Reading Wikipedia

Understanding the Use Cases and Mental Models of Readers from Diverse Language Communities:

A Quantitative and Qualitative Study Report

May 2023

Executive Summary

How do readers conceptualize what they are doing and what are the different use cases that bring people onto the platform ?

The Wikimedia Core Experiences teams (Web, Growth and Editing) are seeking to develop a deeper understanding of what readers in diverse language communities **think they are doing** as they read Wikipedia.

This research was conducted to clarify readers' mental models of Wikipedia readership including their motivations for reading, the navigational structures they perceive and use, and the ways in which they store, access and share information. We focused on 4 language wikis: **English**, **French**, **Yoruba** and **Kiswahili.**

Key Research Questions

- What draws readers to Wikipedia?- Both in general and in the context of a research session?

- How do readers get around the Wikipedia interface?

- What are some of the challenges readers face when looking for information on Wikipedia?

- What are some of the needs and suggestions of readers based on their motivation for visiting Wikipedia and reading behaviour?

Key Findings

- Some of the major motivations for visiting Wikipedia amongst users include: For school/work related tasks; to learn more about people (e.g actors, politicians, athletes, etc).

- Most readers tend to skim and scan articles either to get a general understanding of the content or to find specific information.

- Major challenges for users include lack of content in small-medium Wikipedia languages (Kiswahili & Yoruba), inconsistent interface, poor search experience within the article and difficulty determining the credibility of information.

- Some of the needs/suggestions outlined by readers include succinct articles, a more interactive interface, text-to-speech feature, easier language switching, and direct translation of article sections.
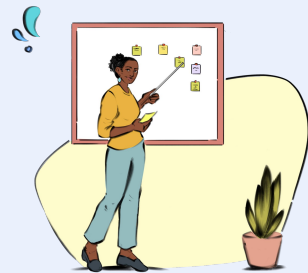
Our Human Centered Design Approach

Desk Research

Qualitative Research

Quantitative Research

Synthesis and Ideation

Data gathering

Assimilating data and existing literature from Wikimedia

Stakeholders interviews

7 interviews with Wikimedia people (growth, web and IOS/android teams) to understand research goals and implications

Preliminary round *of qualitative interviews to test out interview guide and inform survey questions*

8 Interviews in total, 2 per language

(English, French, Swahili & Yoruba)

Final round *of qualitative interviews*

24 Interviews in total, 6 per language

2554 responses

English and French surveys

Data collected by independent surveyors within various African countries.

Survey launched on Looka platform

https://getlooka.com/

Synthesis & Analysis

Analysis of quantitative and qualitative data in the form of affinity mapping, mental models, visual data from survey responses, full research report in the form of slide decks.

Creativity workshop with Wikimedia

Design workshop with Wikimedia team to share learnings and define opportunity areas.

Access to Miro Board

To miro

Link to Project Miro board
Link to Creativity workshop

The Project Miro board contains insight from all the interviews conducted as well as a more detailed view of the personas, User journeys and Mental models.

The Creativity Workshop outlines some of the opportunities areas that were identified by the Wikipedia team based on the findings from this research.
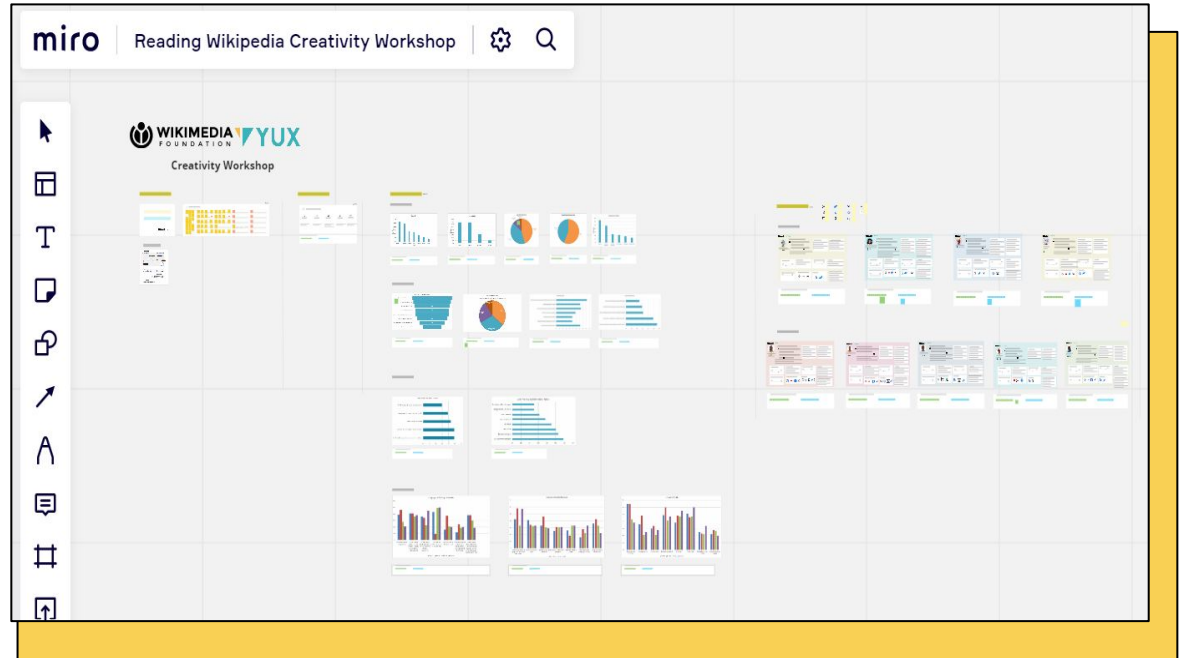
Table of Contents

This report is structured in the following parts:

Research Approach

Qualitative Research Criteria
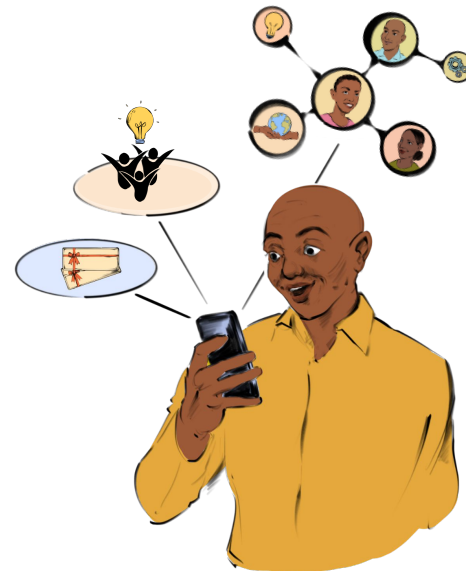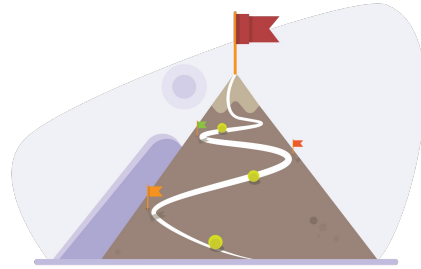
We used 4 criteria to identify the participants to interview.

Participants were recruited with LOOKA panel, a repository of 500K potential research participants all over Africa.

We ensured we had a diverse array of readers with a range of reading frequency and experience levels In order to ensure we had a representative sample of readers all across Africa and get various perspectives.
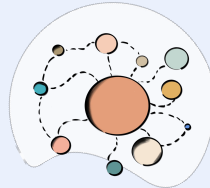
After the research criteria was defined, the LOOKA Panel team worked on randomly selecting and screening out potential participants using a survey. As part of the recruitment effort, online ads, including the screener surveys, were also put out by the LOOKA team.
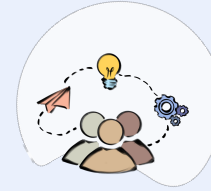
Criteria 1
Language and country

- Our 4 focus languages included: **English**, **French**, **Yoruba** and **Kiswahili**
- Participants came from a diverse range of African countries including **Senegal**, **Nigeria**, **Kenya**, **South Africa**, and **Côte d'ivoire.**

Criteria 2
Reading frequency

- We recruited **high frequency readers** (reads articles everyday), **mid frequency readers** (reads articles a few times per week) and **low frequency readers** (reads articles a few times per month).

Criteria 3
Use case

- To ensure we had a vast range of use cases, we recruited readers who visited wikipedia for various reasons such as for **school/work research**, **random exploration**, etc.

Criteria 4
Reading Experience

- We recruited **high experience readers** (has been reading articles for more than 5 years), **mid-experience readers** (over a year experience and **low experience readers** (less than a year experience).

Participant Statistics

The main focus of the interviews was with readers of English, French, Yoruba and Kiswahili Wikipedia articles all across the African continent. A total of 32 interviews was conducted.

English	French
8	8

Yoruba	Kiswahili
8	8

English Readers
5 women, 3 men
Ages 22-26 yrs
South Africans, Nigerians & Kenyans

Kiswahili Readers
7 men, 1 woman
Ages 21-30 yrs
Kenyans

Yoruba Readers
4 women, 4 men
Ages 22-26 yrs
Nigerians

French Readers
5 men, 3 women
Ages 20-27 yrs
Ivorians & Senegalese

Quantitative Data Collection

The survey was launched online via the [LOOKA Survey platform](#). Initially, online ads were put out to push ensure the survey reached the right audience. However, in order to amass the target number of respondents, we leveraged the LOOKA surveyors. This is a network of over 400 trained surveyors all across the African continent. With their expertise and understanding of the local context, we were able to reach our target number of respondent (~ 2500 responses).

LOOKA MOBILE APP
The companion app for our surveyors
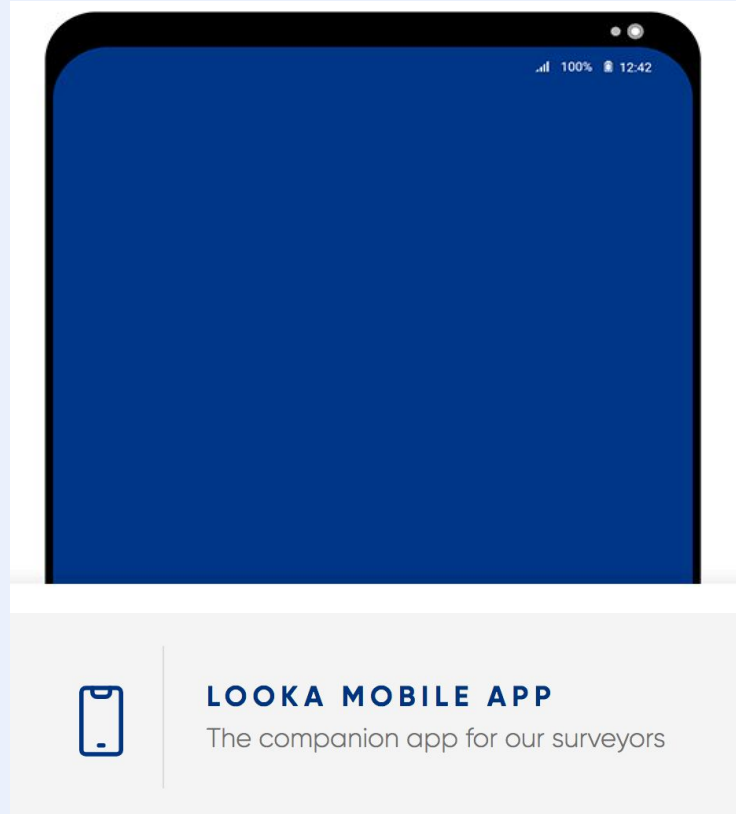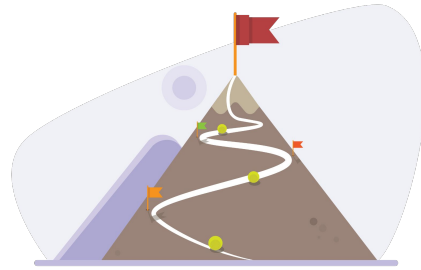
Quantitative Data

Country of Respondents

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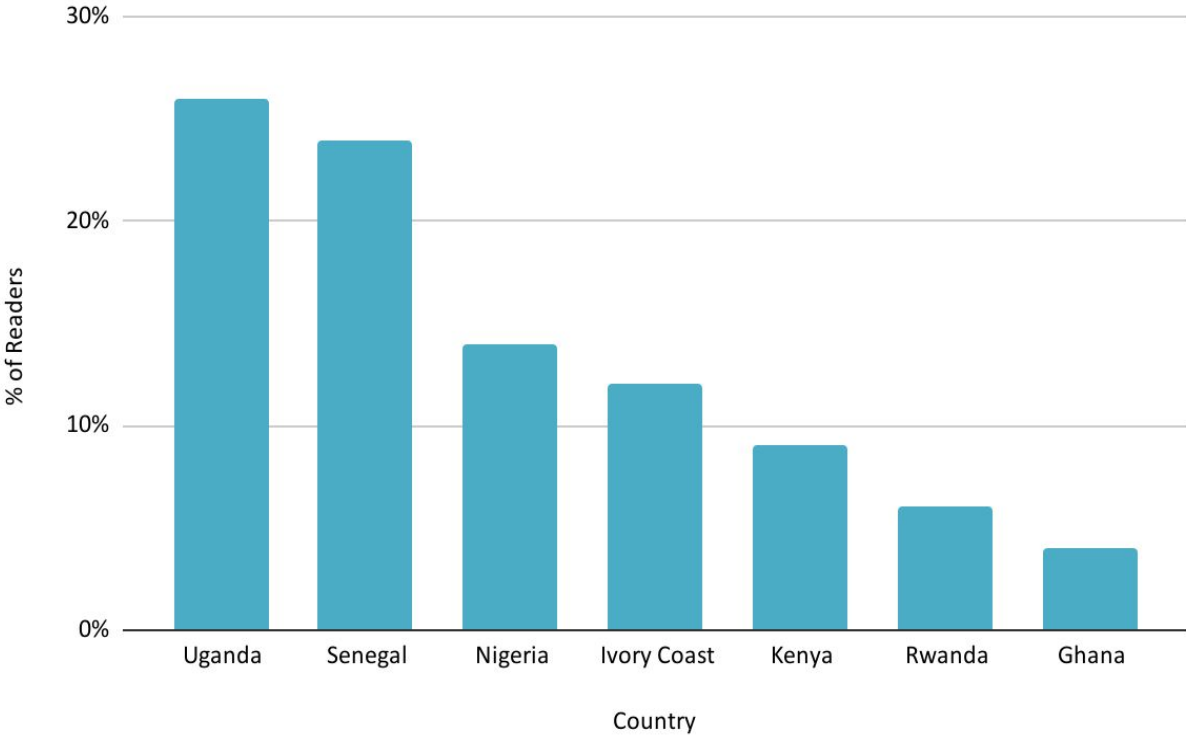
Majority of the survey respondents were from Uganda, Senegal, and Nigeria.

