

Pakistan Market Report

DEAFTAWK CASE STUDY



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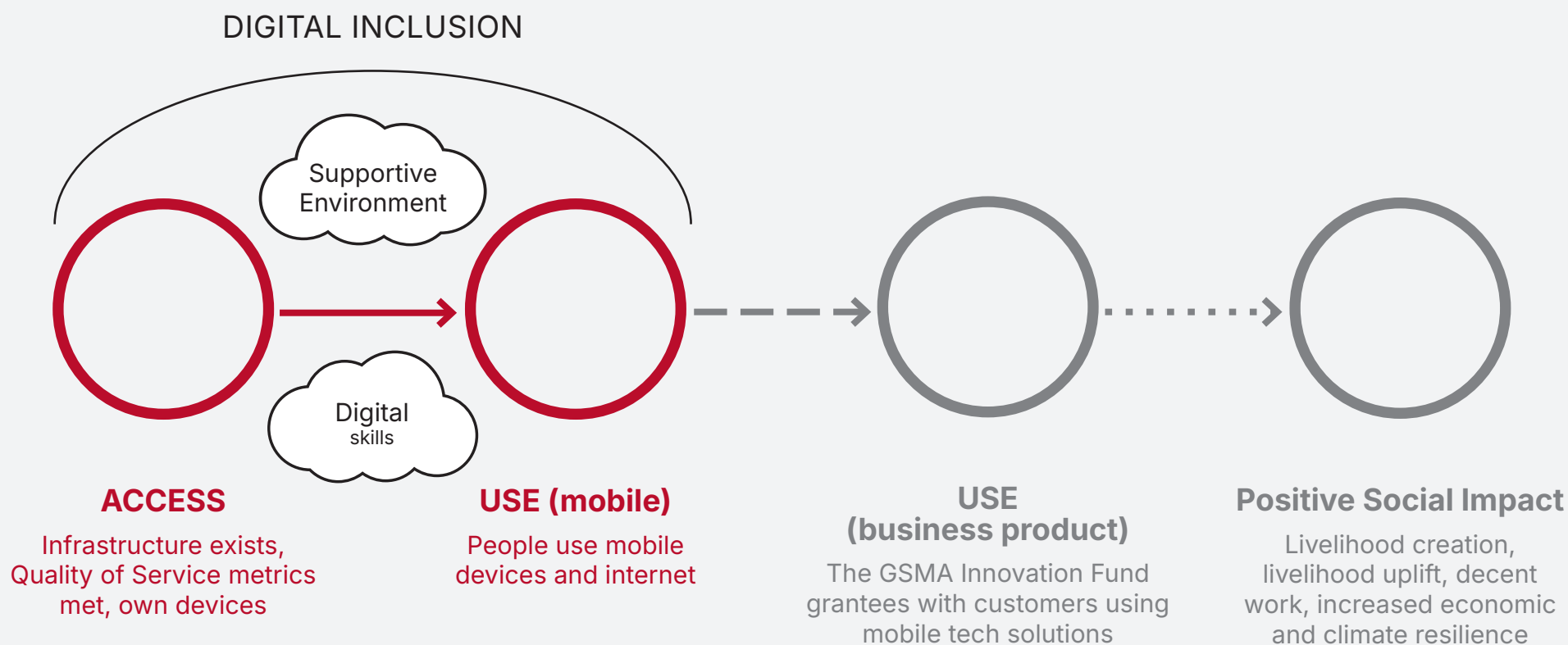
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Background

The GSMA Innovation Fund accelerates digital tech solutions that are addressing key global challenges. Through grant funding and tailored technical assistance, we position innovative organisations in low- and middle-income countries (LMICs) to scale operations and amplify social and environmental impact.

Figure 1 draws the pathway from digital inclusion and the use of mobile, to the use of mobile tech solutions, to positive social impacts.

