



**UNLOCKING DIGITAL PATHWAYS: UNDERSTANDING
COMMUNICATION DYNAMICS IN PEMBA, TANZANIA.**

**A REPORT BY AIFLUENCE LIMITED
FOR
NORWEGIAN CHURCH AID**

Report by
Timothy Ochanji
Afluence Ltd

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1. Introduction

The digital landscape in Pemba, Tanzania, holds significant potential for shaping societal communication patterns and fostering socio-economic development. In an era where digital connectivity catalyzes progress, understanding how individuals in Pemba utilize digital tools for communication is paramount. This report presents the findings of a comprehensive study aimed at unraveling the intricate dynamics of digital communication within the island community.

By examining the preferred digital channels, prevalent device usage, costs of mobile communication and internet connectivity, favored communication formats, and demographic segments embracing digital tools, this survey endeavors to provide actionable insights for Norwegian Church Aid to leverage technology for positive change in Pemba.

Through a combination of rigorous research methods and a nuanced understanding of local contexts, this report aims to shed light on the current state of digital communication in Pemba and illuminate pathways for fostering inclusive and effective digital engagement across the island.

Bandwidth Consumption and Platform Preferences

To understand bandwidth consumption preferences within Pemba, we looked at the national data utilization report published by the Tanzania Communication Regulatory Authority and analyzed that against the factors in the Pemba region.

According to the report, YouTube emerged as the frontrunner, consuming 50.18 million GBs, followed closely by Facebook and TikTok, indicative of the growing penchant for video-based platforms among Tanzanian users. Despite ranking lower in bandwidth consumption, WhatsApp maintained its relevance as a widely used communication tool.

These consumption patterns not only offer insights into content preferences but also shed light on how Tanzanians including those in Pemba allocate their digital time and resources.

The dominance of video-centric platforms underscores the evolving nature of online content consumption habits, shaping advertising strategies and content creation endeavors.

Platform-Specific Insights for the Pemba Region

Examining individual platforms provides a nuanced understanding of their reach and impact within Pemba. Facebook, for instance, emerges as the leading social platform, boasting a potential reach of over 70,000 within Pemba, taking into account an analysis of average family size within Pemba as per TCRA, National Bureau of Statistics and Administrative Units Population Report 2022.

Similarly, Whatsapp and TikTok have garnered significant traction, particularly among the younger demographic segments. Instagram's substantial user engagement, with over 14,000 posts associated with the Pemba region according to Meta tool analysis, highlights its potential as a targeted marketing avenue.

Digital Device Landscape and Connectivity in Pemba

The proliferation of smartphones, albeit lagging behind feature phones in penetration rates, underscores a pivotal shift in consumer behavior and access to digital services. With over 100,000 smartphones estimated to be in circulation within Pemba, understanding the preferences and usage patterns associated with these devices assumes paramount importance in crafting tailored communication strategies.

Furthermore, the affordability of mobile data, coupled with competitive data rates offered by major telecommunications providers, has democratized internet access to a significant extent. Despite challenges in fixed data penetration, mobile devices remain the primary

conduit for internet connectivity, shaping digital inclusion efforts and communication dynamics within Pemba.

2. Methodology and Data Collection

The following research methodology, data collection, and data analysis techniques were used in the study to obtain a more comprehensive understanding of the use of digital channels in Pemba Island, Tanzania.

The research was conducted specifically in the Pemba Kaskazini and Pemba Kusini regions of the Republic of Tanzania between March 14th and March 26th of 2024.. Alfluence used several techniques to collect and analyze public data, including some of the following:

- We conducted a thorough analysis of multiple authoritative sources. These included but were not limited to the Tanzania Communications Regulatory Authority, the Tanzania National Bureau of Statistics, the Tanzania Demographic and Health Survey, the Administrative Units Population Report, as well as the World Bank Poverty Assessment Report specifically focusing on Zanzibar and Pemba. This comprehensive approach ensured a robust and well-rounded dataset for our survey analysis.
- We conducted in-person interviews with telecommunications experts situated within Tanzania. These interviews were meticulously designed to gather firsthand insights and perspectives from knowledgeable individuals within these respective fields. Through direct engagement with experts, we sought to obtain nuanced and contextual understanding crucial to our research objectives.
- We employed advanced data mining techniques alongside audience insights tools native to diverse digital platforms. This strategic approach allowed us to harness a wealth of information from online sources, enabling us to capture nuanced trends and patterns relevant to our research objectives. By leveraging these sophisticated digital tools, we ensured a comprehensive and insightful analysis of the data landscape pertinent to our survey.

3. Limitations and Constraints

Despite the robust methodology employed, several limitations and constraints were encountered during the research process.

One limitation pertained to the availability and reliability of data from secondary sources, specifically regarding the data usage habits of Pemba residents which is sensitive data for telecommunication companies and so some were not willing to share, which could have influenced the depth and accuracy of the analysis.