Language of Respondents

n = 2,554
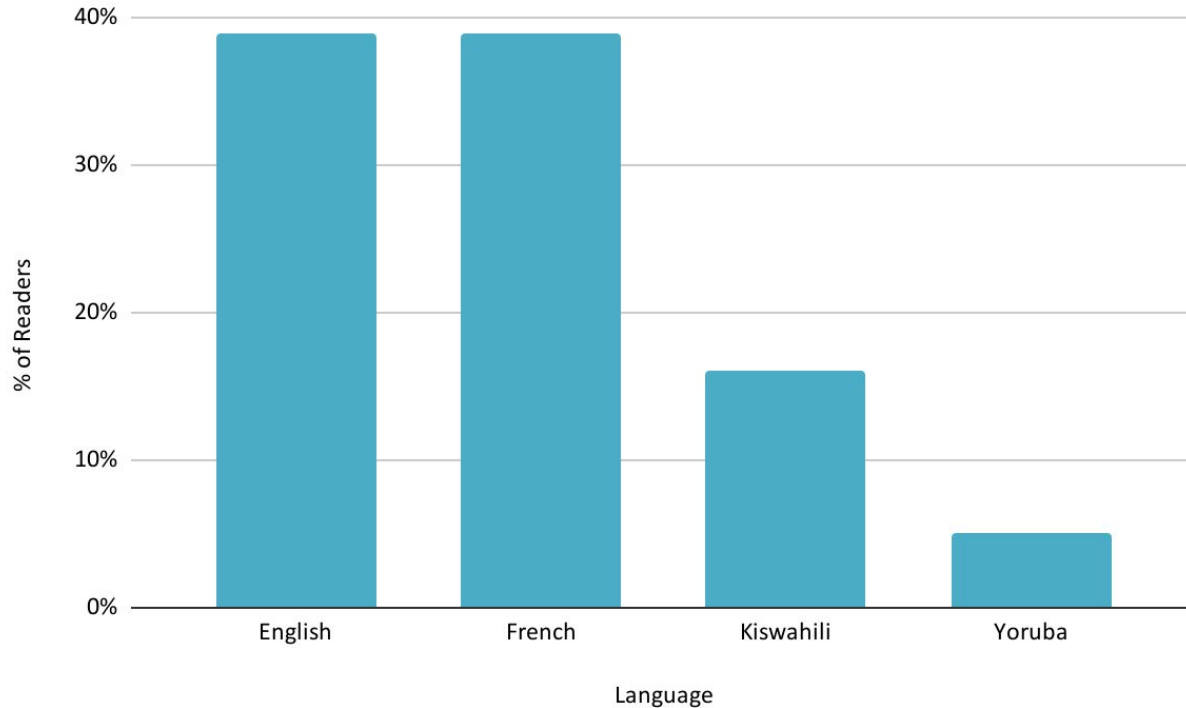
Almost 80% of responses were from Large-language Wikipedia readers (i.e the English and French readers). We had the least responses from Yoruba readers which is also reflected on the qualitative research results as most readers do not primarily read in Yoruba and only tend to visit Yoruba Wikipedia for specific use cases (e.g school assignment, reading to older relatives who do not understand english, etc).

Age Distribution

n = 2,554

Legend:
- 18-25 years
- 26-34 years
- 35-44 years
- 45 years and older

Pie chart values: 45%, 41%, 11%, 3%
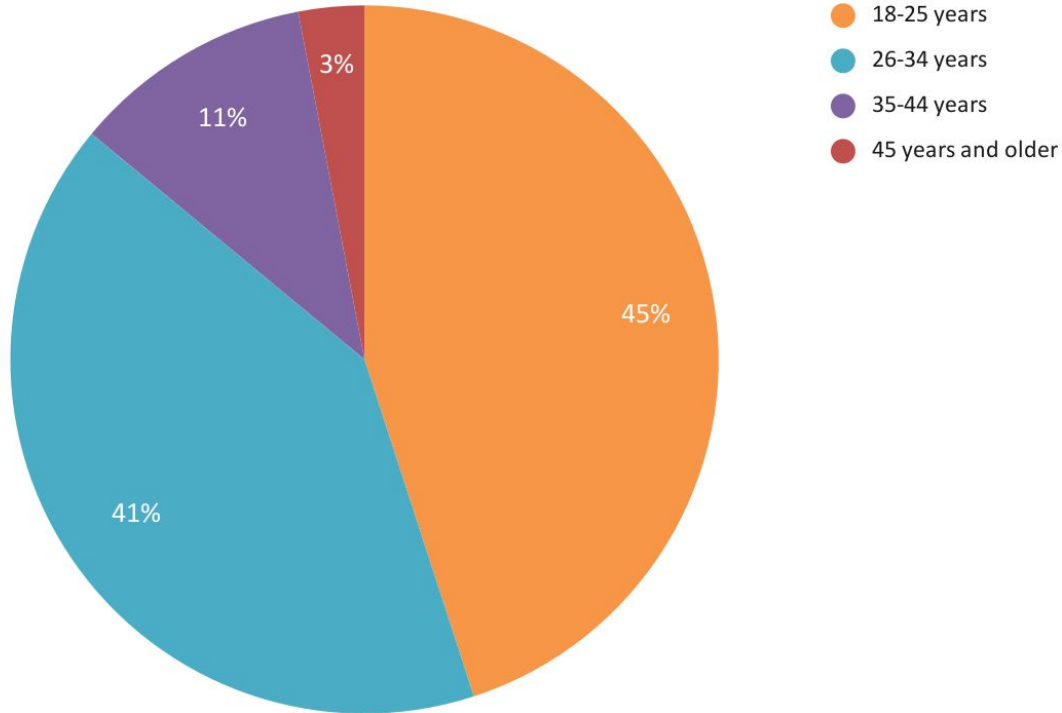
The predominant age group of respondents is 18-25 years, closely followed by 26-34 years.

These findings indicate a promising level of digital literacy across the continent, as the predominant age groups of 18-34 years, who are known to have a strong presence on Wikipedia, demonstrate a notable engagement and adeptness in navigating online platforms for accessing information.

Gender Distribution

n = 2,554

Male
Female

43% 57%
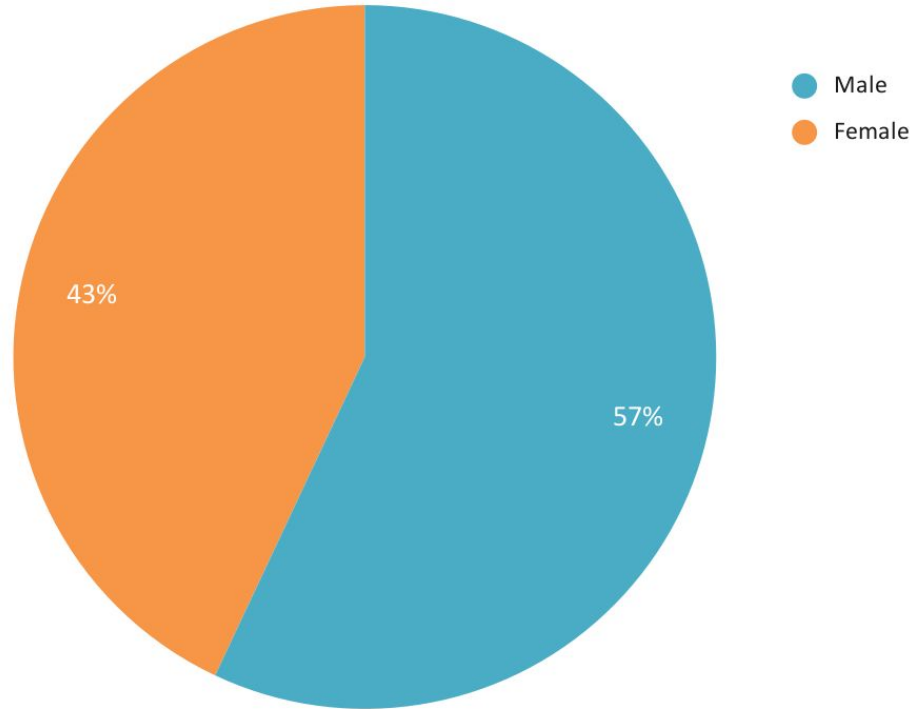
43% of readers who responded to the survey identify as female, and the remaining 57% as male.

Employment Status

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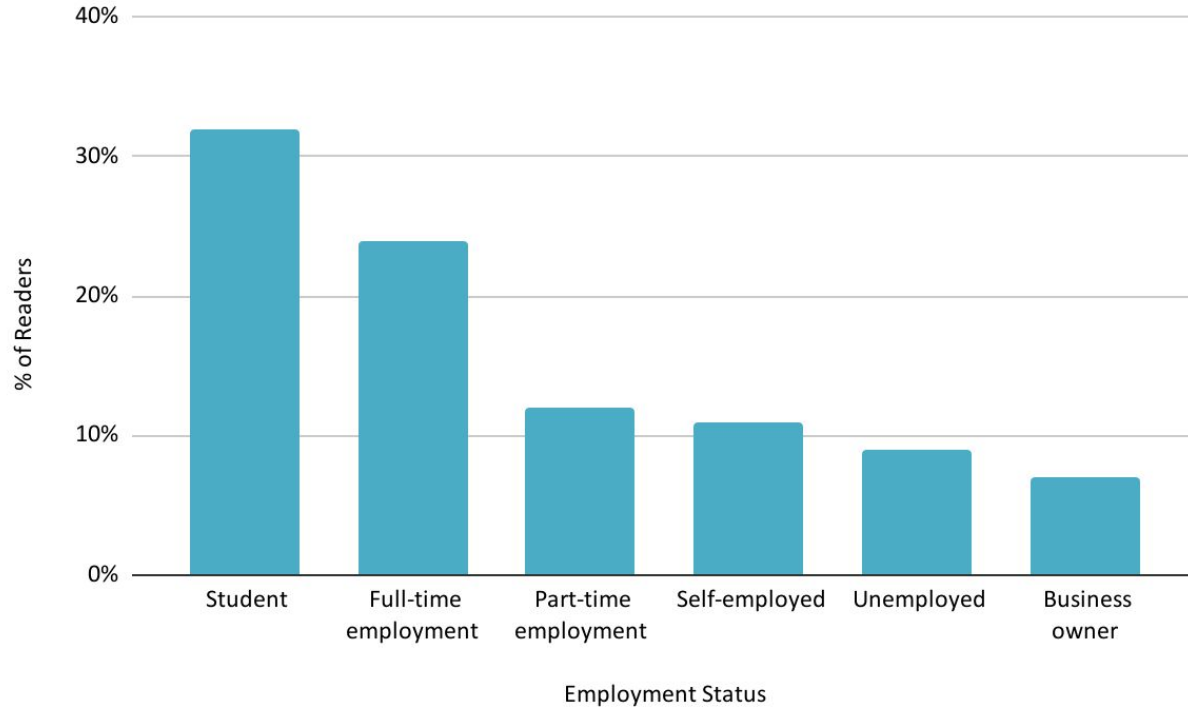
Students are the most frequent users of Wikipedia, making up more than 30% of total users.

Reasons for Visiting

n = 2,554

Reasons for visiting

To learn more about a current event	40%
For school related assignments	38%
To learn more about a person	36%
For work related assignments	34%
To learn more about a topic that is	34%
To find a specific fact about a topic	31%
To randomly explore Wikipedia out of	25%
To make a personal decision	19%
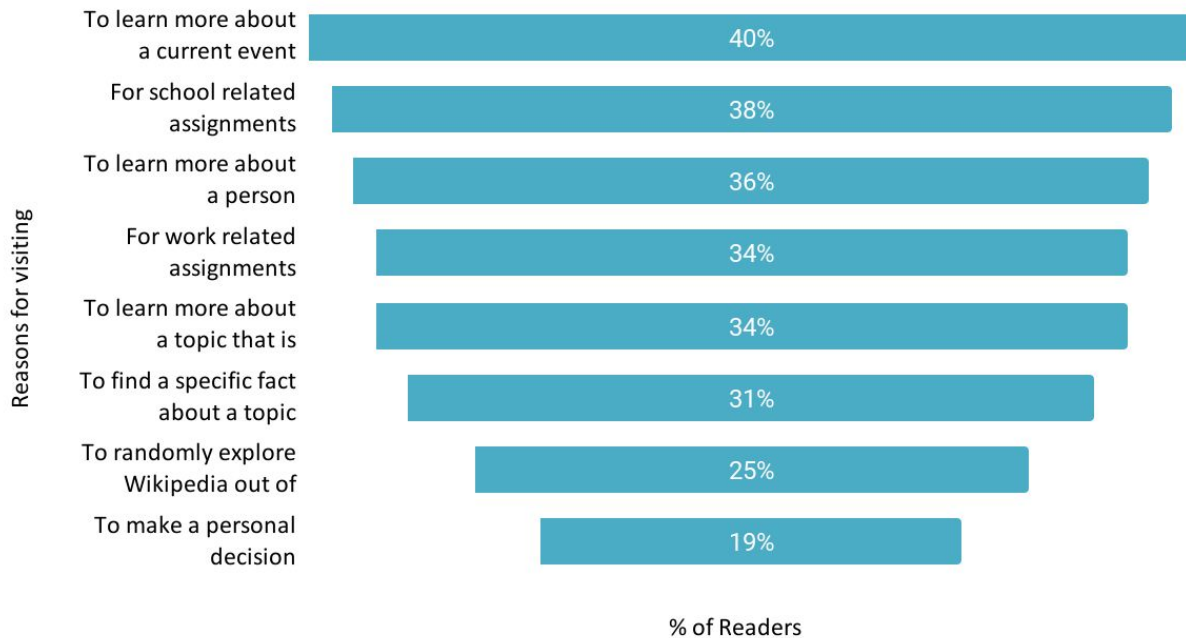
% of Readers

The top 3 reasons readers visit Wikipedia articles are **To learn more about a current event (40%)**, **For school related assignments (38%),** and **to learn more about a person (36%).**

Duration of Stay

n = 2,554

Legend:
- Less than 5 mins
- 5-10 mins
- More than 20 mins
- 11-20 mins

Pie chart values: 9%, 36%, 32%, 23%
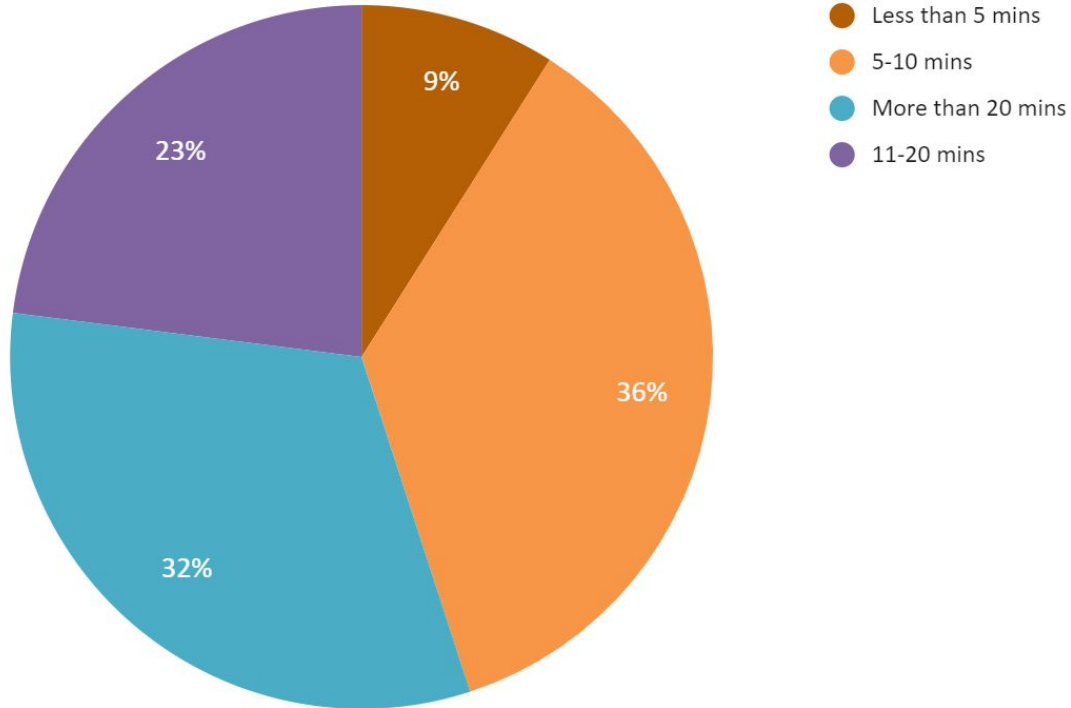
The 5-10 minutes and 11-20 minutes responses encompasses the bulk of those surveyed. Interestingly, we found that the most common reading behaviour amongst the survey respondents was Scanning and skimming through articles in search for specific information or to get a general overview of an article.

