever he misses a live match due to school or church commitments. The only websites he knows by name are sports sites: Goal.com, ESPN.com, and the like.

Chris uses Facebook to connect with secondary school friends who have left Epe and WhatsApp to chat with them—doing so saves him a great deal on airtime costs. He is also in a WhatsApp school study group but doesn't spend much time on it.

Although Chris likes going online, he is annoyed by frequent internet service disruptions. He uses Etisalat, one of the better networks in rural Epe, but its service quality really depends on location. Around his own home, Chris knows exactly where to stand and how to hold his phone for the best reception.

Chris struggles to articulate what Wikipedia is (“an app?”) but appreciates how it organizes information. “I like Wikipedia because it gives me all the background I need, especially for profiles of people.” Wikipedia is his go-to source for resolving arguments with friends, e.g., the height of a famous footballer. For schoolwork, Wikipedia is not a default source; Chris only uses it when it appears on the first page of a set of search results. Once he clicks through to the Wikipedia page, he will scan headings and selectively read (or copy) content for assignments; he doesn't look at the references.



## DEVICE USE



### XOLO Q700s Android Smartphone

**PRIMARY USE:** Sports news and updates, voice calling, instant messaging, and social media.

**NETWORK:** Etisalat: N500 (\$1.80) for airtime and N200 (\$0.70) for 200MB of data each week.



### Tecno T345 (single sim)

**PRIMARY USE:** Voice calling.

**NETWORK:** Glo: N100 (\$0.35) every two weeks.



### Hewlett Packard

**PRIMARY USE:** Web surfing. Research and writing for thesis. Downloading and watching movies.

**DETAILS:** Takes laptop to the campus WiFi Zone or nearby cybercafes to access the internet.



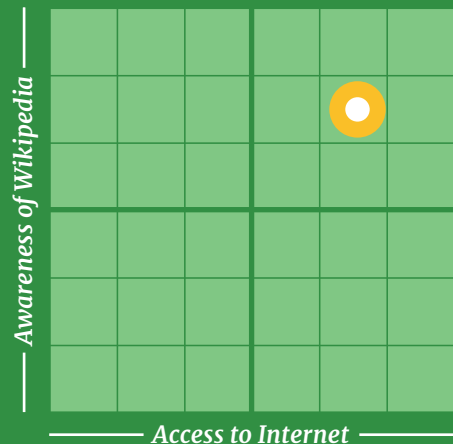


NAME: **Femi** AGE: **35**

FROM **Lagos, Nigeria**

LIVES: **Lagos, Nigeria**

OCCUPATION: **Entrepreneur**



## BIOGRAPHY

Femi is the founder of EduChap, a children’s education app. Coming from a long line of educators, he believes deeply in the role of education to empower the next generation and transform his country.

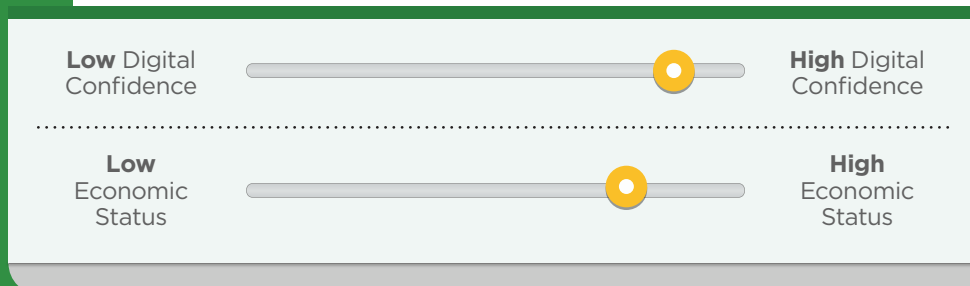
After getting his MBA from the prestigious University of Lagos, Femi worked at a computer business owned by a family friend. Though his salary was modest, Femi worked hard and spent little. After six years, he left and, with his savings and some support from family, started EduChap.

Today, most of Femi’s internet use is for work. Running a startup, he is working seemingly 24/7. Checking and sending email on his phone is often the last thing he does every night before falling asleep and the first thing he does when he wakes up in the morning.

Given how much he is on the move (or sitting in Lagos traffic), his internet usage largely happens via his mobile phone. His iPhone 6 is his primary gateway online—he uses it for email, browsing, LinkedIn, and constantly checking on EduChap. His Blackberry is mostly for social media—he likes Twitter and Facebook for news—and for managing contacts. His Macbook Air is kept at the office for word processing, presentations, and some light browsing. He spends N5,000 to N10,000 (\$17.70 to \$35.40) on monthly data plans and can use up to 1 GB in a day. Last month, his friend told him about a great new MyFi service in Lagos. Femi needs N18,000 to get set-up on the plan and is willing to give it a shot after his current plan expires. He had tried a couple of these types of plans in the past and had left them because the service deteriorates after a while.

Femi knows that for EduChap to be successful he must invest in his own professional growth. He is currently trying to improve his coding skills (via international sites such as Lynda.com, w3schools.com, etc.) and knowledge about primary school curricula and pedagogy (via basic online research to find relevant articles and events).

Femi developed a fondness for Wikipedia at UNILAG. His professors would tell him not to use, but Femi couldn’t understand why, beyond the fact that they wanted to profit from their own textbook sales. He also noticed his professors using Wikipedia material for their lectures and thought this double standard was unfair. He eventually figured out a loophole: he would use Wikipedia content, but just to cite other sources. Today, a modified version of his practice continues: he uses Wikipedia content for EduChap modules and supplements it with information from other sources.



## DEVICE USE



### iPhone 6

**PRIMARY USE:** Voice calling, emailing, LinkedIn, and EduChap.

**NETWORK:** Etisalat: Spends N5,000 (\$17.70) on a 5GB monthly plan for his smartphone and to tether his other devices. Spends another N1,500 (\$5.30) weekly for calls.

**APPS USED:** *In order of preference:* Twitter, Facebook, WhatsApp, Instagram, Wikipedia.



### Blackberry Z10

**PRIMARY USE:** Social media, and voice calling.

**NETWORK:** Etisalat: Spends N2,000 (\$7.10) for data on his BlackBerry and N500 (\$1.77) on airtime top-up each month. Tops up 2 to 4 times a month.



### iPad

**PRIMARY USE:** Reading, taking and looking at photos.

**DETAILS:** Not data-enabled, only accesses internet through WiFi and tethering. iPad was a status symbol—frequently carried, but with limited usage.



### Macbook Air

**PRIMARY USE:** Primary desktop device for word processing, presentations, etc.

**DETAILS:** Kept at the office, primarily for typing, preparing presentations, and light browsing while at his desk.