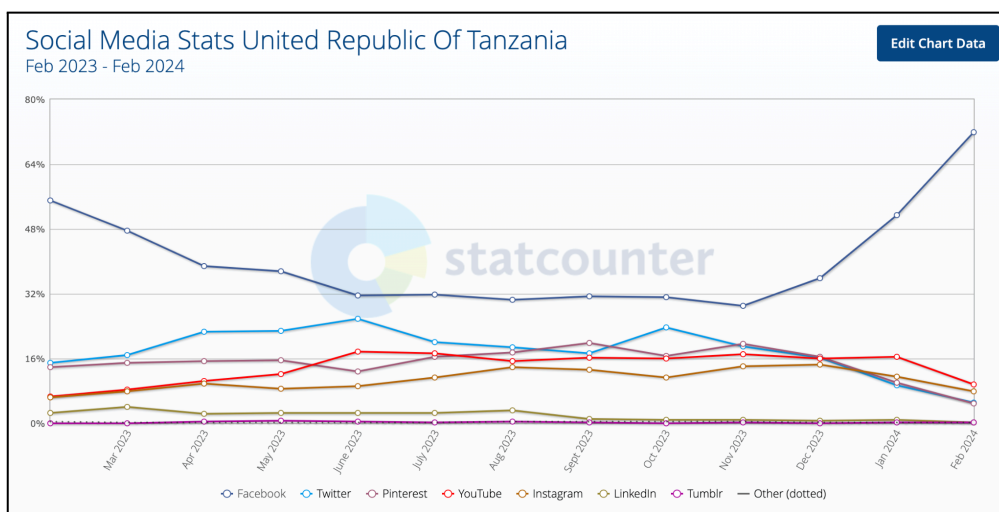
Additionally, the inherent biases and subjectivity associated with qualitative data analysis pose challenges in ensuring objectivity and validity in interpretation. Moreover, it's worth noting that with more time and additional funding, we would have incorporated surveys amongst Pemba residents, supplementing the existing surveys. This would have provided a more holistic understanding of the community's perspectives and enriched the study's findings.

Future research endeavors may benefit from addressing these challenges through enhanced primary data collection strategies and methodological refinements.

4. Available and Preferred Digital Channels of Communication

Data published in the ad planning tools of top social media platforms indicates that significant reach can be achieved through digital channels in Pemba. Meta platform can reach up to 2% of the Pemba population, this is followed by Whatsapp, Tiktok and Instagram. Key to note is that 18% of the Pemba population falls within the 15-24 age bracket and makes up the bulk of the most active social media users in Pemba.

In coming up with estimated channel use preferences in Pemba, we analyzed the national data as reported in the TCRA report which gives a nationwide overview of usage as broken down below:



Source: Statcounter Report 2024

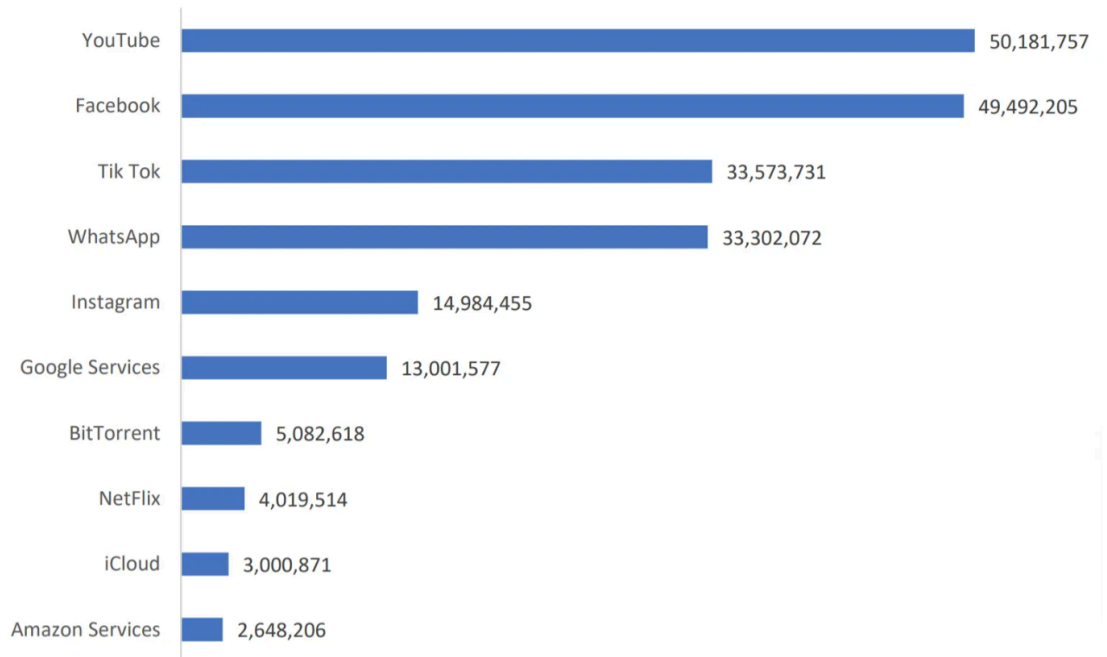
During the quarter ending June 2023, the service that used more bandwidth (in GBs) at country level was YouTube with a total of 50.18 million GBs because video streaming services consumed more bandwidth than other services.

The second was Facebook with 49.49 million GBs mostly due to video services. Third was the video hosting service TikTok with 33.57 million GBs.

These numbers analyzed against the internet penetration, smartphone ownership and population make-up of Pemba give reflective data on usage patterns within Pemba.