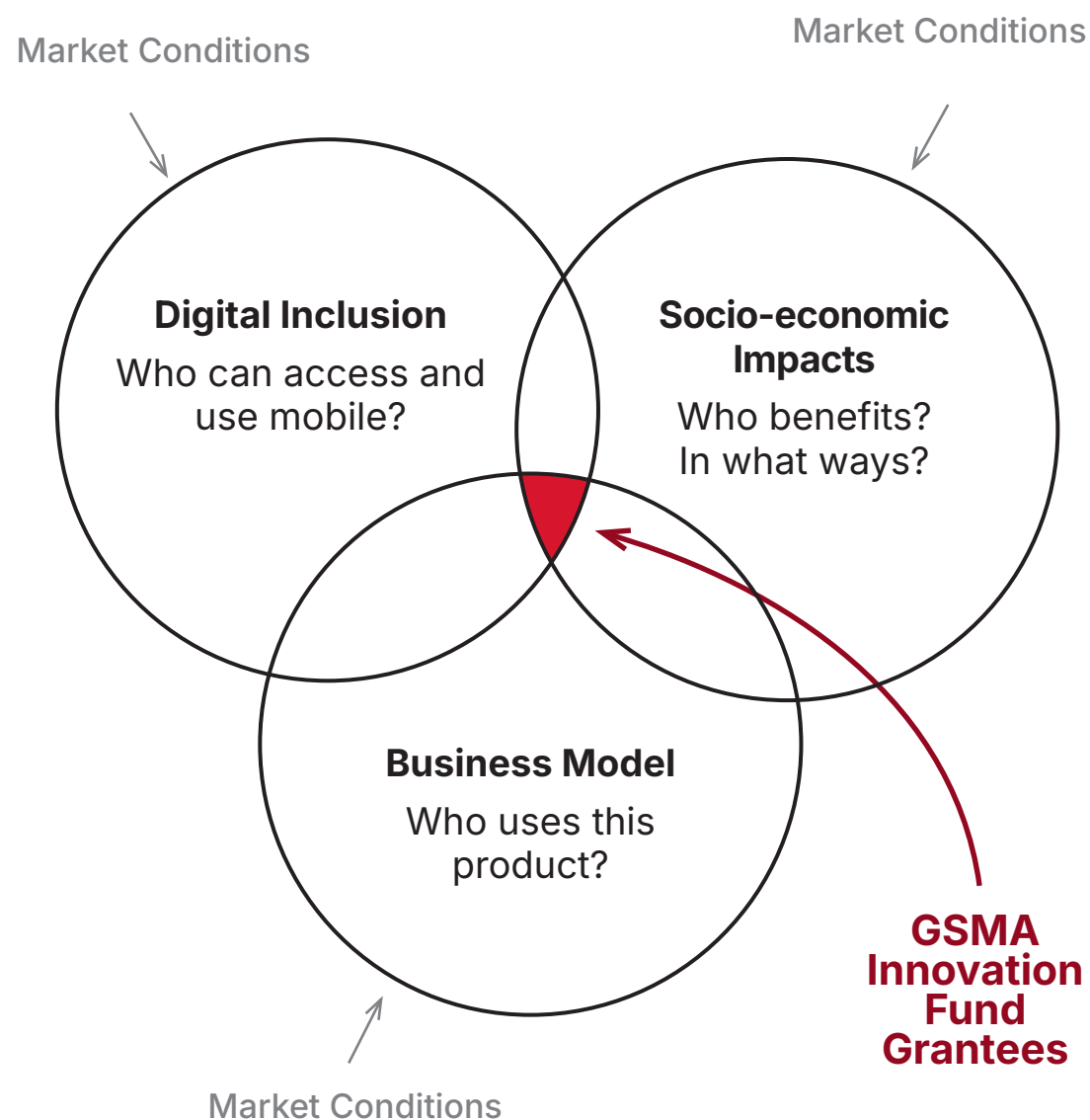
Figure 1



However, digital inclusion, product use and positive social impact are not necessarily linear as depicted in the figure, nor are they dependent on one another or even mutually exclusive. The GSMA Innovation Fund is conducting a series of case studies exploring the intersections of and relationships between these concepts. All three domains are also subject to influence from context-specific market conditions. The GSMA Innovation Fund looks to fund the “sweet spot” (see figure 2) of business models that include digital inclusion as part of a main value proposition and which lead to positive impacts for end users and communities.

This is one of three cases highlighting the digital innovation environment in Pakistan. Look for the other cases in this series on the GSMA Innovation Fund grantees Vceela and Orenda.

Figure 2



DeafTawk at a glance

DeafTawk is a mobile app that provides real-time sign language interpretation services for individuals and businesses.