Reading Style

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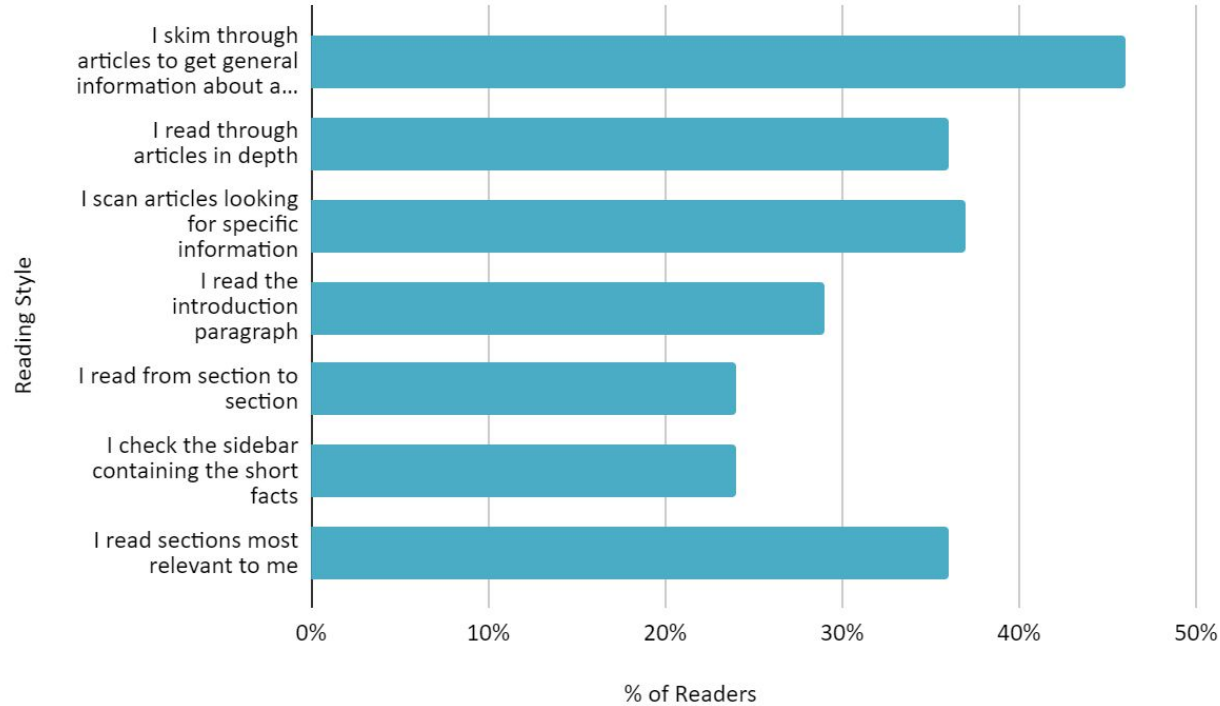
As previously indicated, respondents pointed out that they mostly skim through articles to get general information about a topic, scan articles looking for specific information, and read sections most relevant to them. This was also seen during the qualitative interviews.

Search Behaviour

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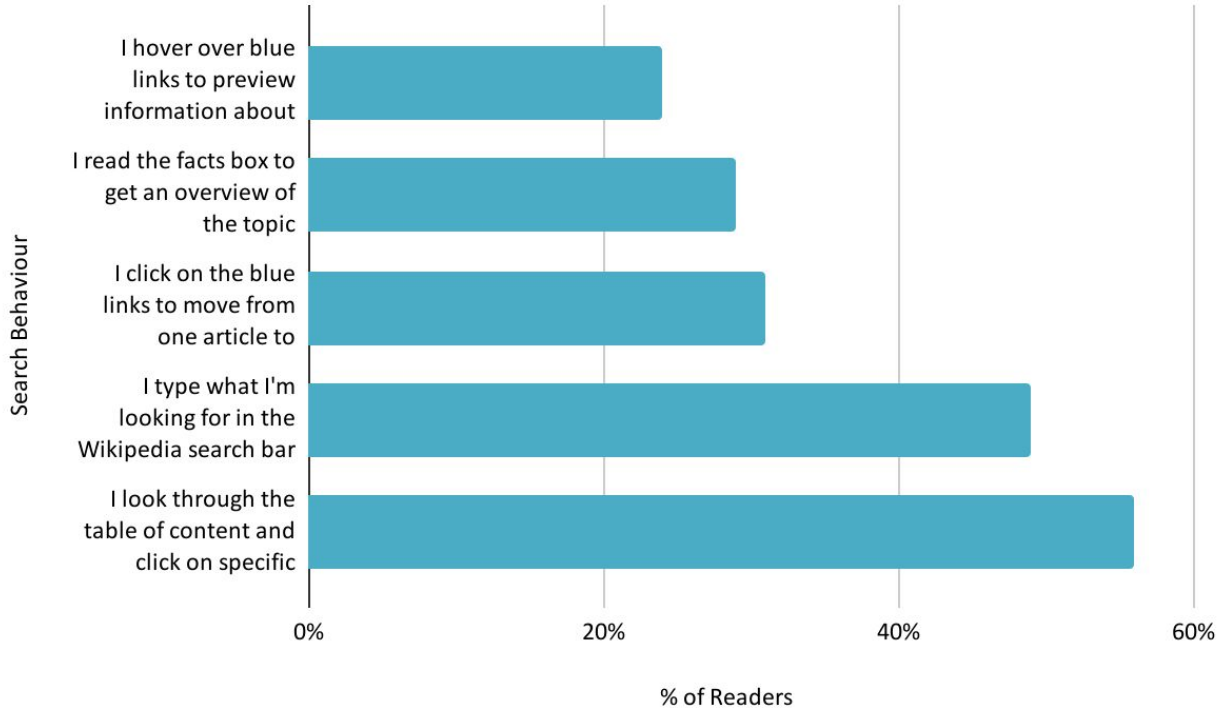
The majority of the respondents tend to look through the table of content and click on specific sections when searching for information on Wikipedia.

Most Helpful Additional Features

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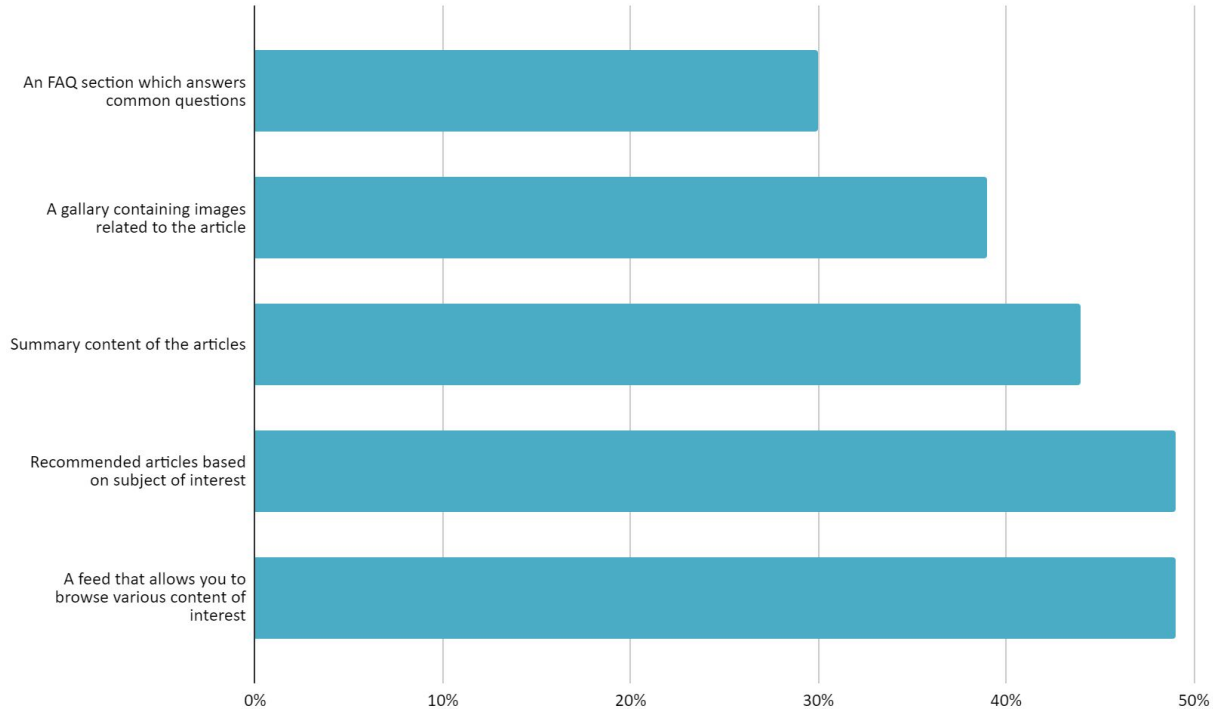
The majority of the readers regard **a feed that allows you to browse various content of interest** and **Recommended articles based on subject of interest** as the most helpful additional features in finding information on Wikipedia.

Most Important Characteristics for Articles

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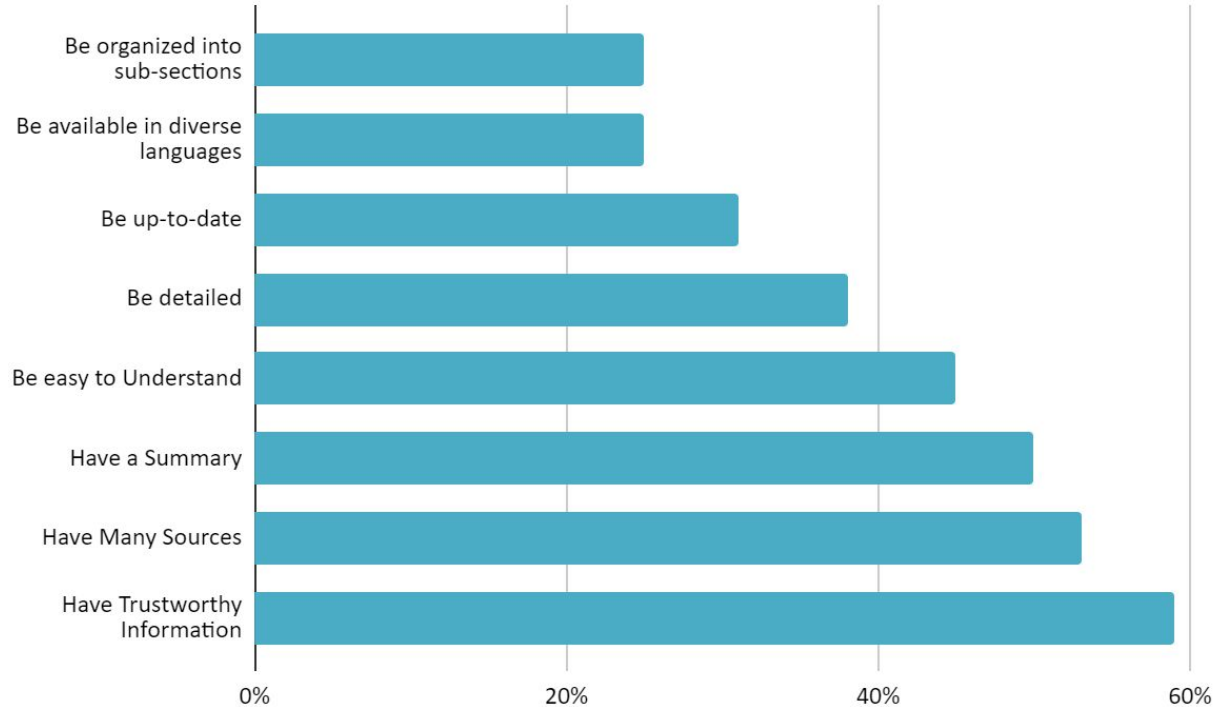
Majority of the readers also consider **Trustworthy Information** to be one of the most important characteristics of an article.

Language vs Reading Motivation

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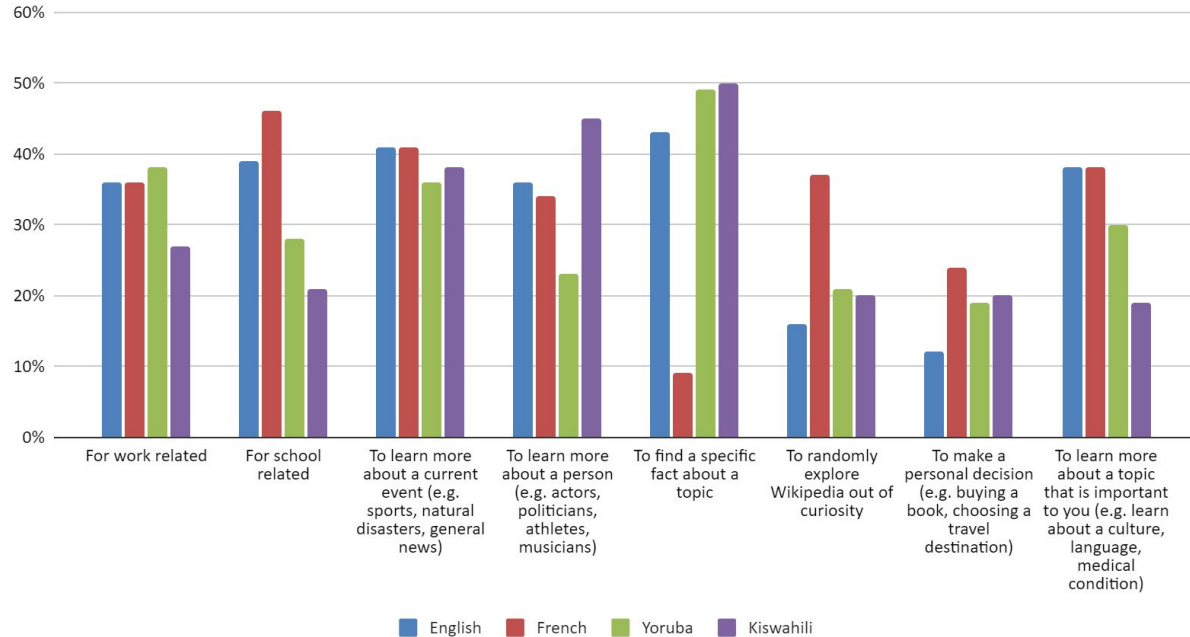
The majority of **Swahili, Yoruba, and English readers want to find a specific fact about a topic.**

Very few **French readers** on the other hand use Wikipedia **to find a specific fact about a topic**. They mostly read Wikipedia articles for **school related activities.**

French readers are highest percentage of readers who **randomly explore Wikipedia out of curiosity**.