Youtube and Tiktok are video-based platforms and as a result, consume higher data amounts compared to other platforms like Whatsapp, but this does give an indication of where Tanzanians spend most of their data and consequently their time online. Which is broken down as follows:

- Facebook
- Whatsapp
- TikTok
- Instagram



Source: TCRA 2022

In terms of numbers, the TCRA 2022 report showed 3,487,383 IP addresses accessed Facebook in a day, followed by WhatsApp at 3,415,917.

Youtube had 2,846,839, Instagram at 2,610,509 and TikTok at 1,601,392.

With these databases, the Platforms with massive reach in Tanzania include Facebook, Instagram, Tiktok, WhatsApp and Youtube.

Facebook

As of January 2024, Facebook stands as the leading social platform in Pemba and across Tanzania, boasting a staggering user base of 4.35 million Tanzanians actively engaging with Meta platforms. This sizable user base underscores the platform's significance and influence within the region.

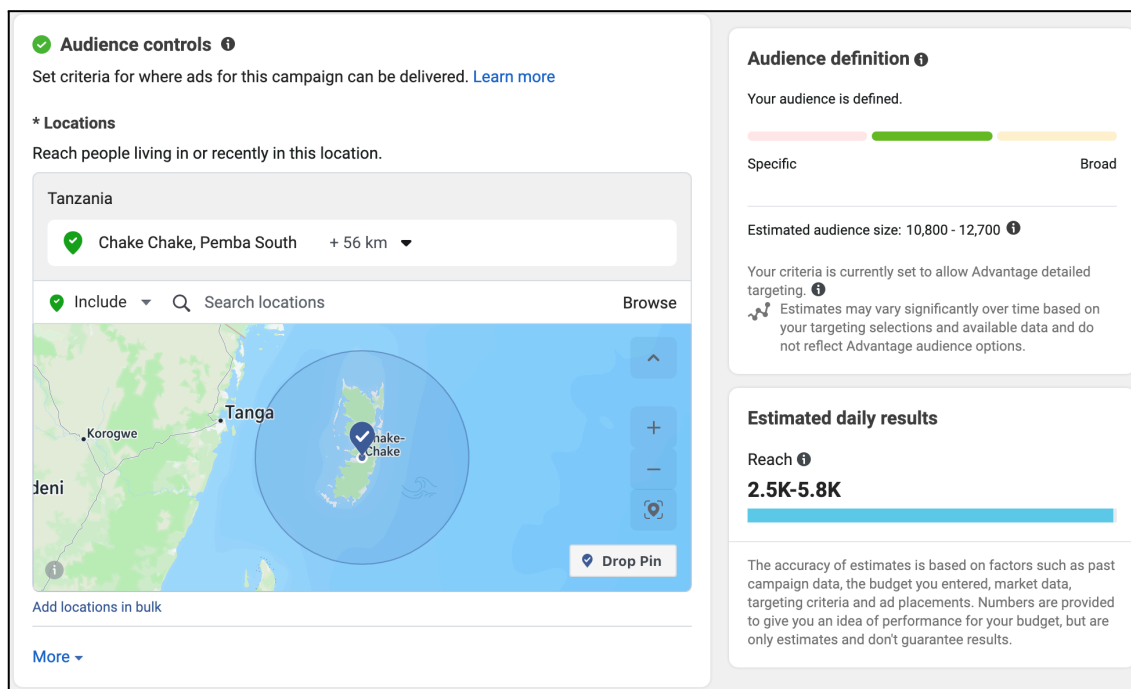
Analyzing the growth trajectory, Meta's audience insights data reveals an impressive surge in Facebook's potential advertising reach within Tanzania. Between January 2023 and January 2024, the platform witnessed a remarkable increase of 1.9 million users, representing a notable uptick of 48.7%. This surge underscores the platform's burgeoning relevance and reach within the Tanzanian market.

At the outset of 2024, Facebook's advertising reach in Tanzania amounted to 8.3% of the total population.

Further dissecting the demographic landscape, it's notable that at the commencement of 2024, 40.4% of Facebook's advertising audience in Tanzania comprised females, while males constituted 59.6%. This gender distribution provides valuable insights into the

platform's user demographics, aiding in targeted marketing strategies.

Meta's insights tools also indicate that the reach within Pemba accounts for over 2% of the region's population. While this figure may appear relatively modest compared to the national reach of 8.3%, it's essential to contextualize this statistic. Considering the average household size in Pemba stands at 5.7 members, the platform's reach extends significantly, encompassing over 80,000 residents. This reach assumes heightened significance when juxtaposed with the overall population of Pemba, standing at 540,000 individuals.



Source: Meta Audience Insights tool

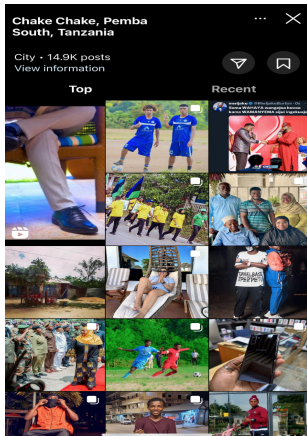
Instagram

The most recent report from the Tanzania Communications Regulatory Authority (TCRA) provides insightful data regarding Instagram usage within the region. According to the report, approximately 2,601,392 unique IP addresses engage with Instagram daily in Tanzania. This figure underscores the substantial digital footprint and connectivity of the populace.