Founded

2018

GSMA Innovation Fund

Round 2, Assistive Technology, from March 2021-August 2022

Sector

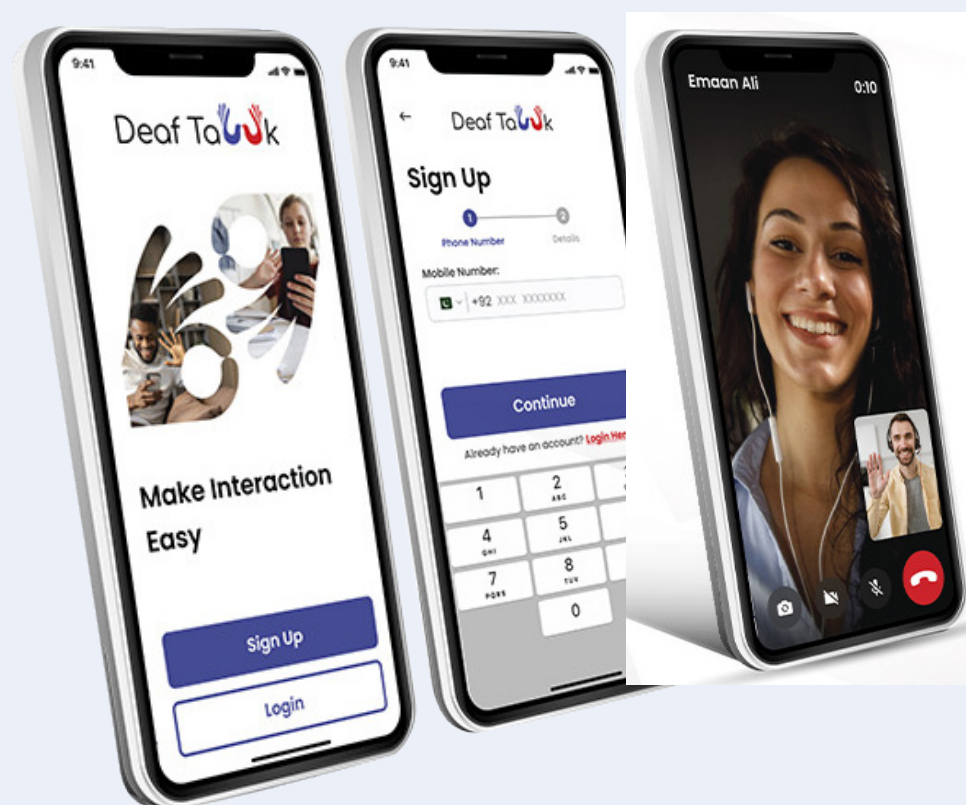
Assistive technology, sign language interpretation

Size

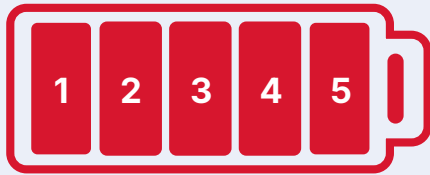
For operations in Pakistan, in the beginning of 2025, DeafTawk had 76,800 users, 28 Pakistani business customers, and offered services in four languages (Tamil Sign Language, Pakistani Sign Language, American Sign Language, Danish Sign Language).

Geographies

The company hosts ground operations in Pakistan and Singapore, and operates in those countries as well as Denmark, the United States, Kenya and soon Malaysia. The company is also piloting licensing as a model for operations in Sri Lanka.



Role of mobile



The degree to which products rely on mobile technology to deliver benefits, where 1 could deliver without mobile and 5 mobile is entirely necessary.

5/5 DeafTawk relies on mobile technology for user benefits.

Mobile provides benefits of:

Proximity – enabling connections across distance

DeafTawk connects users to sign language interpreters without having to share the same physical space. This substantially increases access to the service and ease.

Timeliness - enabling faster and more immediate transactions

Services are available on demand within a matter of moments, increasing opportunities to use sign language interpretation and realising improved communication in a variety of circumstances.

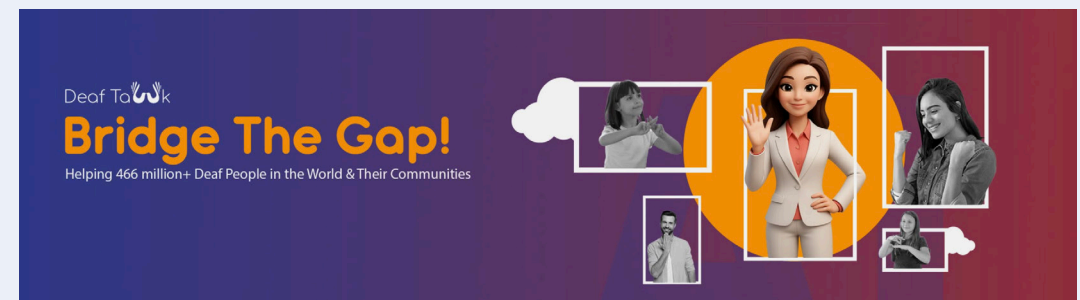
Customisation – enabling more tailored and user-specific experiences (e.g. via GeoTag, Unique ID, algorithm etc.)

DeafTawk's solution is customisation in and of itself because it allows users to receive translation for their own specific needs. Additionally, being able to request a female interpreter or an interpreter with specific industry experience adds to users' experience getting the sign language interpretation they need.