More Swahili than **English, French, and Yoruba readers** use Wikipedia **to learn more about a person**.

Language vs Reading Behaviour

n = 2,554
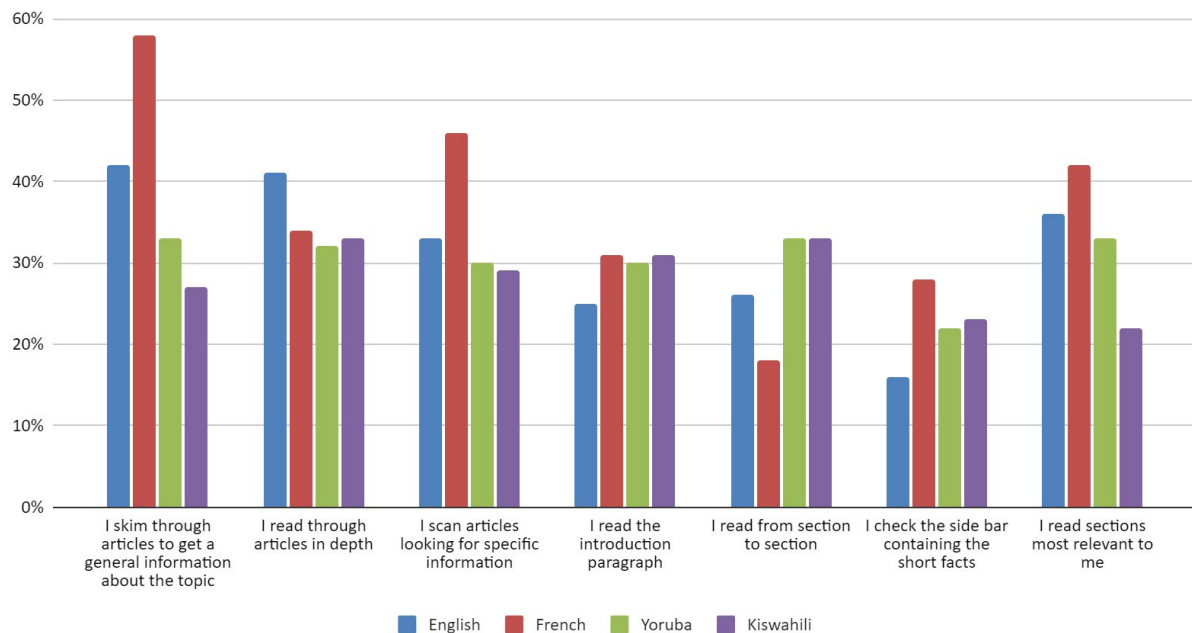
Generally, the reading behaviour across all languages appear to well distributed with only minor fluctuations:

- French readers predominantly tend to skim through articles to **get a general information about a topic, scan articles for specific information, and read sections relevant to them.**

- Most English readers on the other hand are split into either skimming the articles to get a general understanding about the topic or **read through in-depth.**

Language vs Wants

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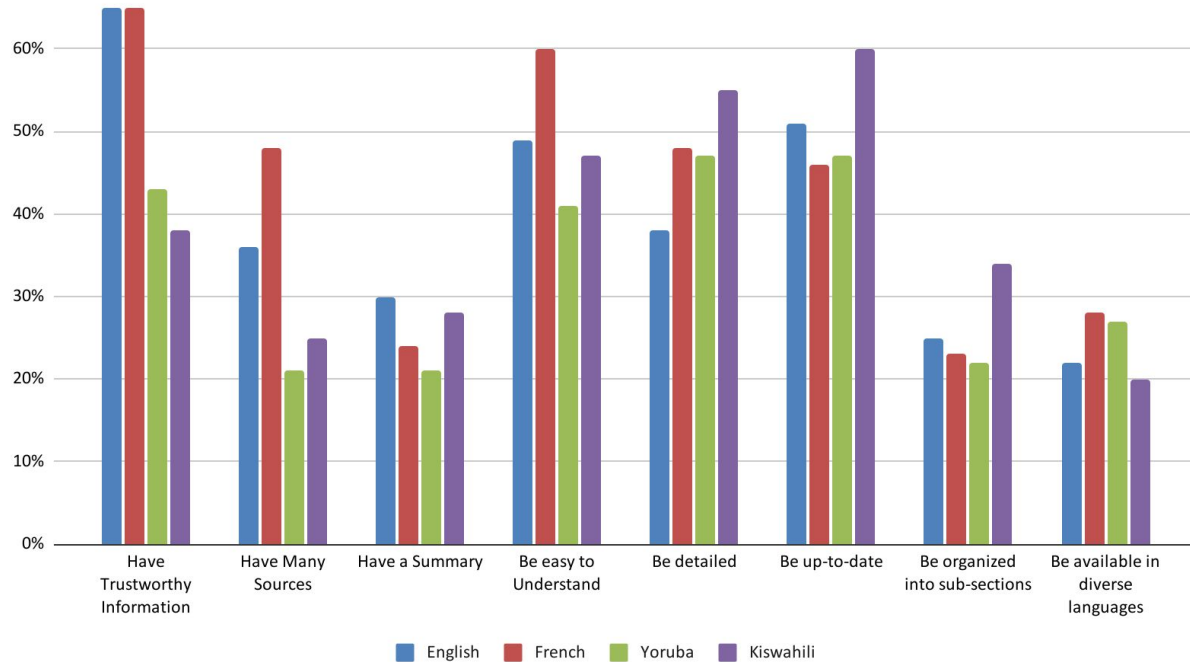
- Majority of the **English Readers** want to **have trustworthy information.**
- **Majority of the French Readers** on the other hand, want to have trustworthy **information, many sources, and articles that are easy to understand.**
- Most **Swahili Readers** want to have **detailed** and **up-to-date information.**
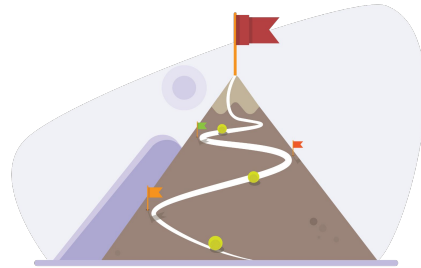
Qualitative Research Findings

Key Takeaways

Qualitative Research

— Reading behaviour —

How do readers typically get to Wikipedia?

Readers typically access Wikipedia by carrying out a general Google search and selecting Wikipedia from the search results. Some readers also intentionally seek out information on Wikipedia by including the word "Wikipedia" after a general search, using a previously saved bookmark, or using the Wikipedia mobile app.

How do people read through articles?

Reading behaviour typically depends on the use case. However, readers typically scan and skim articles in search to get a general understanding of information or to look for specific information.

How does reading motivation influence reading behaviour?

When reading for school/work related purposes, readers tend to read articles in-depth and move from section to section in search for baseline information on a topic. Readers who read biographies typically read in depth out of genuine interest in the content. For readers in search of specific information, they typically scan through the table of contents and navigate to the specific sections of interest.

Who uses the mobile app?

Interestingly, from the readers we spoke to, we found that the Wikipedia mobile app is predominantly used by Yoruba readers, as they believe that downloading the app will grant them greater access to Yoruba content. A few students and young professionals also indicated using the app because of easy access to information as well as the ability to customize the explore feed.

Key Takeaways

Qualitative Research

— Search behaviour —

How do people typically find information on Wikipedia?

People typically find information on Wikipedia by looking through the table of content and clicking on specific sections. People also tend to read the infobox in hopes of getting a quick overview of the topic. Interestingly, we found that people tend to also use the Wikipedia search. However, this is a last resort and occurs only when the readers happen to be on the Wikipedia page already.

What tools are typically used to search on Wikipedia?

The most commonly used tools amongst all readers include the blue links used to move from one article to another, the blue links preview feature to get a sense of a topic without necessarily switching articles, the infobox and the table of content.

What type of content are people looking for on Wikipedia?

The type of content searched for varies by language. We found that small- medium Wikipedia language readers (i.e Kiswahili and Yoruba) typically look for content related to their language and culture. Large wikipedia language readers typically look into more generic information including scientific content for school work, history, current affairs and health related content.

What are the major motivations for searching on Wikipedia?

The major motivation for searching on Wikipedia was to have a general understanding of various topics for school/work related tasks or out of general curiosity. Readers also go on Wikipedia to get to a specific fact.
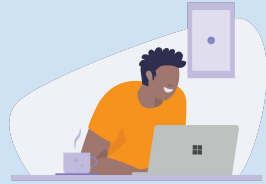
Key Takeaways

Qualitative Research

—Trust —

How knowledgeable are readers about how the content on Wikipedia is generated?

A majority of the readers from large to medium Wikipedia languages (i.e French, english and Kiswahili) were well aware of the source of information on Wikipedia. However, many readers from smaller Wikipedia language (i.e Yoruba) indicated that they thought Wikipedia articles were written solely by professionals and WMF employees.

Is Wikipedia the first resort?

For some users, Wikipedia is their first resort for information. For others, it is used as a starting point for research or quick reference tool.

How does trust level differ within the various use cases?

As expected, trust levels amongst students who use Wikipedia to get information for their assignments was relatively low. This was mainly due to their inability to discern the accuracy and reliability of the articles. Interestingly, we found that trust levels were also low amongst French as they indicated that they were uncomfortable with the fact that just anyone could edit articles.

What other sources of information do people refer to?

Readers refer to a variety of other sources of information, including YouTube, Twitter, Facebook conversational AI such as Chat GPT and domain-specific websites

Key Takeaways

Qualitative Research

— Pain points —

Sparse content available within small- medium language Wikipedia

A major pain point for readers of small-medium Wikipedia languages (i.e Yoruba and Kiswahili) is the lack of content. Also, readers sometimes expect direct translations of the articles from large Wikipedia language (I.e English and french) and are often disappointed when this is not the case.

Readers are not aware of the various tools available on the Wiki interface

Readers are often unaware of the various tools and functionality available on Wikipedia hence do not have the opportunity to leverage them. A lot of these functionalities are often hidden and/or difficult to understand by the average reader.

Lack of visual information and interactivity may sometimes create a lacklustre reading experience.

Most readers we spoke with indicated that they were visual learners. The mentioned that the vast amount of text and lack of visual and interactive information makes it difficult to read through articles in depth. Readers describe the content provided within articles as "academic".

No proper summary of information for large Wikipedia languages

A common pain point amongst readers of large language Wikipedia was the lack of proper summary of information. Most readers indicated that the information presented in the infobox often does not properly summarize the key information presented within articles.
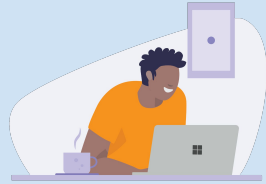
Key Takeaways

Qualitative Research

—Pain points —

Inability to discern accuracy and reliability of content

Students and young professionals often indicated that the inability to verify the accuracy and reliability of the content within articles was a major challenge and led to further mistrust of the content

Inability to conduct quick searches within articles

A pain point amongst readers going on Wikipedia to get specific facts about a topic was the inability to quickly search for information within sections
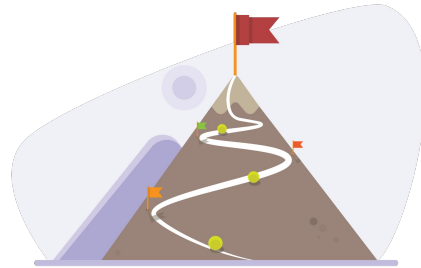
Use Cases

Use Cases

→

The Enlightening Relative
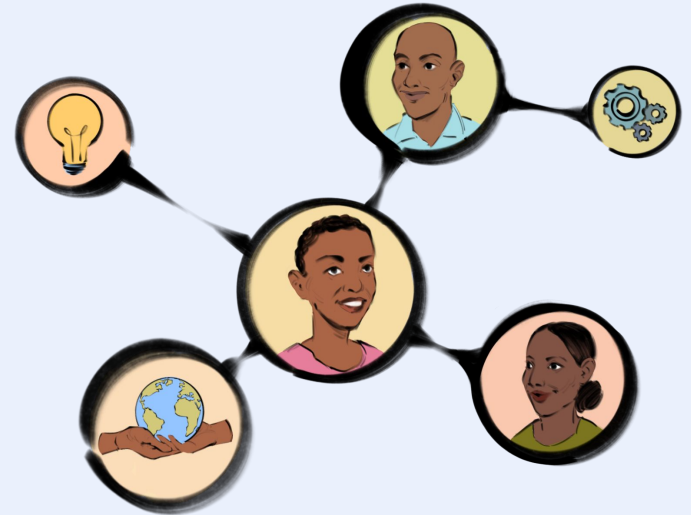
1. Use Case

This use case was seen within all the languages. Typically younger tech-savvy university students who read wikipedia articles to their relatives who do not read. These relatives could be grandparents or younger siblings who do not have access to devices.

2. Trust

Most users with this persona mentioned that although they rarely consult the references, they trust the information presented within these articles. Users within this persona also believed that Wikipedia articles are generated by Wikipedia employees or professional content creators

3. Reading/Search Behaviour

These readers rarely read entire articles but rather skims through to derive specific information for the relatives they are reading to. When reading, they tend to often refer to the images present on the pages (If available) in order to put the information to context.

4. Needs/suggestions

The most common need highlighted by this group of readers included a text- to-speech that could potentially be used to read articles out. These readers also suggested having more diagrammatic representation of information to visually explain concepts to the relatives.

Quotes & examples

"My mum sometimes asks me to look up information on her favourite actors and actresses on Wikipedia. Besides that, I never go to Yoruba Wikipedia"

| Yoruba reader

"My younger siblings sometimes ask me to help with their homework and so I go to Wikipedia to get some information for them"

| French reader

The Enlightening Relative

5 ## Reading motivation

The main reading motivation amongst these readers is to keep their relatives well-informed and entertained. These readers also look to Wikipedia to help their younger siblings with their school assignments and ensure that family members are getting accurate information and are not misinformed.

6 ## Challenges

A major challenge amongst these readers is the sparse information presented within the articles. Furthermore, the type of content they would typically read to their older relatives are scarce on Wikipedia (Yoruba proverbs and folktales, religious content, etc)

7 ## Other sources of information

- **Google:** For general search
- **Youtube:** For entertainment, learning new skills and religious content.
- **Celebrity gossip blogs:** For entertainment and specific facts about celebrities

8 ## Features and tools

These readers sometimes look for information in larger Wikipedia languages such as English or French and afterwards translates the article in smaller languages (i.e Kiswahili and Yoruba). Interestingly most of these readers were not aware of the language translate feature and so they use google translate.