With a burgeoning internet user base exceeding 34 million individuals across Tanzania, leveraging Instagram emerges as a strategic avenue to effectively engage with the younger demographic segments within the nation, including those residing in the Pemba region.

A closer examination of Instagram activity unveils a notable trend within the Pemba community. Recent analysis indicates a robust level of engagement, with over 14,000 posts directly associated with the Pemba region. This heightened level of digital interaction underscores the potential for targeted marketing and outreach efforts within

this specific locale, presenting an opportunity for tailored campaigns aimed at resonating with local youthful audiences.



Source: Instagram app

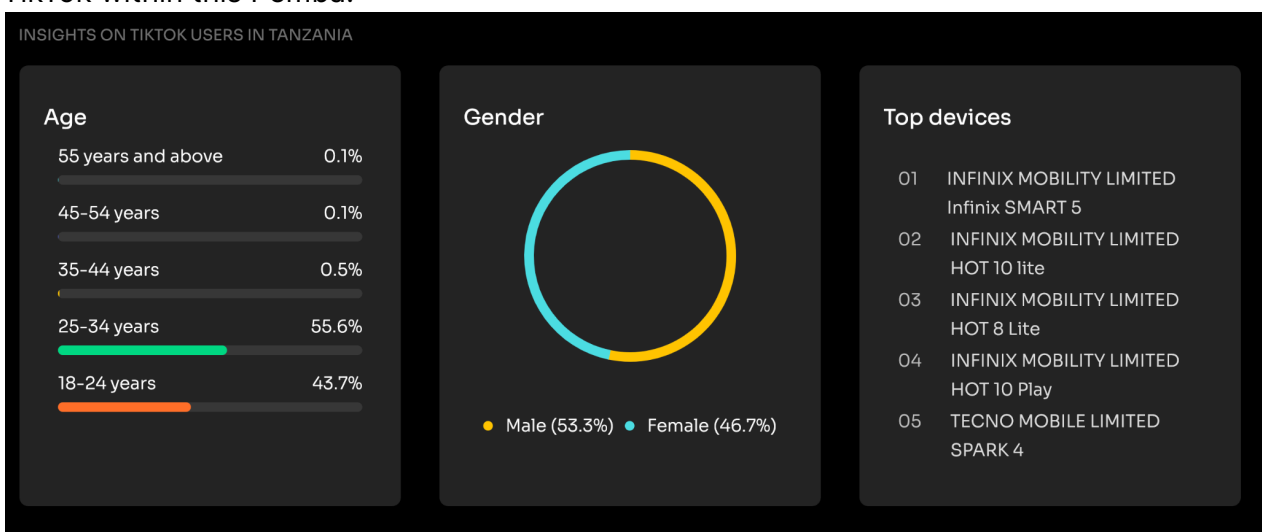
Consumption of Instagram content is not tied to Pemba-specific content. An analysis of active accounts in the Pemba region shows that the majority follow national accounts and are not limiting their content or creator consumption specifically to the Pemba region.

TikTok

TikTok has emerged as a prevalent platform among the younger demographic segments in Tanzania, showcasing a pronounced appeal to the tech-savvy populace. According to insights derived from Start.io, a notable 55.6% of TikTok users within Tanzania are 25 to 34 years old, signifying a substantial portion of the platform's user base hailing from this age cohort.

The platform's expansion trajectory within Tanzania has been marked by considerable strides, particularly resonating with the country's vibrant youth demographic.

While precise data specific to the Pemba region is not available, extrapolating from national averages provides valuable insights into the potential reach and penetration of TikTok within this Pemba.



Source: Start.io 2024

X(Twitter)

X (Twitter) audience insights tool indicates that X has 625 thousand users in Tanzania, with the majority of that audience concentrated within the larger cities including Dar es Salaam.

The screenshot displays the 'Demographics' and 'Audience summary' sections of the X (Twitter) Audience Insights tool for Tanzania.

Demographics Section:

- Instruction: "Narrow your audience based on their gender, age, and location."
- Gender:** Three buttons: 'Any' (selected), 'Women', and 'Men'.
- Age:** Two radio buttons: 'All' (selected) and 'Age range'.
- Location:** Two tabs: 'Specific locations' (selected) and 'Radius around a location NEW'.
- Location Search:** A search bar with the placeholder text 'Search' and a magnifying glass icon.
- Include:** A list of filters with an 'x' icon to remove them. One filter is visible: 'Country — Tanzania x'.

Audience summary Section:

- Reach potential:** 565.8K - 625.3K.
- Demographics:** A list of filters:
 - Gender: Any
 - Age: Any
 - Location: Tanzania

This translates to 0.9% of the total population of Tanzania. The X platform's latest data indicated that 12.3 percent of X's ad audience in Tanzania was female, while 87.7 percent was male.

These low numbers when calculated backward against penetration of smartphones and the population of Pemba, give a bleak picture of potential X reach in the region hence disqualifying X as an effective platform for reaching Pemba residents.