DeafTawk's Impact

DeafTawk is delivering impacts for users, particularly in increased independence, confidence, and access to opportunities and services. A large majority of users report being able to communicate independently (82%) and no longer relying on family members for support (87%). Impacts include economic benefits, with most users reporting easier access to workplace communication and financial services. However, outcomes are not uniform across all user groups. Men consistently report stronger benefits than women, reflecting structural inequalities more likely to limit women's access to mobile devices and the public sphere generally.

Differences across user groups further highlight how context and product use shape impact. Rural users report particularly strong gains in social inclusion and quality of life; users engaging with the platform more frequently reported stronger outcomes across all measured dimensions. DeafTawk's impact is most pronounced where it intersects with high usage and greater need.



Case study: Leveraging mobile technology for accessibility and inclusion

DeafTawk seeks to bridge communication gaps between deaf and hearing individuals, creating greater inclusion through accessible, quality sign language interpretation services. DeafTawk offers:

- **On-demand, live interpretation via mobile application:** Users can instantly connect with certified interpreters through video calls to interpret for in-person or virtual interactions.
- **Scheduled in-person, on-site interpreting:** DeafTawk helps arrange in-person interpreters for planned events or appointments where physical presence may be preferred or required.
- **AI-generated sign language for text or audio interpretation:** AI-driven tools that translate digital content into sign language to complement human interpretation and provide support for less-complex situations.
- **Subscription service for sector-specific and customised business accessibility solutions:** Businesses can subscribe to tailored packages that integrate interpretation services into their operations, improving accessibility across customer service channels.
- **Sign language development, education and dictionary services:** The platform supports the growth and standardisation of sign language.
- **Platform for community, jobs and content creation:** DeafTawk is looking to evolve into a “Facebook for the Deaf community,” where users can access employment opportunities, resources, and eventually create and share their own content.



Methods

This study considered DeafTawk's impact on both deaf users and interpreters providing services through the platform. Data collection took place from December 2025-March 2026 and included:

- A survey with 306 app user respondents and a survey of 152 interpreter respondents. Respondents had been registered on DeafTawk's platform for a minimum of three years and active in the prior 12 months. The sampling for data collection ensured equal gender representation and pulled equal representation across Pakistan's provinces, with the exception of Islamabad Capital Territory. The sample is representative of DeafTawk's user base, not Pakistani citizens of deaf individuals generally.
- Eight focus groups with app users
- Two focus groups with sign language interpreters
- Literature review of program documents from DeafTawk's time as a grantee with the GSMA Innovation Fund, as well as external literature
- Validation sessions with members of the GSMA Innovation Fund team and DeafTawk leadership.

This study builds on an impact report completed by 60_decibels in December, 2022. The 60 Decibels study focuses only on DeafTawk's app users; it did not address the interpreter experience. The emerging AI sign language translation services, business customers, and users outside of Pakistan are outside the scope of both studies.



Who is using DeafTawk?

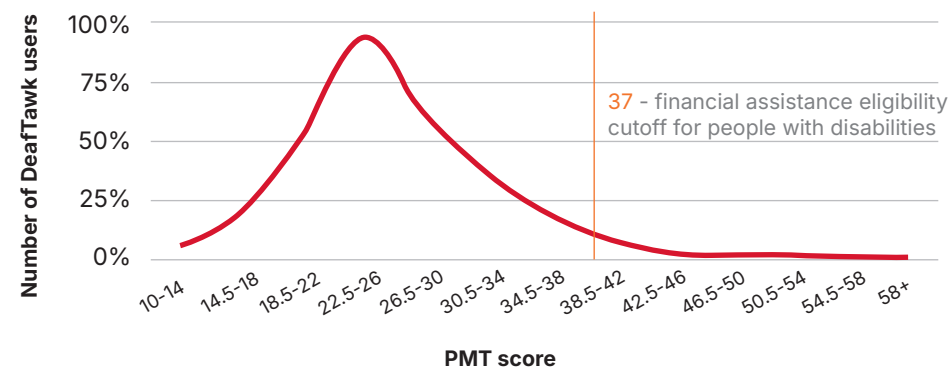
DeafTawk is designed to benefit individuals who are deaf or hard of hearing. The “typical” DeafTawk user is:

- Male, between the ages of 25-44, living in a city, who is almost equally likely to be employed or unemployed
- Educated with a high school diploma, and likely even a post-secondary degree
- Economically vulnerable, eligible but unlikely to actually be receiving public assistance
- Digitally connected, with regular access to mobile internet and likely owning a personal smartphone

We used the Proxy Means Test (PMT) to understand DeafTawk users’ economic status. The PMT evaluates a household’s income, assets, living conditions and social indicators to calculate a numerical score between 0 and 100. The lower the score, the more financially vulnerable the household is considered to be. The government of Pakistan uses the PMT to estimate household poverty levels and determine eligibility for social assistance programs. The cutoff scores for assistance eligibility are 32 and 37 for households including a person with a disability. Scores up to 40 are eligible for utility assistance and are still widely considered economically vulnerable.¹

In addition to deaf users, the other group that necessarily uses the platform and, ideally, benefits from it, are sign language interpreters. Read more about interpreters’ experience with and outcomes from using DeafTawk on page 25.