Quotes & examples

"It's hard to find some of the things my grandparents would be interested in learning about on WIkipedia"

| Yoruba reader

"It would be nice to have more images to show to my grandmother when reading an article to her"

| Kiswahili reader

THE ENLIGHTENING RELATIVE

" Although I primarily read for my own knowledge, I sometimes read Wikipedia articles to my grandparents and other relatives who don't read. It's a great way to keep them informed! "

22-26 years old, Student.
Small, medium and large Wikipedia.

This use case was seen within all the languages. Typically younger tech-savvy university students who read wikipedia articles to their relatives who do not read. These relatives could be grandparents or younger siblings who do not have access to devices.

Reader motivation

• Keep relatives informed and entertained.

• Confirm information gotten while conversing with relatives.

• Help younger siblings with homework.

Reading/search behaviour

• Searches in english and directly translates articles to either yoruba or Kiswahili via google translate.

• Reading behaviour depend on the length of article. Skims through longer articles looking for specific facts.

Reading Frequency

Low   High

Types of content

• Proverbs and folklores
• Definition of words
• Specific facts about celebrities
• Religious content

Trust in Wikipedia articles

Low   High

Challenges

• Sparse information presented within articles
• Target content unavailable

Experience Reading Wiki Articles

Low   High

Other sources of information

Features/tools

Needs/suggestions from readers

• Text - speech feature that could potentially be used to read out articles to

• A toggle feature to be able to rapidly switch between two languages that the reader is proficient in

The Language Enthusiast

Use Case

① This use case was seen amongst Yoruba and Kiswahili readers who grew up reading and speaking english. Typically younger university students or young professionals who are intentional about reading wikipedia articles in their native language as a form of advocacy for the language use.

Trust

② There is also some mistrust amongst these readers regarding the authenticity and accuracy of the articles related to culture and language knowing that it could potentially have been written by someone who is not from the language culture.

Reading/Search behaviour

③ These readers search for information in the local language and only resort to searching in english when the information in target language is unavailable. These readers often read in depth due to interest and also as a way to practice how the local language is used to explain concepts.

Needs/suggestions

④ The most common need highlighted by this group of readers included more information in respective languages and also updated information within articles for more accurate information.

Quotes & examples

"I believe Kiswahili has the chance to grow and become the biggest language in Africa....this is why I like to promote the language"

| Kiswahili reader

"I appreciate the effort Wikipedia puts in to promote languages"

| Kiswahili reader

The Language Enthusiast

Reading motivation

5 Their main motivation for consulting Wikipedia is preserve and promote their local languages, and also read articles related to their culture from a more authentic and less foreign standpoint.These sets of readers also consult Yoruba and Kiswahili articles to see how technical concepts are explained with the language.

Challenges

6 A major pain point is the sparse information being presented on the available articles. Readers also mentioned that the way the articles are written does not reflect the richness of their respective languages. They describe it as "Dry and plain language being used"

Other sources of information

7
- Twitter: For community awareness, to learn more about topics that pertain to culture.
- Youtube: To double check the pronunciation of words, for historical content
- Domain specific websites

Features and tools

8 Typically, users within this persona have their phone settings in their respective languages.Users also tend to use the blue links and "see also" features often to explore other articles within the language of interest.

Quotes & examples

"Short articles don't serve the purpose of growing language skills in Kiswahili"

| Kiswahili reader

"I changed my phone settings to yoruba recently so I can practice reading and speaking more"

| Yoruba reader

THE LANGUAGE ENTHUSIAST

22-26 years old, Students/young professionals.
Small and medium Wikipedia.

"I make an effort to ensure that I read articles in my native language. This is a great way to learn how the language is used to explain technical concepts. It's also a way to celebrate my mother tongue!"

This use case was seen amongst Yoruba and Kiswahili readers who grew up reading and speaking english. Typically younger university students or young professionals who are intentional about reading wikipedia articles in their native language as a form of advocacy for the language use. These sets of readers also consult Yoruba and Kiswahili articles to see how technical concepts are explained with the language.

Reader motivation

- Preserve and promote native language.
- Practice language skills.
- Read about topics related to their culture from a more authentic and less foreign standpoint.
- To understand the way technical concepts are explained in target language

Reading/search behaviour

- Searches for articles in native language.
- Often read articles in depth due to interest and also as a way to practice how the language is used to explain concepts.
- Only resorts to searching in english in cases when they are looking for translations or definitions of english words. In these cases, they use the google translate feature.

Reading Frequency

Low — High

Reads articles in their native language at least a few times a week.

Types of content

- Topics that pertain to culture and regions.
- Definition and use of words in target language.

Trust in Wikipedia articles

Low — High

Challenges

- Lack of technical concepts in smaller language wikis
- Sparse information being presented on the available articles.
- "Dry and plain" language within articles.

Experience Reading Wiki Articles

Low — High

Typically high experience readers who have been reading Wikipedia articles for over 5 years.

Other sources of information

Features/tools

Edit

Needs/suggestions

- More information and articles in respective languages.
- Text- speech options with proper pronunciations.
- More awareness of the language communities on Wikipedia.

The Debater

Use Case

1 This use case was mainly seen amongst english readers. Their main goal is to get quick and accurate information in order to buttress their points in an argument. Most of these readers mentioned that they appreciate how accessible and simple Wikipedia is compared to other sources of information that have ads and other distracting components.

Trust

2 Trust in Wikipedia articles is somewhat high as readers tend to refer to these articles quite often.Rarely refer to the references since they are often in a hurry to get quick facts.These readers tend to have a deep concern about getting inaccurate information on Wikipedia

Reading/Search behaviour

3 These readers do not consult Wikipedia as their first resort. They initially carry out a general google search and if they are unable to get to the information during that search, they resort to Wikipedia.Once on the wikipedia page, the readers take a quick scan of the content to advance to various sections that may contain their desired information.

Needs/suggestions

4 The most common need highlighted by this group of readers was regarding an embedded voice search within Wikipedia to quickly search for information without the need to scan through the article. Readers also suggested an ability to search with sections of the article.

Quotes & examples

"I usually do a general google search to find quick information"

| English reader

"There is so much information and it's hard to get to specific facts"

| English reader

The Debater

Readers Motivation

5 This main motivation for searching through Wikipedia is to have enough facts to win an argument, get simple, accurate and updated facts information that would be relevant during an argument and also discover random facts that could be used during an argument.

Challenges

6 The main challenge shared amongst this group of readers was the inability to search within various sections of an article and also the vast amount of information within an article. Readers shared that although the infobox comes in handy for quick information, sometimes it does not contain the desired information and so there's a need for a more elaborate summary of the whole article.

Other sources of information

7
- Google: For general searches
- Twitter: To stay up to date on trending topics
- Domain specific websites (e.g celebrity personal websites, science publications, etc)

Features and tools

8 The Infobox is the most commonly used feature amongst these readers. They also have a high experience reading Wikipedia articles and generally read scientific facts, current events, and historical content.

Quotes & examples

"It's important for me to get updated and accurate information from Wikipedia so I don't end up looking foolish"

| Yoruba reader

"The quick facts box does not do a good job summarizing the content of the article"

| English reader

18-25 years old Student

📱 **Large Wikipedia**

THE DEBATER

❝ Wikipedia really comes in handy when I'm in an argument with my friends or family members. I'm able to get information to either buttress my argument or oppose the points of whoever I'm arguing with. ❞

This use case was mainly seen amongst english readers. Their main goal is to get quick and accurate information in order to buttress their points in an argument. Most of these readers mentioned that they appreciate how accessible and simple Wikipedia is compared to other sources of information that have ads and other distracting components.

Reader motivation

- Have enough facts to win an argument.
- Get accurate and updated facts that would be valid during an argument.
- Discover random information that could potentially be used in future arguments.

Reading/search behaviour

- Consults other "quicker" sources of information before going on Wikipedia
- Takes a quick scan of the infobox and then introduction section
- If the information is not found, they look through the table of content to scan through the various sections

Reading Frequency

Low — High

Reads Wikipedia articles almost everyday.

Types of content

- Scientific facts.
- Current events.
- Scientific and historical content

Trust in Wikipedia articles

Low — High

Challenges

- Inability to search within various sections of the articles.
- The infobox tends to not contain relevant information.
- Sometimes the content presented is not updated.

Experience Reading Wiki Articles

Low — High

Typically high experience readers who have been reading Wikipedia articles for over 5 years.

Other sources of information

G Twitter ☀

Features/tools

ℹ ☰
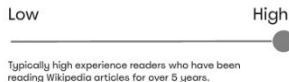
Needs/suggestions

- A camera scan feature for quick access to information
- Ability to search within various sections of the article.
- Short summary of each section.
- Ability to discern old from new information.

The Pop Culture Fan

Use Case

(1) These are curious readers who visit Wikipedia to learn more about a famous person or movie character and read entertainment news. They enjoy reading the latest updates on their favorite stars and are always looking for new information.

Trust

(2) Readers tend to have a high trust of information presented within various biographies on Wikipedia. They are also aware of the source of this information

Reading/Search Behaviour

(3) Readers tend to read in depth with the aim of knowing everything about the person being searched for. However, occasionally, readers also scan the infobox to get quick facts.

Needs/Suggestions

(4) The major need highlighted by this group of users was more media and audio content. Readers also interestingly indicated that they would like for the links to the official social media pages and/or websites of the celebrities to be linked within the article.

Quotes & examples

"I use Wikipedia mainly to look up celebrity biographies"

| English reader

"I like to read about the general plot of a movie on Wikipedia before watching it"

| Yoruba reader

The Pop Culture Fan

Readers Motivation

(5) The main motivation behind visiting Wikipedia is to learn more about a person (artist, athlete, etc). Theses readers also vista Wikipedia to learn more about a movie plot and stay up to date with entertainment news.

Other sources of information

(7)
- Google: For general searches
- Twitter: To stay up to date on trending topics
- Domain specific websites (e.g celebrity personal websites, gossip blogs, etc)

Challenges

(6) The most common challenge faced by this group of users is in the inability to discern the accuracy of the information presented as well as the lack of visuals within the Wikipedia articles.

Features/tools

(8) Thes users tend to use the infobox quite often when looking for quick facts about celebrities. They also interact with the blue links to dive in deeper into some other information they may find entertaining.

Quotes & examples

"I always look through the short summary of the page to get specific facts about the celebrity"

| English reader

THE POP CULTURE FAN

" I am always on the lookout for new information and updates about my favorite stars and movie characters. That's why I love browsing Wikipedia! I can always rely on it for accurate and trustworthy information. "

22-28 years old, Students and Young Professionals

These are curious readers who visit Wikipedia to learn more about a famous person or movie character and read entertainment news. They enjoy reading the latest updates on their favorite stars and are always looking for new information

Reader motivation

- Learning about a movie plot to decide whether the move will be worth watching.

- Getting information about a famous person such as their age, awards, background, etc.

- Learning more about actors and actresses before or after watching a movie out of curiosity.

Reading/search behaviour

- Readers tend to read in-depth with the aim of knowing everything about the person.

- Readers sometimes go in with the intention of find specific facts about a person and so would scan through infobox or introduction

Reading Frequency

Low   High

Types of content

- Biographies

- Movie plots

Trust in Wikipedia articles

Low   High

Challenges

- Unavailability of visual information.

- Inability to discern accuracy of information presented

Experience Reading Wiki Articles

Low   High

Other sources of information

Features/tools

Needs/suggestions

- Voice-text feature

- More media content (audio and images)

- Add links to the verified social media pages of famous people since there are lots of fake social media pages.

Language Wiki Readers

- → **English Wikipedia Readers**
- → **French Wikipedia Readers**
- → **Yoruba Wikipedia Readers**
- → **Kiswahili Wikipedia Readers**
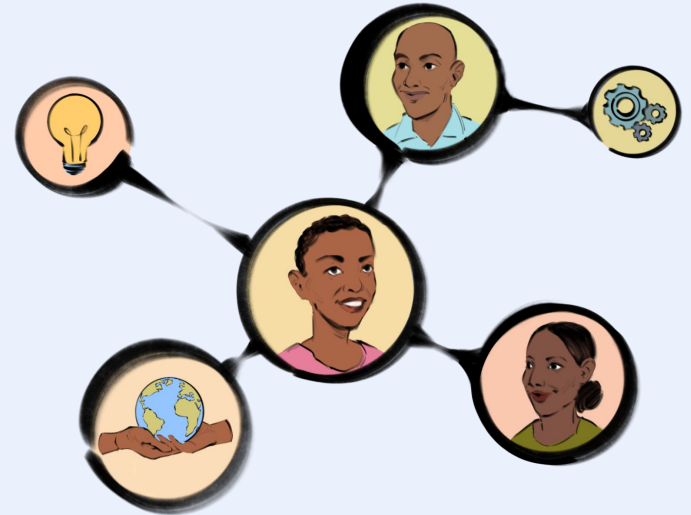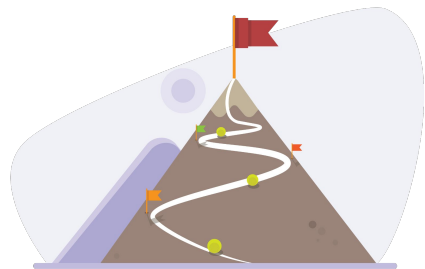
English Wikipedia
Readers

English Wikipedia Readers

Use Case and Reading motivation

1

Many English readers rely on Wikipedia for academic or work-related research, using it as a tool for gathering information and writing papers (For example: writing a final-year thesis). Additionally, users often use Wikipedia as a quick reference tool to look up facts as well as for random exploration out of curiosity.

2

Their main motivation for reading Wikipedia was to find reliable and accurate information that could be used for school and work assignments, find domain-specific information related to school or professional work, dig deeper into topics that have been discussed at school, stay updated on current events & discover new topics.

Quotes & examples

"Wikipedia is a great for basic knowledge but I have to check other places to confirm the information I get from there"

"I really like the blue links because it allows me explore more topics I may be interested in"

English Wikipedia Readers

Reading/Search behaviour & Features/tool

③ Readers typically go through the introduction of an article then jump to the sections of an article containing the information they are looking for

Readers tend to read sections in depth when working on a school assignment and scan through articles when randomly exploring

When looking for quick facts, readers tend to go through the info box and if they are unable to find the target information there, they use the table of content to look through the sections.

④ Readers typically use the Wikipedia Search bar to further search for articles after getting on Wikipedia

The Infobox is the most commonly used feature amongst these readers especially when reading up on specific facts about celebrities

Readers also use Table of Contents to jump to areas of the article containing the information they need.

Blue links and preview feature are also commonly used when reading to learn more about terms mentioned within articles

Students use the reference section for citation purposes and also to gain access to other sources of data that could be cited within their school assignments

Quotes & examples

"I typically skim through the introduction of an article and then check the table of content for the sections"

"The reference section is useful when looking for other sites to visit that is about the same topic"

English Wikipedia Readers

Trust & Other sources of information

1 For students, there's a lot of skepticism around the information presented on Wikipedia and so it is quite often that they refer to references

For young professionals, the trust level is typically higher and it's rare for them to check reference unless in cases when they are looking for additional information.