5. Most Used Type of Digital Devices

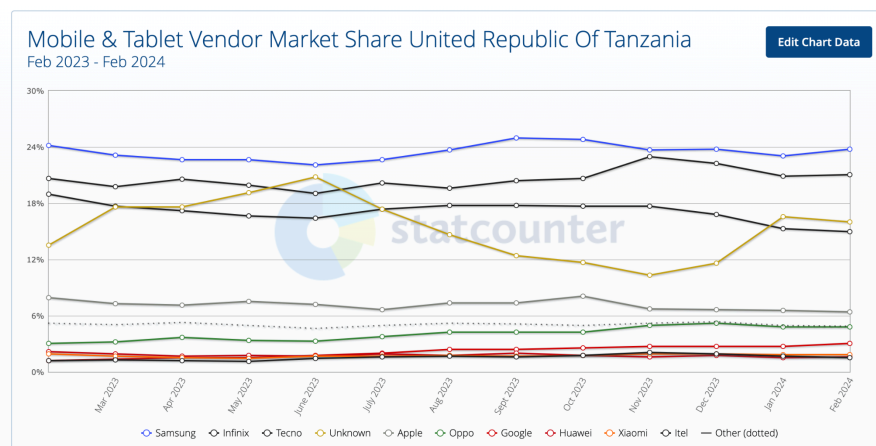
Mobile phones

The Tanzanian telecommunications landscape reveals a notable disjunction between feature phones and smartphones. Although feature phones maintain a dominant penetration rate of 85.62 percent, smartphones lag significantly behind at only 32.13 percent. This is particularly striking given the pivotal role that smartphones play in propelling internet adoption.

According to data from Start Counter, a reputable global web analytics service, Samsung asserts its dominance in the Tanzanian phone market with a substantial share of approximately 24 percent, closely trailed by Infinix at 21 percent.

Moreover, an overwhelming majority of smartphones in Tanzania, over 95 percent, operate on the Android platform, highlighting a strong preference for the Android ecosystem among consumers.

With smartphone acquisition pointing mainly towards the youthful population, these insights underscore the critical importance of understanding and harnessing the potential of smartphones in reaching younger audiences in Tanzania and by extension the Pemba youth.



Source: Statcounter report 2024

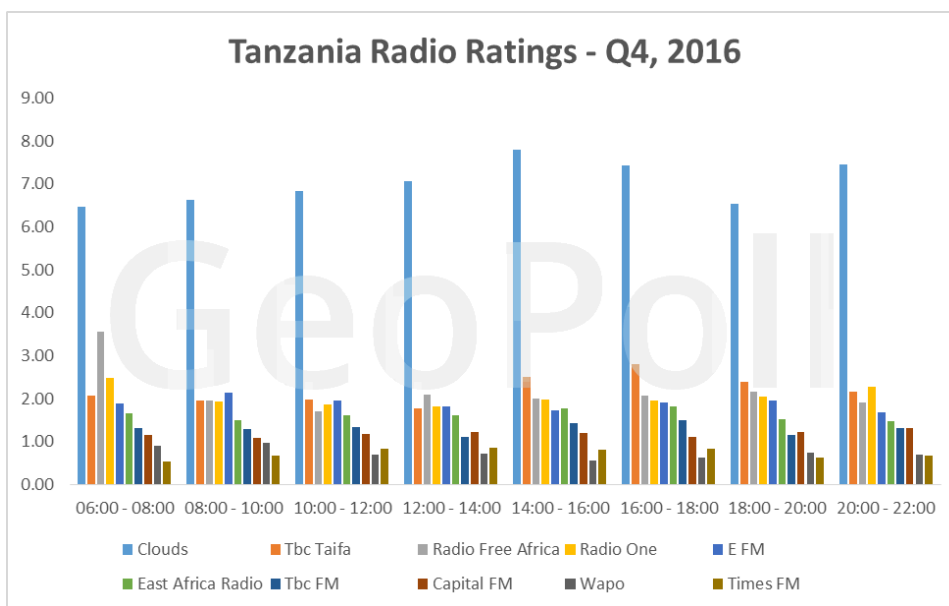
The total number of smartphone owners countrywide against the local Pemba population puts over 180,000 smart devices in the hands of residents of Pemba. On a global scale, 87% of residents of Pemba have access to a mobile phone.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	20
Mbeya							0.01	1.64	3.28	4.91	12.2	19.5	26.8	34.1	41.5	48.8	54.0	59.2	64.4	69.6	74.8	80.0	85.2	90.4				
Morogoro							0.01	4.01	8.01	12.0	17.8	23.6	29.4	35.2	41.0	46.8	51.7	56.7	61.7	66.7	71.7	76.6	81.6	86.6				
Mtwara							0.01	0.35	0.68	1.02	5.06	9.10	13.1	17.2	21.2	25.3	34.3	43.3	52.3	61.3	70.3	79.3	88.3	97.4				
Mwanza, Geita							0.01	2.83	5.64	8.46	14.5	20.5	26.6	32.6	38.6	44.7	51.0	57.4	63.8	70.2	76.6	82.9	89.3	95.7				
Pemba North							0.01	3.55	7.09	10.6	18.1	25.5	32.9	40.3	47.7	55.2	61.7	68.2	74.7	81.2	87.7	91.8	95.8	99.9				
Pemba South							0.01	4.28	8.54	12.8	20.0	27.3	34.5	41.7	49.0	56.2	62.7	69.2	75.7	82.2	88.7	92.4	96.2	99.9				

Radio

Radio is the most frequently accessed form of media, with 32% of women and 52% of men aged 15–49 listening to the radio weekly.