Most DeafTawk users considered poor by the nation’s PMT (n=306)



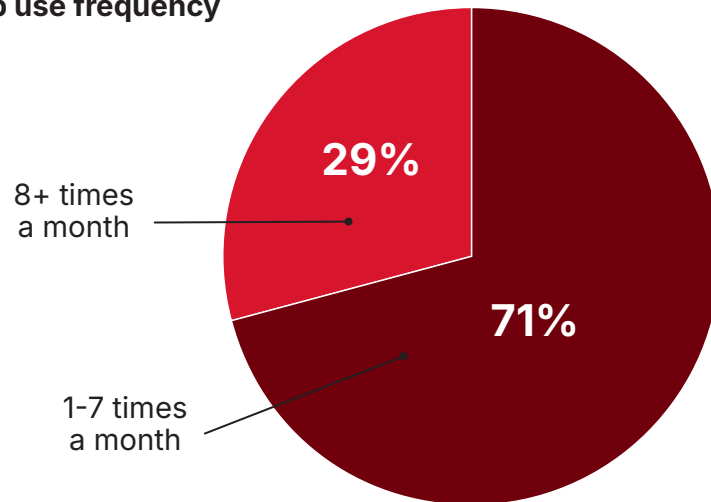
In context...

Category	Pakistan nationally	DeafTawk Users surveyed	Compared to national averages, DeafTawk Users are...
Education – high school	17% ²	22%	More highly educated
Education – above high school	10% ³	42%	
Urban	49% ⁴	87%	More urban
Unemployment rate	7% ⁵	45% (27% looking for work)	Less likely to be employed and more likely to be looking for work
Smartphone ownership	63% ⁶	95%	More likely to own a smartphone
Reliable mobile internet access	80% ⁷	90%	More likely to be connected to mobile internet

How users communicate using DeafTawk

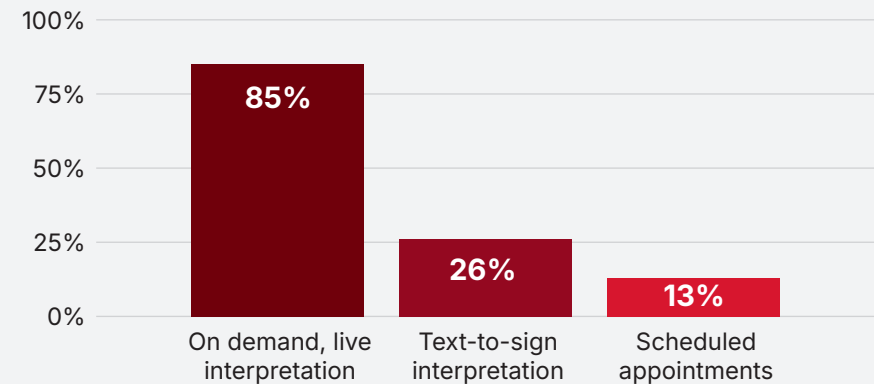
DeafTawk's most used service is on-demand live interpretation. Most users accessed DeafTawk less than 8 times a month (1-2 times per week). The most common use case for DeafTawk was to communicate with friends, family and community members, followed by for work and healthcare.

DeafTawk app use frequency
(n=306)