2 **Google:** for search

Youtube: Learning skills, entertainment purposes, tutorials on school topics and learning about topics through more engaging formats

Facebook, Reddit, & Twitter: To get information about answers to 'undocumented questions' and to stay up to date with current trends

Domain-specific websites

Quotes & examples

"Right from secondary school, our teachers always told us not to use Wikipedia as a reference in our assignment"

"Wikipedia is good to get general information but you would need to visit other websites to get the specific information you're looking for"

English Wikipedia Readers

Challenges & Needs

1 Most readers that they found the **interface "Inconsistent and plain"**. By inconsistent, the readers were referring to how the layout may sometimes change (I.e some articles may have more visuals than others, or some articles may contain a table of content while other do not).

Readers also complained about the **overwhelming amount of information** on within these articles and how it is quite difficult to find related articles.

Another common pain point was the **difficulty determining the credibility** of information on Wikipedia.

2 Some of the needs/suggestions relayed by the english readers include:

- A voice search feature to make it easier to search for information
- A camera scan feature for quick access to information
- Diagrammatic representations of information
- A snapshot of related articles

Quotes & examples

"There is too much information on Wikipedia, it's hard to read everything"

"There's rarely any image on the page which makes it boring to read through articles"

18-25 years old
Students/young professionals

THE ENGLISH READER

"I find myself using Wikipedia both as a starting point for my academic research and as a reliable quick reference tool for fact-checking. It also comes in handy when learning new skills or information related to my profession."

Many English readers rely on Wikipedia for academic or work-related research, using it as a tool for gathering information and writing papers (For example: writing a final-year thesis). Additionally, users often use Wikipedia as a quick reference tool to look up facts as well as for random exploration out of curiosity.

Reader motivation

- Find reliable and accurate information that could be used for school and work assignments

- Dig deeper into topics that have been discussed at school

- Getting quick facts or a brief overview on a topic.

Reading/search behaviour

- Most readers typically get to wikipedia through the search results after an initial google search

- Readers typically go through the introduction of an article then jump to the sections of an article containing the information they are looking for

- When looking for quick facts, readers tend to go through the info box and if they are unable to find the target information there, they use the table of content to look through the sections.

Reading Frequency

Low — High

Experience Reading Wiki Articles

Low — High

Types of content

- Domain specific content related to school work (i.e scientific content, historical content, etc)

- Definition and use of words

- Current events

- Specific facts about celebrities

Trust in Wikipedia articles

Low — High

Challenges

- Struggles to find reliable sources for academic research papers.
- Inconsistent and plain user interface
- Overwhelming amount of information on articles
- Difficulty finding related articles
- Difficulty determining the credibility of information on Wikipedia

Other sources of information

Features/tools

Needs/suggestions

- A voice search feature to make it easier to search for information

- Diagrammatic representations of information

- A snapshot of related articles

Before Wikipedia

The English Reader

Expectations

Expects to get to an article related to search query after carrying out a general google search

Expects to find baseline information on a topic

For school or work related research, users don't expect Wikipedia to have all the information required but rather act as a means to other sources of information

"Wikipedia is more of a lead than the actual end product"

Expects to get recommendations on other related articles

Actions

Intentionally seeks out Wikipedia in search results. Although readers mention that they intentionally refer to Wikipedia before other sources of information, only a few of them search directly on "Wikipedia.com"

Some readers also mention that the get to Wikipedia via bookmark previously saved

Thoughts

"I love how accessible information on Wikipedia is, It's great to have this wealth of information at the tip of your fingers."

"Unlike platforms that have distracting components such as advertisements, I appreciate how straight forward Wikipedia is."

"Wikipedia always pops up from a general search results and so even when i'm not intentionally seeking out information on Wikipedia, I'm inclined to browse through the page."

Challenges

English readers often indicate that they have to input multiple search queries before finding the specific information they are looking for.

On Wikipedia

The English Reader

Expectations

"I only know how to use Wikipedia because I've used it several times before, It's not very intuitive for first time users"

"You have to know exactly what you want to search for on Wikipedia before you can find information"

Expects to get original sources of information via the reference section

Expect to get a quick snapshot of information through the infobox

Actions

Readers use Google to search for specific information on Wikipedia.

They use the Infobox to find specific facts about celebrities.

When conducting research, readers read the introduction and the table of contents.

They scan through the sections for tables, graphs, and diagrams.

They interact with blue links and the preview feature to learn more.

They refer to the Reference section for citations.

Thoughts

Wikipedia is a great place to get baseline information, I like the fact the it gives me access to other sources.

The format of this page looks so different from that of a previous article I read. I don't like the inconsistency.

I wish there was a way to determine the credibility of the information i'm getting here

How do I know when this information was updated last?

Challenges

Lack of interactivity on the Wikipedia page.

inconsistent and plain User interface.

Overwhelming amount of information.

Inconsistent User interface which can be confusing.

After Wikipedia

The English Reader

Expectations

"One good thing about Wikipedia is that other sources are linked in the reference section."

Expect to find relevant information via other sources of information.

Actions

ACTION

Goes back to scan through general google search results. Looks through domain specific websites.

Uses YouTube for skill learning, entertainment, school tutorials, and engaging information.

Turns to social media for answers to "undocumented questions" and staying updated with trends.

Relies on domain-specific websites (e.g., Investopedia, scientific journals, LinkedIn) for school or professional work.

Thoughts

"I appreciate how other sources of information are linked in the reference section of Wikipedia, this makes my search experience so much easier."

Challenges

English readers often indicate feeling overwhelmed after going through Wikipedia articles due to the vast amount of information present.

Mental Model of English Wikipedia Readers

English readers are typically students and young professionals looking for baseline information about a topic. However this expectation is typically not met due to the vast amount information within many articles in English Wikipedia.

1 INTERNAL REPRESENTATION

*"Wikipedia is not my final destination for information, it's more of a lead.. "*

English readers are typically students and young professionals who use Wikipedia as a tool to retrieve baseline information about a topic and get to other sources of information.

2 EXPECTATIONS

- Baseline summary of information
- Recommendations of other sources of information

3 EXTERNAL REALITY

- Vast amount of information presented within articles
- Lack of visuals and interactive media
- Difficulty finding related articles
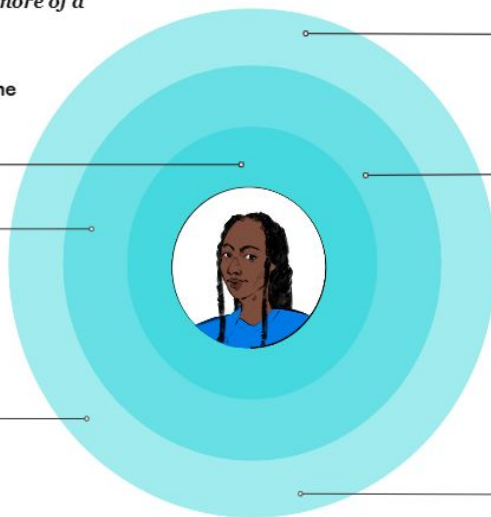
4 PAINPOINT

"I came here for baseline information but I'm being bombarded with so much information!.."

Readers are often overwhelmed by the vast amount of information presented within English articles. Most readers complain that there is no proper summarization of the information presented.

5 SUBSEQUENT BELIEFS

"Wikipedia is where you come to when you want detailed information… it's better to search other platforms when looking for summarized content."

"Wikipedia is great for school work, perhaps not as great when reading for leisure due to the academic language used and the plain interface."

"The infobox never contains the information I'm searching for.."
The vast amount of information presented on Wikipedia makes readers refer to other sources of information when looking for quick facts.

6 SUBSEQUENT ACTIONS

- Consults other google search results before going on Wikipedia
- Visits Wikipedia only when looking for "serious info" related to school or work.
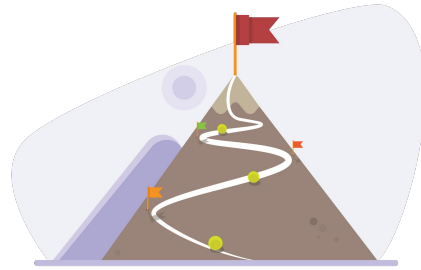
French Readers

French Wikipedia Readers

Use Case and Reading motivation

1 French Wikipedia readers are mostly young professionals who use wikipedia to occasionally check the definition of words or find specific facts around a topics. Compared to english readers, french readers seem to refer to Wikipedia less frequently. Most of these readers have very specific interests (e.g cryptocurrency, business stocks, urban planning, etc) and would rather visit domain-specific sites to get information on these topics.

2 Their main motivation for reading Wikipedia was to get a general understanding of a topic, obtain basic information that could lead to specific and more accurate sources, Randomly explore topics and learn new things and get information that could be used to assist younger siblings with their school assignments

Quotes & examples

"Wikipedia is good as a first reference to get a general understanding of a certain subject"

"Wikipedia is a great place to read about the history of countries"

French Wikipedia Readers

Reading/Search behaviour & Features/tools

3 Most readers of French Wikipedia rarely read articles in depth but rather scans through to get the general gist of the topic and scans through various sections and reads the section most relevant to them.

4 They typically interact with the table of content to browse through information that is most pertinent to them. They also use Blue links to have more informations and allow them to learn more about the topic. Interestingly, most of these readers know that Wikipedia is available in multiple languages but cannot seem to identify the language translation feature and so would translate using google translate.

Quotes & examples

"I usually scan through the article looking for relevant keywords"

"I like using the infobox when looking for specific information about history or about a celebrity"

French Wikipedia Readers

Trust & Other sources of information

5 Trust level amongst readers is typically low and most readers did not like the fact that anyone could edit a Wikipedia article. Most readers also mention that Wikipedia is not a reliable platform for news since the content is not up to date at times

Interestingly, although trust level is low, readers still refer to wikipedia for basic knowledge about generic topics (E.g when helping siblings with a school assignment).

6 **Google:** for general search

ChatGPT: For work related tasks, to get new ideas for work, to get specific facts.

Newspapers: To stay updated on current events

Domain-specific websites

Quotes & examples

"Wikipedia should be strict about how easy it is for people to edit articles"

"I would rather read a newspaper to get information on what is happening"

"For theoretical info go to Google/Wikipedia but for practical info go to Chat GPT - Wikipedia lacks this practical side"

French Wikipedia Readers

Challenges & Needs

(7) A major pain point amongst most readers is the **lack of detailed data in French** as compared to the English one which is much more detailed.

Another challenge reported was the **unreliable information** gotten from Wikipedia articles and the inability verify information.

Lack of visuals to support information presented within articles was also a pain point amongst most readers of French Wikipedia.

(8) The following are some needs and suggestions highlighted by readers:

Make the information on Wikipedia more precise and concise

Ability to discern old from new information

A more interactive interface (such as with ChatGPT where back and forth inquiry is allowed)

More media and audio information to support information presented within articles

Quotes & examples

"I don't trust Wikipedia articles because it's regular people like me that edits them"

"Wikipedia does not contain details about the specific information I'm looking for- it does not go deep into a topic"

22-29 years old, Student and Young Professional.

THE FRENCH READER

> *Wikipedia is a great platform to get general information about a topic. However, I would rather go to domain-specific sites to learn more about my niche interests.*

Mostly young professionals who use wikipedia to occasionally check the definition of words or find specific facts around a topics. Compared to english readers, french readers seem to refer to Wikipedia les frequently. Most of these readers have very specific interests (e.g cryptocurrency, business stocks, urban planning, etc) and would rather visit domain-specific sites to get information on these topics. Occasionally, french readers also refer to Wikipedia to get information to help their siblings with a school assignment.

Reader motivation

- Obtain basic information that could lead to specific and more accurate sources.
- Randomly explore topics and learn new things.
- Get information that could be used to assist younger siblings with their school assignments

Reading/search behaviour

- Most readers typically get to wikipedia through the search results after an initial google search
- Scans through various sections and reads the section most relevant to them
- Interacts with blue links and moves from one article to another

Reading Frequency

Low — High

Types of content

- Content related to respective field of work
- Current events
- Specific facts about celebrities.

Trust in Wikipedia articles

Low — High

Challenges

- Unreliable information
  - "I don't trust wikipedia information because it's regular people like me who edit the articles.."
- Lack of visuals to support information presented within articles

Experience Reading Wiki Articles

Low — High

Other sources of information

Google · NEWS · ChatGPT

Features/tools

Needs/suggestions from readers

- Ability to discern old from new information
- Ability to verify the reliability of information
- A more interactive interface (such as with ChatGPT where back and forth inquiry is allowed)

Before Wikipedia

The French Reader

Expectations

The french reader expects to find a Wikipedia page related to their search topic after carrying out a general Google search. They expect to find baseline information on the topic, such as definitions, basic facts, and overviews.

Students often use Wikipedia to research their school assignments, especially for their younger siblings.

Actions

They carry out general google search and scan through search results. Only a few of the readers search directly on "Wikipedia.com" Some refer to their search history to get previous articles.

Thoughts

"Wikipedia is a great source for all information about geography, and public or historical figures"

"For my work, I only expect to find definitions on Wikipedia, I know I will need to search other sources afterwards to get more accurate information"

Challenges

Lack of detailed info on domain specific topics on Wikipedia.

The French Reader

🙂

On Wikipedia

Expectations

Readers expect to use the table of content to jump to sections they find relevant.

They also anticipate obtaining a concise overview of information through the use of infoboxes.

Actions

Scan article introductions from general Google searches to determine if they contain desired information, then browse the table of contents to locate the most relevant sections.

While reading, readers engage with blue links and the preview feature to learn more about terms. Some use the Wikipedia search bar, while others prefer to return to Google for specific information. When working on school projects, they examine sources and references.

Thoughts

"Wikipedia provides valuable definitions for specific terms but there is overwhelming information on Wikipedia and articles often lack specificity"

"I wish there was a way to determine the credibility of the information i'm getting here."

"I wish reading a wikipedia article could be more interactive."

Challenges

The Wikipedia page lacks interactivity, visual support for presented information, and often has lengthy articles that are too broad.

There is no clear path to determine the credibility and reliability of information derived from Wikipedia.

After Wikipedia

Expectations

French readers will most likely check other sources provided in the article to get more details about the topic.

Actions

Goes back to Google to do another search in order to check other sources.

Refers to domain specific websites that are related to the professional work such as Investopedia, scientific journals, LinkedIn, etc

Also goes to some AI chatbot such as ChatGPT.

Thoughts

They expect the wikipedia editors (which they think are experts) to do a better job at writing detailed, accurate and straight to the point articles

For school work they like how other suggestions and additional links are provided should they need to look for further information

Challenges

Having to check multiple sources for work and school related searches.

The French Reader

Mental Model of French Wikipedia Readers

French readers are mostly young professionals who are not comfortable with the fact that anyone could edit a Wikipedia article. Due to this concern, they tend to have very low levels of trust and expect to find unreliable and inaccurate information on Wikipedia.

1 INTERNAL REPRESENTATION

"I don't trust Wikipedia to give me reliable and accurate information. I would rather consult other sources of information before referring to Wikipedia."