Amongst the top 10 stations, Clouds achieves the top spot with an average of 23.6% followed with a great difference by Tbc Taifa averaging 7.5% and a slight difference from Radio Free Africa which achieves the third position with an average of 7.3%.



Source: Geopoll radio insights survey

Television

Television ownership is relatively low in the Pemba region according to year-on-year analysis

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	20
Mbeya	0.00	0.00	0.50	0.61	0.91	1.11	1.32	1.52	1.73	1.93	3.59	5.24	6.90	8.56	10.2	11.9	12.6	13.3	14.1	14.8	15.5	16.2	17.0	17.7				
Morogoro	0.81	0.76	0.65	0.53	0.42	2.03	3.64	5.24	6.85	8.46	8.17	7.89	7.60	7.31	7.03	6.74	8.17	9.60	11.0	12.5	13.9	15.3	16.7	18.2				
Mtwara	0.00	0.00	0.00	0.00	0.00	0.20	0.39	0.59	0.78	0.98	1.89	2.80	3.71	4.62	5.53	6.44	7.35	8.27	9.18	10.1	11.0	11.9	12.8	13.8				
Mwanza, Geita	0.24	0.32	0.98	1.63	2.29	2.80	3.31	3.81	4.32	4.83	5.90	6.97	8.04	9.11	10.2	11.3	11.9	12.5	13.1	13.7	14.3	14.9	15.6	16.2				
Pemba North	2.29	1.79	3.60	5.42	7.23	6.25	5.27	4.30	3.32	2.34	3.65	4.95	6.26	7.56	8.87	10.2	11.4	12.6	13.8	15.0	16.3	17.5	18.7	19.9				
Pemba South	1.27	1.50	1.76	2.02	2.28	3.12	3.96	4.80	5.64	6.48	8.11	9.73	11.4	13.0	14.6	16.2	17.3	18.3	19.4	20.4	21.5	22.5	23.5	24.6				

Clouds take the lead in share nationally with an average of 19.6% followed by East Africa TV with an average of 17.2%. ITV achieves the third position with an average of 17.0%, and TBC1 sits in fourth with an average of 10.8%

6. Costs of Mobile Communication and Internet Connectivity Solutions

Our analysis indicates that data costs in Tanzania, and by extension Pemba, are notably affordable. The primary telecommunications providers in the region, namely Airtel, Halotel, Tigo, Vodacom, and TTCL, have established their data rates at approximately 9 Tanzanian shillings per megabyte (MB). Which is within reach of most residents.

This pricing structure has made internet data accessible to a significant portion of the population in the Pemba region. According to data sourced from household income surveys conducted in Tanzania, households in economically challenged areas typically allocate 63% of their income towards food expenses, leaving 37% for other essentials, including communication services.

Despite the affordability of mobile data, fixed data penetration remains relatively low in Pemba. Consequently, residents primarily rely on mobile devices to access the internet.

Table 1.2.2b Data tariffs

Operator	Cost per MB(Tzs)
AIRTEL	9
HALOTEL	9
TIGO	9
VODACOM	9
TTCL	9
Industry Average	9

The average cost of smartphones

According to the *Zanzibar Broadcasting Commission*, the average cost of smartphones in Pemba is \$29.09. This figure is a critical metric for assessing accessibility to digital connectivity within the community.

Expanding on this data, it's essential to contextualize this cost relative to the average earnings of Pemba residents. Therefore, the average cost of a smartphone represents approximately 34% of the average monthly income. This makes phones within reach of Pemba residents.

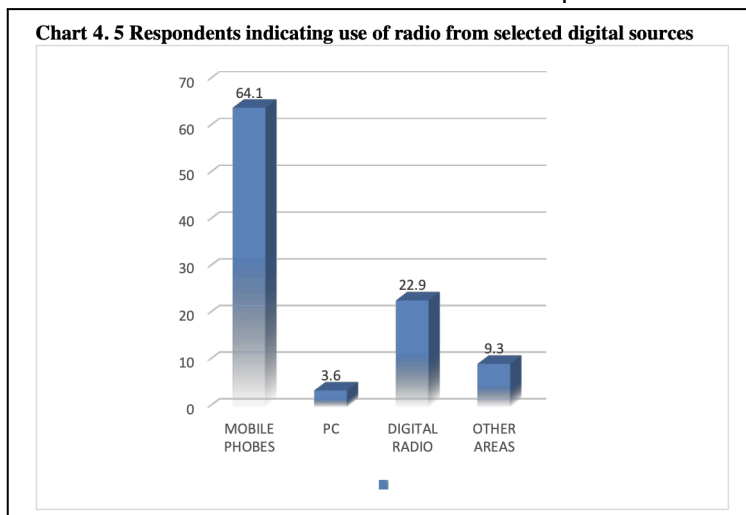
7. Available and Preferred Digital Formats of Communication

From aggregated data based on National surveys on smartphone penetration and access to the various communication channels. The use of digital formats is broken down as follows within the Pemba region.

Youthful population: The young population across Tanzania has fully embraced digital formats of communication with TCRA report ranking their usage patterns around the key channels including Facebook, Tiktok, Whatsapp and Youtube.