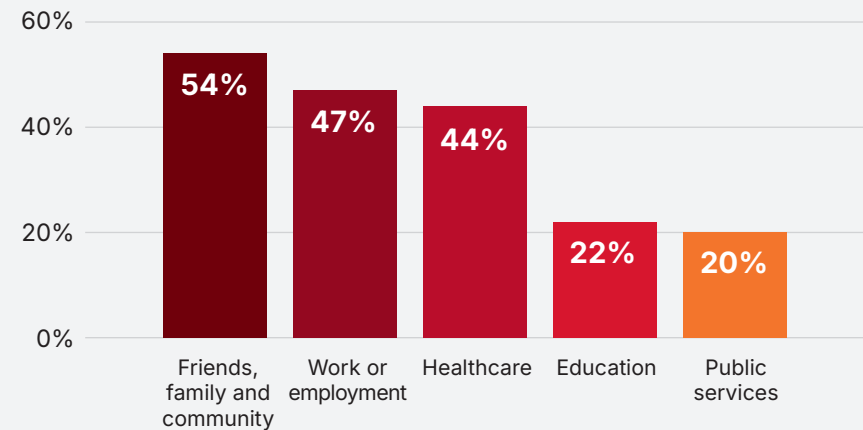
On average, users spend 585 PKR/month (1.60 GBP/month) on DeafTawk, with 65% of respondents spending less. For context, average monthly earnings range from 30,800 PKR (\$82 GBP) in informal sectors (which is the majority of the workforce) to 54,000PKR (145 GBP).⁸

DeafTawk services used (n=306)



DeafTawk services used (n=306)

I use DeafTawk for communication with...



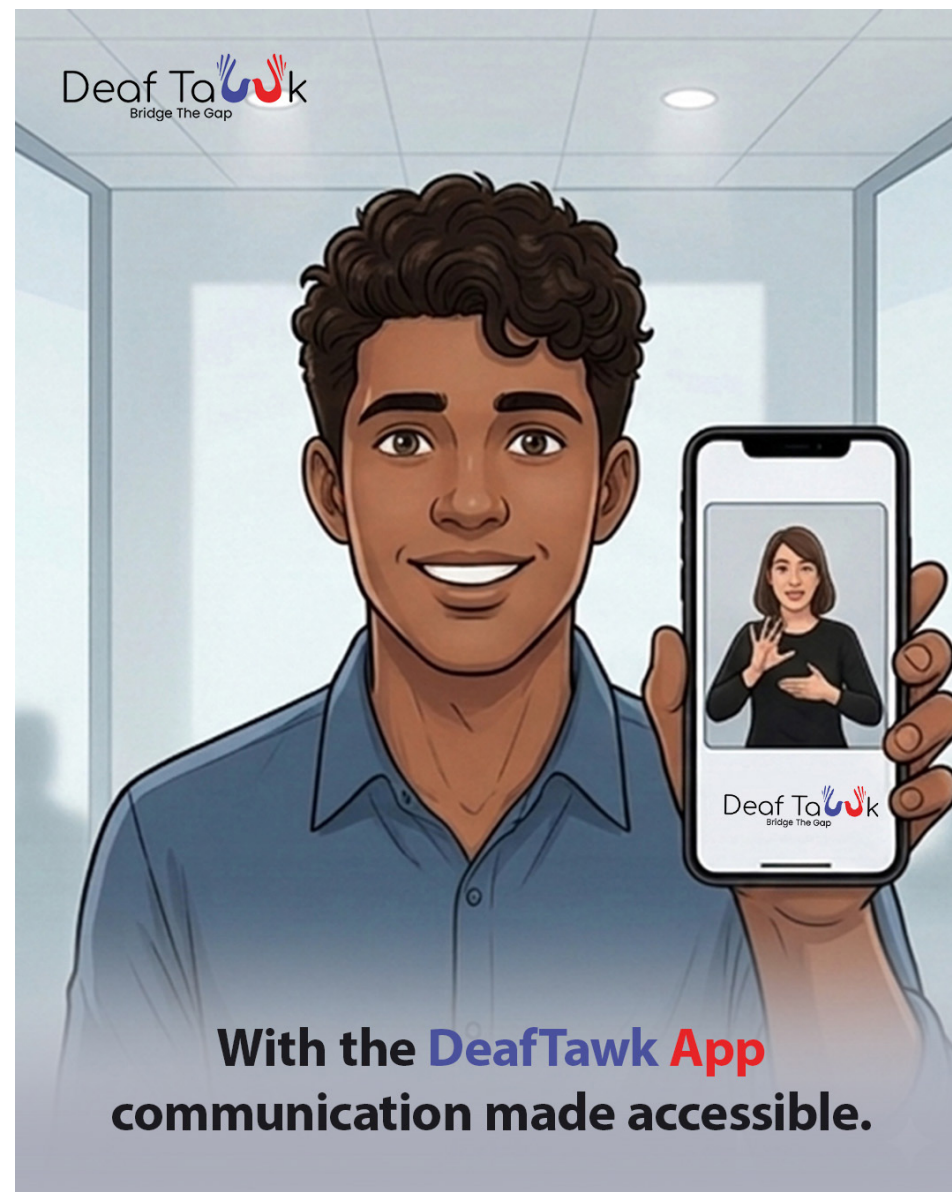
Why users choose DeafTawk

- **Ease of independent communication.** The app makes communication easier and simplifies everyday tasks and situations. On-demand interpretation frees users from needing to rely on family for interpretation. It also reduces stress and miscommunication, increasing users' confidence to navigate different situations. Users stressed the importance of having a resource like DeafTawk in critical settings, such as banking, emergencies, educational institutions and professional environments.
- **Affordable, reliable interpretation.** DeafTawk is perceived as more cost-effective, with faster and more reliable connectivity than other interpreter options. Users in Islamabad mentioned improved connectivity more than rural users.
- **Availability of interpreters.** The process of finding an interpreter using DeafTawk is simple, easy and immediate. In contrast, finding interpreters without the app was often expensive and difficult.