French readers are typically young professionals looking for domain specific information. These readers are aware of the fact that anyone could edit on Wikipedia and that leads to lack of trust in the reliability of these articles.

2 EXPECTATIONS

- Inaccurate information
- Lack of domain specific information
- General and baseline information

3 EXTERNAL REALITY

- Vast amount of information presented within articles
- Inability to verify the reliability and accuracy of information
- Lack of visuals to support information presented within articles
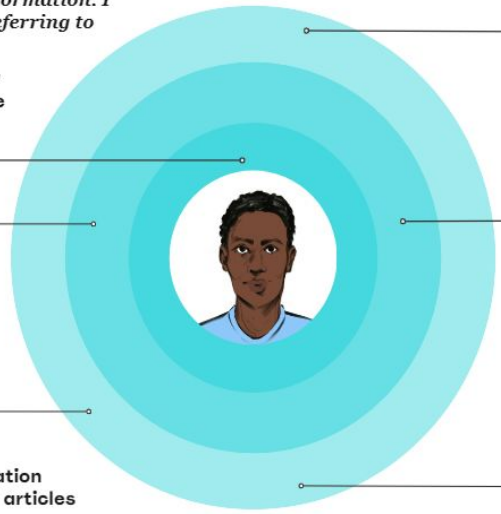
4 PAINPOINT

"There is no proper summary of the information presented on Wikipedia"

"How do I distinguish old from new information?"

Not only are readers unable to discern the relaibility and accuracy of the ifnormation, they are also unable to figure out how updated the information presented is.

5 SUBSEQUENT BELIEFS

"Wikipedia should be strict about how easy it is for people to edit articles"

Those who read in French say that they have not edited articles on Wikipedia and may never do so because, for them, it has to be a professional or expert's job to do so. Their level of trust therefore becomes lower because they don't appreciate the fact that anyone can edit a Wikipedia article.

6 SUBSEQUENT ACTIONS

- Consults specialized websites or newspapers
- Consults Wikipedia less frequently
- Use AI chatbots. They like the interactivity and ease of use of it.
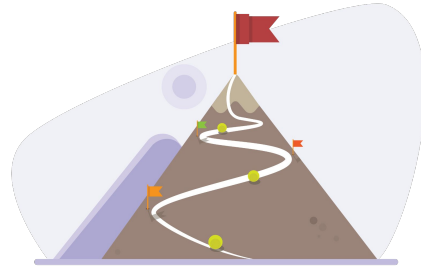
Yoruba Readers

Yoruba Readers

Use Case and Reading motivation

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1 These readers do not read or search primarily in Yoruba but rather in english. They only go to Yoruba Wikipedia to get specific information for school assignments or work tasks (i.e a linguistic student who has to hand in a paper in yoruba or a Playwright writing a yoruba play). A majority of these readers also occasionally consult Yoruba Wikipedia to retrieve information for their older relatives who communicate primarily in Yoruba.

2 Their main motivations for reading Wikipedia articles were to carry out research for school or work that involves the Yoruba language, check the definition of words, and keep relatives informed and entertained. Most of these readers are also quite intentional about promoting and preserving the use of the yoruba language.

Quotes & examples

"I'm already good at english so I need to read more in Yoruba to learn the language"

"My mum sometimes asks me to look up information on her favourite actors and actresses on Wikipedia. Besides that, I never go to Yoruba Wikipedia"

Yoruba Readers

Reading/Search behaviour & Features/tools

③ They primarily search for information in English but would search in Yoruba in specific cases such as research for school. Additionally, readers acknowledged that since the Yoruba articles are relatively short compared to the english articles, they tend read through everything in depth.

④ For the few readers who frequently consult yoruba Wikipedia for school or work, they typically have the Wikipedia apps on their mobile phones which is set to yoruba for easy access and also in hopes to find more yoruba content there. The few readers who made use of the language translation feature expected to get a direct translation of the english article and were often disappointed when they realized this was not the case.

Quotes & examples

"I believe reading in yoruba would be so much easier if there was a text-speech feature.. This would encourage more people to visit Yoruba Wikipedia"

"I work as a playwright and write all my plays in yoruba, so I frequently consult Yoruba Wikipedia when writing…. I downloaded the app because i am able to find information in yoruba faster there"

Yoruba Readers

Trust & Other sources of information

5 Most of the readers of Yoruba Wikipedia were unaware of the source of information. Most believed that the content on Wikipedia was generated by WMF employees and professional content creators. Thus, this believe somewhat increases the level of trust these readers have for the Wikipedia articles.

However, readers tend to refer to youtube or other domain specific websites to build onto the knowledge they gained from reading the article on Wikipedia. They also tend to go through the reference section of Wikipedia to verify the information they read especially for school/work research.

6 Other sources of information for these readers include:

Youtube: To learn more about the yoruba culture through more engaging formats (e.g Yoruba movies and folklores)

Facebook: For community awareness and to keep up to date with latest information related to the yoruba culture (e.g king coronation, latest yoruba movies, etc)

Celebrity gossip blogs: to get information related to specific celebrities.

Quotes & examples

"I am very confident in the information I get from Wikipedia"

"I don't get a lot of information from Yoruba articles on Wikipedia, I only get a 'preview summary'"

Yoruba Readers

Challenges & Needs

⑦ Readers of Yoruba Wikipedia outlined several challenges when reading through language-specific articles, highlighting two major pain points. Firstly, they often find that **the information provided in these articles is relatively sparse** compared to what is available in larger Wikipedia languages. This lack of comprehensive content makes it difficult for Yoruba readers to access the same level of information. Secondly, **incorrect or confusing intonation marks** further compound the problem, making it challenging for readers to follow the intended pronunciation and rhythm of the text. Additionally, the presence of **red links** on the page adds to the confusion, leaving readers unsure about the validity or availability of linked information.

⑧ The following are some needs and suggestions highlighted by Yoruba Readers:

- Text-speech feature
- Diagrammatic representation of information
- More content on the articles
- Removal of red links (most users did not understand the need for the red links and also found it quite distracting)

Quotes & examples

"Wikipedia should be user friendly- I only know how to use it now because I have been using it since I was in primary school. People who have not used it before will not know how to"

"The intonation marks used in many Yoruba articles are incorrect and this makes it hard to read because the intonation marks can change the meaning of a word in yoruba language.."

THE YORUBA READER

> "I read Yoruba articles on Wikipedia only when it's required of me. So this could perhaps be when I have to hand in a paper in Yoruba language or if I have to retrieve information for my yoruba grandparents."

22-34 years old, Students and Young Professionals

These readers do not read or search primarily in Yoruba but rather in english. They only go to Yoruba Wikipedia to get specific information for school assignments or work tasks (i.e a linguistic student who has to hand in a paper in yoruba or a Playwright writing a yoruba play). A majority of these readers also occasionally consult Yoruba Wikipedia to retrieve information for their older relatives who communicate primarily in Yoruba.

Reader motivation

- Carry out research for school or work that involves the yoruba language
- Check the definition of words
- Keep relatives informed and entertained

Reading/search behaviour

- Primarily searches for information in English but would search in Yoruba in specific cases such as research for school.
- Often searches in english and then translates
- They tend read through everything in depth since articles are relatively short

Reading Frequency

Low — High

Types of content

- Proverbs and folklores in Yoruba.
- Definition of words.
- Content specifically pertaining to the yoruba culture (e.g different yoruba kingdoms and tribes)

Trust in Wikipedia articles

Low — High

Challenges
- Sparse information presented on articles compared to information presented on larger Wikipedia languages.
- Incorrect intonation marks which are often hard to follow.
- Confusion around the presence of red links on the page.

Experience Reading Wiki Articles

Low — High

Other sources of information

Features/tools

Needs/suggestions

- Text-speech feature
- Diagrammatic representation of information
- More content on the articles
- Removal of red links (most users did not understand the need for the red links and also found it quite distracting)

Before Wikipedia

The Yoruba Reader

Expectations

Yoruba Wikipedia readers have an initial expectation of getting direct translations of English articles to Yoruba However, after a few times consulting Yoruba Wikipedia, Readers have little to no expectation of getting a lot of articles written primarily in Yoruba.

They do not expect to get Yoruba articles explaining technical concepts (e.g scientific content). Rather that the desired information will have to be searched for in english and then afterwards translated to yoruba.

Actions

Will either carry out general a Google search and scan through search results, open the wikipedia app that was previously downloaded in hopes to obtain fast and easy information in yoruba language for school and work tasks, or refer to search history to get to previously read articles.

Thoughts

"There is little information on the internet presented primarily in yoruba. I will need to search in English and then use Google Translate to get the Yoruba translation."

"Perhaps I should download the Wikipedia app That way I could configure the language settings to Yoruba and would not need to take the extra step of translating the information."

"I would love to get authentic information in yoruba by yoruba writers. So much information is lost in translation."

Challenges

Lack of information on Yoruba Wikipedia.

Readers are unaware of the existence a separate Yoruba wikipedia and believe they have to translate English articles.

On Wikipedia

The Yoruba Reader

Expectations

Expect to perform multiple searches using different search prompts before obtaining desired information

Expect to be able to scan through table of content and judge whether or not desired information is present without having to read entire article

For app users, they expect to find information faster within the app

ACTION

Actions

Scans article introductions from general Google searches to determine if they contain desired information, then browse the table of contents to locate the most relevant sections. While reading, readers engage with blue links and the preview feature to learn more about terms. Some use the Wikipedia search bar, while others prefer to return to Google for specific information. When working on school projects, they examine sources and references.

Thoughts

"Wikipedia provides valuable definitions for specific terms but there is overwhelming information on Wikipedia and articles often lack specificity."

"I wish there was a way to determine the credibility of the information i'm getting here."

"I wish reading a wikipedia article could be more interactive."

Challenges

The Wikipedia page lacks interactivity, visual support for presented information, and often has lengthy articles that are too broad.

After Wikipedia

The Yoruba Reader

Expectations

Expect to find relevant information via other sources of information.

Actions

Goes back to scan through general google search results.

Consults Youtube to more information pertaining to the yoruba culture (E.g Proverbs and Folklore).

Consults Facebook for community awareness and to stay up to date on the latest information related to the Yoruba culture (E.g the King's coronation, latest yoruba movies, etc).

Thoughts

"The attention given to english Wikipedia should also be given to Yoruba Wikipedia"

** Most Yoruba readers believe that the content comes from WMF employees or professional content creators and so assume that the sparse information present is due to neglect from the WMF staff

Challenges

Rarely any recommendations of other sources of information especially on the web version.

Mental Model of Yoruba Wikipedia Readers

Yoruba Readers are typically students and young professionals who read Wikipedia articles primarily in english and only visit Yoruba Wikipedia for specific use cases. These readers expect the Yoruba articles to be direct translations of the english and are often disappointed when they realize this not the case.

1 INTERNAL REPRESENTATION

"I get a lot of detailed articles in English. It should be the same for yoruba articles since it's a direct translation...."

Yoruba readers typically read in english primarily and only access Yoruba Wikipedia for specific use cases. Hence, the mental model of Yoruba readers typically stem from their experiences interacting with English Wikipedia.

2 EXPECTATIONS

· Elaborate content as presented on English Wikipedia
· Direct translation of english articles

3 EXTERNAL REALITY

· Desired content is often unavailable
· Sparse information presented on articles compared to information presented on larger Wikipedia languages.

4 PAINPOINT

"The attention given to the english Wikipedia should also be given to yoruba Wikipedia.."

Readers realize that the Yoruba Wikipedia is not a direct reflection of the english Wikipedia. This mismatch in mental models leads to disappointment and confusion.

5 SUBSEQUENT BELIEFS

"Searching on Yoruba Wikipedia is a hit or miss, sometimes i'm able to get the desired information or at least recommendations for other sources...other times I don't get any information "

"Maybe I'm searching wrong"

After a few times consulting Yoruba Wikipedia, Readers have little to no exception to get a lot of articles written primarily in Yoruba. Readers also do not expect to get Yoruba articles explaining technical concepts (e.g scientific content)

6 SUBSEQUENT ACTIONS

· Downloads Wikipedia app in hopes of getting more Yoruba content
· Consults other Google search results before going on Wikipedia
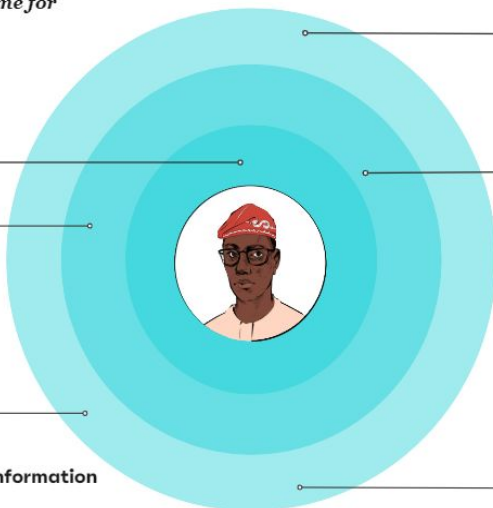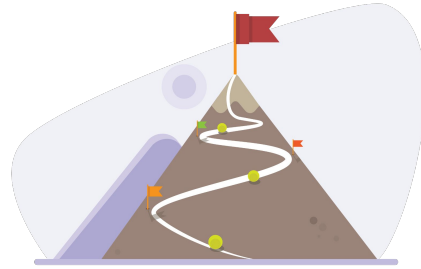
Kiswahili Readers

Kiswahili Readers

Use Case and Reading motivation

1 Kiswahili Wikipedia readers are often motivated to use the platform not just to find new information (usually in English), but also to understand how information is communicated in the Kiswahili language. This is because direct translations from English can be inaccurate or confusing. Swahili readers are typically fluent in English and tend to search for information primarily in English, especially when looking for new information out of curiosity or for school work. However, if the work is directly tied to East African topics or the Kiswahili language, such as Swahili literature, they are more likely to turn to consult Kiswahili Wikipedia pages.

2 Kiswahili Wikipedia readers turn to Wikipedia articles to communicate or explain concepts in Kiswahili to individuals who are not fluent in English. They also read Swahili articles to get a more authentic perspective on East African topics and use Wikipedia articles as a valuable tool to enhance their language skills. Finally, a major motivation amongst Kiswahili readers is to preserve and promote the use of the language.

Quotes & examples

"English is usually for the intellectual people but Kiswahili is the language that most of the population understand"

"I use Wikipedia to practice how to become a better Swahili writer.. There are already too many english writers"

Kiswahili Readers

Reading/Search behaviour & Features/tools

3 When conducting research for school or work, readers predominantly rely on English language searches, unless the subject matter is directly related to the Kiswahili language. In most cases, readers discover Wikipedia articles through search results after performing an initial Google search. However, when Swahili readers explore articles out of curiosity, such as those pertaining to space or biographies, they tend to read them thoroughly, delving into the details. On the other hand, when visiting Wikipedia for academic or professional purposes, readers often scan the articles using specific keywords relevant to their assignments or tasks at hand.