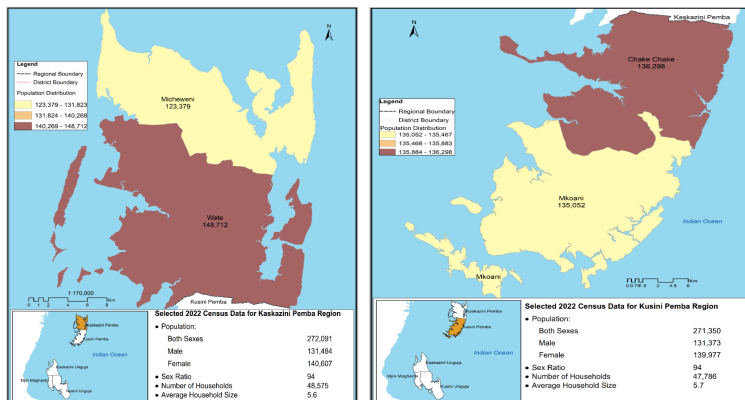
Older Population: The slightly older population within Pemba leans more towards the traditional formats of communication including radio and television to access information. Radio is the most frequently accessed form of media within this category with 32% of women and 52% of men listening according to Geopoll which tracks radio listenership in Tanzania.

64.1% of residents of Pemba use mobile phones to listen to radio.



Source: Zanzibar Audience Survey 2022

Though there is very low TV ownership within Pemba the Geopoll survey indicated the audience viewed TV at least once a week.



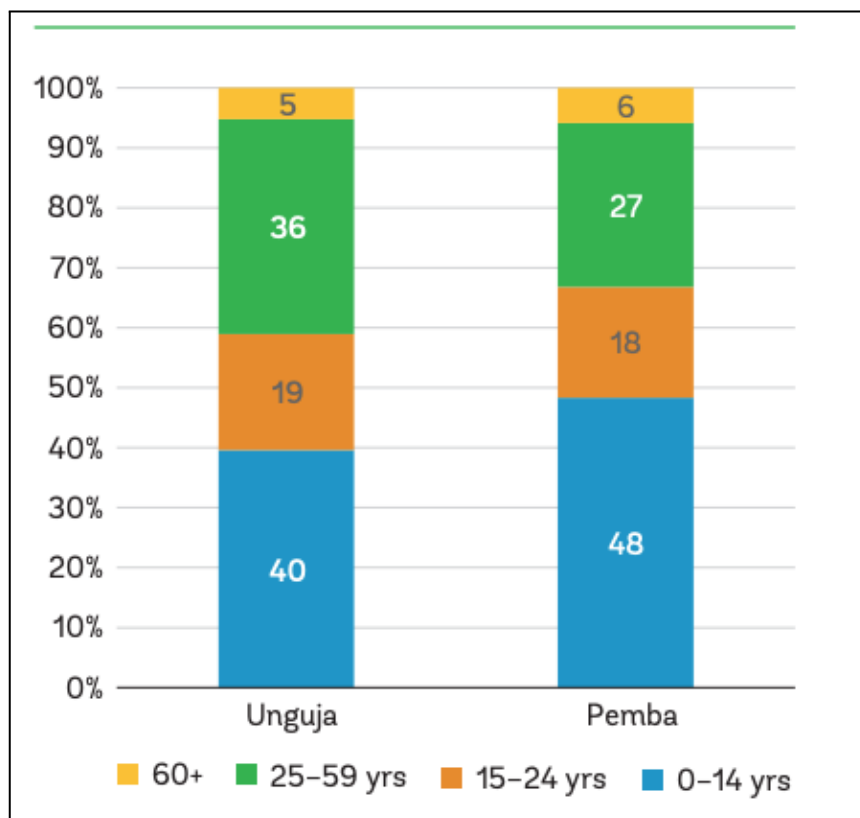
Source: Administrative Units Population 2022 Report -Tanzania

8. Identification of Demographic Segments Using Digital Tools

Pemba exhibits a distinctive demographic profile characterized by a notably youthful population. Comparative research conducted between Pemba and Unguja reveals a significant demographic contrast, with nearly half of Pemba's populace aged below 15 years. Furthermore, only slightly over a quarter, specifically 27 percent, falls within the age range of 15 to 60 years.

Consequently, a mere 18 percent of Pemba's population falls within the youth bracket of 15 to 24 years.

An in-depth analysis of household budget surveys underscores a prevailing trend: data consumption predominantly occurs within the demographic segment aged between 18 and 35. This observation, derived from a comprehensive nationwide dataset, is indicative of the usage patterns within the corresponding age cohort in the Pemba region.