"My first impression [of DeafTawk] was happiness and excitement. Before using the app, I had to rely on hearing people to accompany me, and often they said they did not have time. That was very disappointing for me. Hiring interpreters was also expensive. When I saw DeafTawk, I found it very convenient and affordable and since then, I have continued using it."

DeafTawk user

With overall positive experiences, some participants also identified barriers to use. These included challenges with balance uploads, high cost with increased use and occasional connectivity issues. Some users felt that the video window was too small, making it hard to see interpretation.



Net promoter score

A Net Promoter Score (NPS) is a standard measure using a single question asking respondents how likely they are to recommend a product on a scale from 0 to 10. Respondents are grouped into promoters (9–10), passives (7–8) and detractors (0–6), and the score is calculated by subtracting the percentage of detractors from the percentage of promoters.

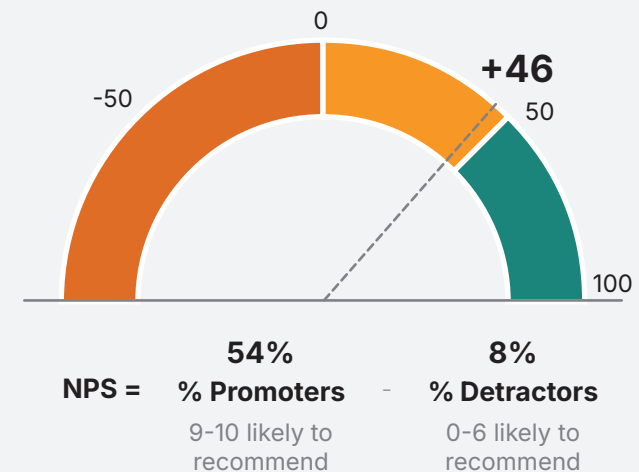
DeafTawk has a strong NPS of +46, indicating high user satisfaction and loyalty with a likelihood that users would recommend DeafTawk to others. This is a substantial improvement from the 2022 study by 60 Decibels, which found an NPS of +6.⁹ The average rating among those surveyed was 8.5.

This high NPS score aligns with several service quality indicators from the survey:

- **93%** of users find it easy or very easy to connect with interpreters
- **89%** of users say interpretation is very accurate
- **87%** of users never or rarely experience technical difficulties

An additional feature on the app allows users to select the gender of their interpreter; this can be particularly important for women. Eighty percent of women had used this feature and 67% found access to a female interpreter to be easy or very easy.