4 The language switching option, blue links and preview feature, and table of contents were noted as some of the useful features that these readers used. The Wikipedia app, however, was not well known amongst the readers, but for those who had interacted with it, the following features were mentioned with enthusiasm: dark mode, the ability to switch between two languages easily, the featured article section, and the ability to read on the go

Quotes & examples

"I normally intentionally look for Wikipedia in the search results after doing a google search"

"When I read Kiswahili articles for my school work, I skim through because I normally have tight deadlines or unexpected work to do on short notice"

Kiswahili Readers

Trust & Other sources of information

5 Generally, there is a high level of trust in the accuracy of information on Wikipedia articles. Some readers trust Kiswahili articles because there are likely fewer editors on Kiswahili Wikipedia compared to English Wikipedia. There is also a recognition that content in Kiswahili is more likely to be written by someone from East Africa, and is therefore more likely to have a more local & authentic, rather than foreign perspective.

6 Other sources of information for these readers include:

Google: for general search

Youtube: Learning skills, such as cooking, and learning about topics through more engaging formats

Facebook, Reddit, & Twitter: To get information about answers to 'undocumented questions', such as home remedies or treatments for illnesses.

Quotes & examples

"'I've never come across wrong information on Wikipedia', Wiki gives you the facts and truth head on, you don't have to weigh different pieces of information"

"'There are some things you just can't find on Wikipedia- especially specifically related to East African culture..''

Kiswahili Readers

Challenges & Needs

7 Some of the challenges that the Kiswahili readers face include the following: Firstly, **limited content in Kiswahili** stands out as a major pain point, making it difficult for readers to access comprehensive information in their native language. Additionally, some Kiswahili articles suffer from **outdated information**, hampering the readers' ability to stay up-to-date. Moreover, on both mobile and desktop web platforms, the absence of a convenient method to **swiftly switch between the English and Swahili versions of the same article** poses a significant usability hurdle for users. Addressing these pain points would greatly enhance the experience of Kiswahili readers on Wikipedia.

8 The following were some needs and suggestions highlighted by Yoruba Readers:

- Text-speech feature
- Surfacing wiktionary results on the wikipedia search results page
- A toggle feature to be able to rapidly switch between two languages that the reader is proficient in

Quotes & examples

"Doing research in Swahili {Literature} is so limited"

"Some Kiswahili articles have information that is yet to be updated"

"Short articles don't serve the purpose of growing language skills in Kiswahili"

22-34 years old, Students and Young Professionals.

THE KISWAHILI READER

" I read Kiswahili articles if they are about East African culture or to learn how to communicate concepts in Kiswahili to those in my social circles. If the article was written in Kiswahili, I would prefer to read the original to get the message as it was intended. "

Kiswahili Wikipedia readers are often motivated to use the platform not just to find new information (usually in English), but also to understand how information is communicated in the Kiswahili. This is because direct translations from English can be inaccurate or confusing. Swahili readers are typically fluent in English and tend to search for information primarily in English, especially when looking for new information out of curiosity or for school work. However, if the work is directly tied to East African topics or the Kiswahili language, such as Swahili literature, they are more likely to turn to consult Kiswahili Wikipedia pages.

Reader motivation

- Learning to communicate or explain concepts in Kiswahili

- Reading about topics related to East Africa from a more authentic/less foreign standpoint

- Building language skills

Reading/search behaviour

- For school or work-related research, readers primarily search in English unless the work is directly tied to the Kiswahili language.

- Most readers typically get to wikipedia through the search results after an initial google search.

- Among Swahili readers, when reading articles out of curiosity, such as a topic about space or a biography, they typically read it in depth

- When visiting Wikipedia for school or work, readers typically scan the article with keywords related to their assignment in mind.

Reading Frequency

Low | High

Types of content

- Content related to East Africa (history, culture, political figures)

- Religious content such as bible stories in Kiswahili

Trust in Wikipedia articles

Low | High

Challenges

- Limited content in Kiswahili

- Some Kiswahili articles have information that is not updated

- On mobile and desktop web, there is no easy way to rapidly switch between English & Swahili versions of the same article

Experience Reading Wiki Articles

Low | High

Other sources of information

Features/tools

Needs/suggestions

- Text-speech feature

- Surfacing wiktionary results on the wikipedia search results page

- A toggle feature to be able to rapidly switch between two languages that the reader is proficient in

Before Wikipedia

The Kiswahili Reader

Expectations

More experienced Wikipedia readers anticipate authentic information when the topic pertains to East African culture, history, or politics.

They expect articles to illustrate how to convey specific concepts and terms (in a more natural manner than direct translations) to their friends and relatives who are less proficient in English.

English articles will have more information, especially about topics related to science and technology.

Kiswahili teachers expect to find material that they can teach their class.

Actions

Most readers get to wikipedia through the search results after an initial Google search.

For school or work-related research, readers primarily search in English unless the work is directly tied to the Kiswahili language.

Searches on Google, either in Kiswahili or types english phrase and adds 'Kiswahili' to the end when looking specifically for Kiswahili content.

Thoughts

"Reading articles in Kiswahili unrelated to the language itself or East Africa can be confusing. However, it would be valuable to have the ability to explain things in Kiswahili, particularly when communicating with family and friends who have limited English proficiency"
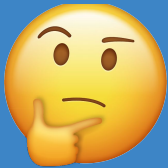
Challenges

Some readers assume that the Kiswahili versions of articles are direct translations of their English counterparts. These readers are often disappointed when they realize this is not the case.

On Wikipedia

The Kiswahili Reader

Expectations

Expects to be able to search for Kiswahili words in the search bar and get results for their definition.

Expects to find more articles in Kiswahili through the blue links.

Expects to find additional Kiswahili literature or references to it.

Actions

Readers delve deep into articles of curiosity, such as space or biographical topics, focusing on content and skimming technical parts.

For academic or professional purposes, they scan articles using relevant keywords and consult the Table of Contents. While they prefer English, they switch to Kiswahili if comprehension becomes challenging. They first read English articles and then search for Kiswahili versions, using Google Translate if necessary. App users frequently switch between English and Kiswahili articles. Some readers directly search for specific words on Wikipedia.

Thoughts

"Why is there a lack of scientific and technical content in Kiswahili on Wikipedia?"

"Although I find more information in English, the Kiswahili content is useful. It is evident that native speakers write it, resulting in a more natural language style compared to direct translations by Google Translate. Kiswahili outperforms English in presenting East African culture due to region-specific authors."

"Short articles don't serve the purpose of growing language skills in Swahili."

Challenges

Short length of Kiswahili articles.

It takes long to switch between English and Kiswahili versions

The translations present are described as "dry and plain" and not reflective of the richness of the kiswahili language.

After Wikipedia

The Kiswahili Reader

Expectations

Expects to get further translations using Google Translate.

Expectation of not finding enough Kiswahili content is usually met.

Actions

Goes back to general Google search for other sources of information in Kiswahili e.g. literature

Uses google translate to find out how to communicate more technical and scientific terms, however readers feel that this is not ideal as the translation may not be natural.

To learn about more information that they would typically read in English, they consult youtube to learn new skills and social media (reddit, twitter) to get opinions and advice for dealing with certain issues

Thoughts

"There should be an easier way to switch between Kiswahili and English versions of an article but then the content would need to be the same for each one. This would be helpful for building language skills."

Challenges

See's the potential that Kiswahili Wikipedia has but is often disappointed by the lack of content.

Hard to find other sources of information that presents content primarily written in Kiswahili.

Mental Model of Kiswahili Wikipedia Readers

Kiswahili Readers are students or young professionals looking for information that specifically pertains to East African culture for either school assignments or out of general curiosity. However, this need is often not met due to the sparse information present within these articles .

1 INTERNAL REPRESENTATION

"I usually look for information in English unless the topic is related to East Africa, but I use Kiswahili Wikipedia for language communication purposes"

Kiswahili readers typically read in English primarily and only access Kiswahili Wikipedia for specific use cases.

2 EXPECTATIONS

- Direct translation of English articles (for less experienced readers)
- More authentic content on topics related to East Africa & natural ways of expressing various terms and content

3 EXTERNAL REALITY

- Difficulty finding the natural translations of scientific and technical terms
- Sparse information presented on articles compared to information presented on larger Wikipedia languages, but the information that is there is received well and appreciated.

4 PAINPOINT

"Wikipedia is not designed for bilingual readers who like to switch between languages"

Readers want to rapidly switch between Kiswahili and English articles to satisfy their motivations to both learn new information but also to learn how to communicate it in Kiswahili to their friends, families, or students.

5 SUBSEQUENT BELIEFS

"Kiswahili Wikipedia doesn't have much content on science and technology, and short articles don't really help if I'm trying to build my language skills"
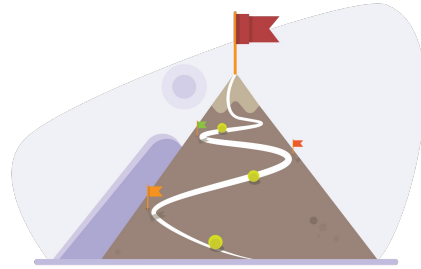
"You can tell that Kiswahili articles about East African topics are more authentic and from a less foreign standpoint - there should be more of this."

After a few times consulting Yoruba Wikipedia, Readers have little to no exception to get a lot of articles written primarily in Yoruba. Readers also do not expect to get Yoruba articles explaining technical concepts (e.g scientific content)

6 SUBSEQUENT ACTIONS

- Uses Google translate to get translations of English content even though they acknowledge that this is not ideal.
- Consults other google search results before going on Wikipedia.
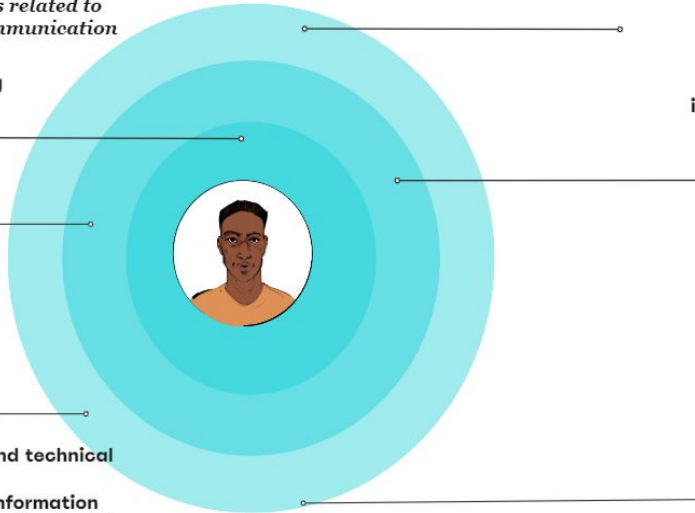
Opportunity areas

How Might We's

Features & Tools

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Here are some high level opportunity areas regarding features and tools that could be further explored

- HMW enable readers to easily & regularly switch between languages that they are comfortable with?

- HMW ensure that version history is apparent to readers?

- HMW improve search for section and search within sections?

- HMW make the infobox adaptable to the specific information that has been searched for?

Recommendations

- Provide toggle feature between different reading options for articles i.e full article view, summary view, story like view, audio, etc
- Add a form of "TL-DR" feature to summarize longer articles and make reading slightly more interactive

How Might We's

General interface

Here are some high level opportunity areas regarding the general interface that could be further explored

- HMW make reading Wikipedia more interactive?

- HMW ensure more articles are illustrated and have more visual content?

- HMW make the interface more welcoming to visual learners?

- HMW create more personalized experiences?

Recommendations

- Provide better spotlight images/visual content
- Ensure "add an image" is available on all wikis and apparent to users
- Make Wikistories infrastructure instead of bespoke to one Wikipedia content so that they can be better discovered by readers

How Might We's

Trust

Here are some high level opportunity areas regarding readers trust in the content that could be further explored

- HMW give more signals to readers about the relative "quality" of an existing article?

- HMW improve the signals coming from references so that sources are more trustworthy?

- HMW make the community-review process more visible to curious readers?

- HMW ensure that the content added to Wikipedia is reliable and accurate?

Recommendations

- Create a reader-focused version of article metadata tool to strengthen visibility of problems
- Surface Metadata to readers to help indicate trustworthiness
- Provide ways for readers to understand the origin of the content as well as tools to distinguish the quality of an article

How Might We's

Small-Medium language Wikipedia

Here are some high level opportunity areas related to small-medium language Wikis that could be further explored

- HMW encourage people to use translation in small-medium language wikis as a language activism exercise?

- HMW improve visibility of the "community" to readers of small-medium language wikis?

- HMW encourage content creation for science & technology content in small-medium language wikis?

- HMW encourage & sustain the curiosity in local languages?

Recommendations

- Make it clear how different language versions relate to each other, the communities that sustain them, and the role of translation.
- An easy and visible CTA on small-language wiki articles to join the language community would be useful for language enthusiasts
- Enable readers to add edit suggestions easily to sections

How Might We's

Specific Use-cases

Here are some high level opportunity areas related to specific use-cases of Wikipedia that could be further explored

- HMW help improve multimedia representation of pop-culture in non-global north contexts?

- HMW allow easy access to quick information (especially amongst debaters looking for quick argument points)?

- HMW design to better support the use of Wikipedia and the interaction that Yoruba and Kiswahili readers have with their relatives who are unable to read by themselves?

- HMW create more opportunities for language learning through Wikipedia articles?

Recommendations

- Showing direct translations of languages by hovering over words would help encourage local language learning and use on Wikipedia
- Opportunities for "collaborative reading" which would be useful to those who often read articles to their older relatives
- Improve Wiktionary visibility on smaller language Wikis and integrate with search

How Might We's

Onboarding readers

Here are some high level opportunity areas regarding the onboarding of readers that could be further explored

- HMW ensure readers are aware of the different features available on the page (both web version and the mobile app)

- HMW make it easier to discover interesting/related content?

- HMW better introduce readers to how Wikipedia works?

Recommendations

- Include a quick overview of available tools on the interface and their different uses
- Integrate AI tools with Wikipedia (e.g AI chatbot)
- Create a reader-focused version of the newcomer homepage

Leveraging AI to enhance reading & search experience

Natural Language Search

A major pain point relayed by all language wiki readers during the course of this research was the inability to properly find information on Wikipedia and also having to put in multiple search prompts before getting to desired information Natural language search could potentially allow find information on Wikipedia more efficiently by interpreting user queries in a more effective way and also analyzing the structure and meaning of a user's query more accurately. Natural language could also enable semantic search which considers the underlying meaning and concepts rather than just on the presence of specific words and phrases. This would be useful to readers searching on small-medium language Wikis.

Leveraging AI to enhance reading & search experience

AI chatbot

A popular suggestion from readers of all language was a more interactive interface. By implementing an AI chatbot on Wikipedia, readers are able to have a conversational and interactive experience that could potentially assist them in finding more information, digging deeper into the context of the topic they are researching and navigating the vast knowledge available on the platform. Chatbot can also provide an opportunity for personalization based on user's preferences and historical interactions. Leveraging user's past conversations, the chatbot can offer tailored recommendations, suggest related articles and generally a more personalized experience.

Leveraging AI to enhance reading & search experience

Content summarization

A major pain point specifically from english Wikipedia was the vast amount of information present and no proper summarization. AI can be used to automatically generate concise summaries for Wiki articles. AI algorithm could potentially analyze the content of the article, extract key information and generate short summaries that provide an overview of the topic of interest. This can be particularly useful to readers who want to quickly grasp the main points of an article without reading the entire text.

Thank you!

Let's chat!

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