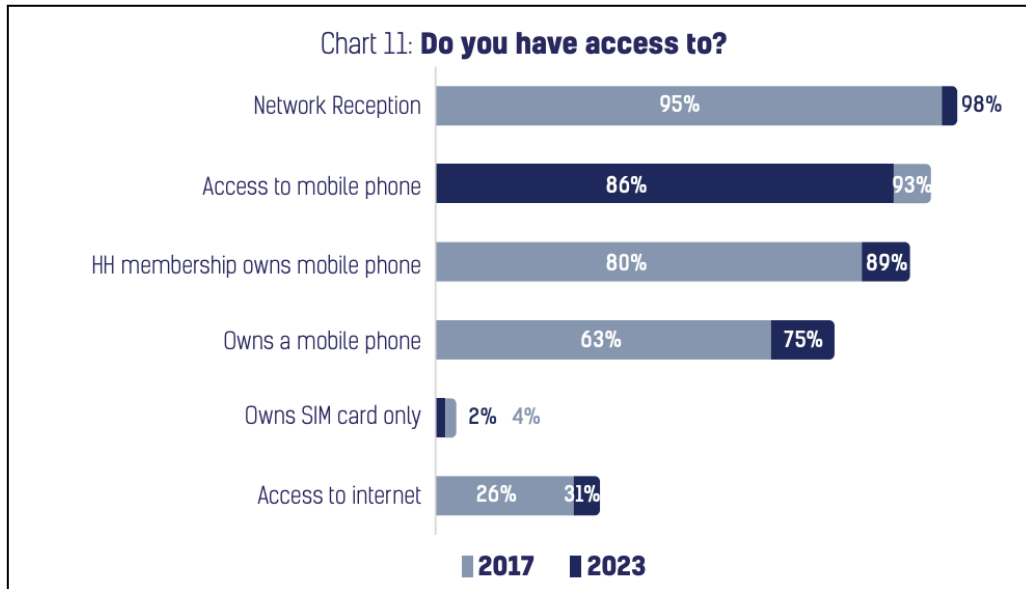


Source: Household Income Survey Tanzania 2022

Although mobile phone ownership has increased by 12%-points there are important disparities. While 80% of men claim mobile phone ownership, only 71% of women do so.

Further, among younger youth, 16-24 years, 61% claim to own a mobile phone. A rural-urban gap can be observed, with only 69% of Tanzanians in rural areas owning a mobile phone vis-a-vis 85% of Tanzanians located in urban areas.

Network reception continues to be good, with 98% of respondents indicating network coverage in their area.



Source: FinScope Tanzania 2023 (March-April 2023) & FinScope Tanzania 2017 (April-July 2017)

9. Recommendations

Based on data from our analysis, we make the following recommendations:

1. Strategic Platform Utilization:

Primary Platforms: Focus on leveraging Facebook and WhatsApp due to their widespread adoption and engagement within Pemba. Develop targeted communication strategies to maximize reach and impact on these platforms.

Secondary Platforms: Utilize Instagram and TikTok to extend engagement opportunities, particularly among younger demographics. Tailor content to align with the preferences and behavior of each platform's user base.

2. Content Format Optimization:

Emphasize the creation of video-centric content to align with the dominant consumption patterns observed, especially on platforms like YouTube and TikTok. Incorporate visually engaging and culturally relevant content to resonate with Pemba's diverse audience.

3. Community Engagement Initiatives:

Foster community engagement through interactive content formats, such as polls, Q&A sessions, and user-generated content campaigns. Encourage user participation and dialogue to strengthen connections and build trust.

4. Localized Outreach Strategies:

Tailor communication strategies to reflect the unique cultural and linguistic nuances of Pemba. Engage local influencers and community leaders to amplify messaging

and increase relevance within the target audience.

5. Mobile-Friendly Approach:

Ensure all digital content and communication channels are optimized for mobile devices, considering the prevalence of smartphone usage in Pemba. Prioritize responsive design and lightweight content formats to enhance accessibility and user experience.

6. Data Affordability Initiatives:

Advocate for policies and initiatives aimed at further reducing data costs and improving internet accessibility, particularly in rural areas where fixed data penetration remains low. Partner with telecommunications providers and regulatory authorities to address affordability barriers.

7. Youth Empowerment and Education:

Invest in digital literacy programs and skills development initiatives targeted at empowering Pemba's youth to effectively navigate and utilize digital tools. Equip them with the necessary knowledge and resources to harness the potential of digital communication for personal and community development.

8. Continuous Monitoring and Evaluation:

Establish robust monitoring and evaluation mechanisms to track the effectiveness of digital communication initiatives over time. Regularly assess key performance indicators (KPIs) and gather feedback from the target audience to inform iterative improvements and strategic adjustments.

10. Conclusion

In conclusion, this report sheds light on the intricate dynamics of digital communication within Pemba, Tanzania, presenting valuable insights and actionable recommendations for stakeholders such as Norwegian Church Aid (NCA) and other organizations invested in the region's development. By understanding the prevailing digital consumption patterns, platform preferences, and demographic nuances, stakeholders can tailor communication strategies to foster inclusive engagement and drive positive socio-economic outcomes. Leveraging platforms like Facebook, WhatsApp, Instagram, and TikTok, while prioritizing video-centric content and mobile-friendly approaches, holds the potential to maximize reach and impact within the diverse Pemba community. Moreover, initiatives aimed at improving data affordability, promoting digital literacy, and empowering youth can further enhance the effectiveness and sustainability of digital communication efforts in Pemba. Incorporating influencer-driven campaigns into advocacy initiatives would be particularly recommended, as they can effectively amplify messaging and resonate with target audiences on a personal level. Through continuous monitoring, evaluation, and iterative improvements, stakeholders can navigate the evolving digital landscape to create meaningful connections, empower communities, and catalyze lasting change in Pemba, Tanzania.