54% Promoters
38% Passives
8% Detractors



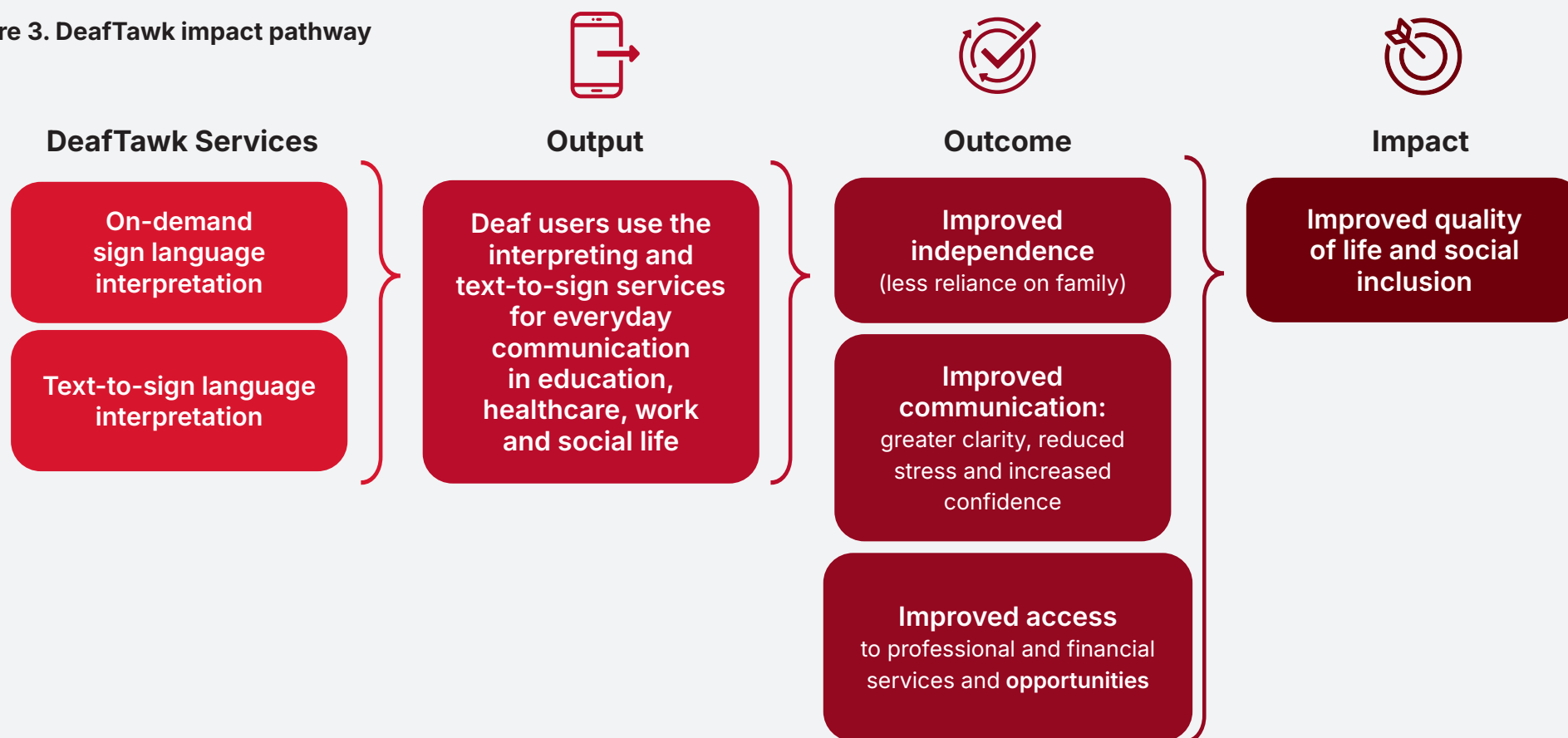
DeafTawk's Impact Pathway

This is the missing text: DeafTawk drives impact through greater accessibility and inclusion in society for persons who are deaf or hard of hearing. This case study looks specifically at the impact pathway hypothesised below in figure 3. The app makes interpreting services available almost instantly, via on-demand interpretation or AI-based text to sign interpretation. Having access to and using interpretation

when needed improves independence, communication and general ease of every day interactions. Ideally, these combined outcomes contribute to improved quality of life and social inclusion.

The following sections look at where data supports and/or calls into question this hypothesis, across outcomes and impact.

Figure 3. DeafTawk impact pathway



Outcomes



Improved independence

Since using DeafTawk, 82% of users reported they can always or usually communicate independently in public spaces. 87% of users reported they no longer need to rely on family or friends for communication.

"DeafTawk has significantly addressed challenges related to accessing sign language interpreters. Before using the app, it was difficult to find an interpreter, especially at short notice. Communication often depended on family members or was delayed."

DeafTawk user

"Before using DeafTawk, communication and interpretation were very difficult. I had to rely on people around me, mostly my family members, especially my mother and sister. I struggled whenever an interpreter or someone to help was not available. This often made everyday conversations challenging, particularly in public places."

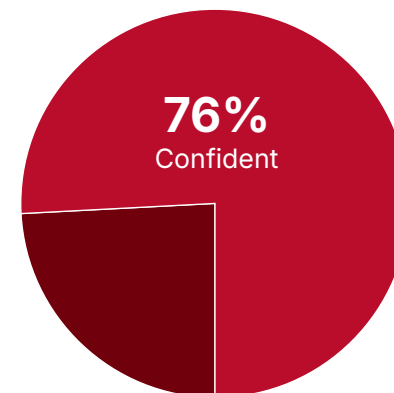
DeafTawk user

This outcome was not realised equally, however, for men and women. Men were somewhat more likely to report greater independence (for more on outcomes by users' gender, see page 17).

Improved communication

While using DeafTawk, three-quarters of users surveyed reported feeling very or completely confident communicating with people who do not know sign language with only 3% indicating no confidence. Once again, men were more likely to report they were very or completely confident (82%) than women (69%).

76% of DeafTawk users reported they are very or completely confident communicating with non-signers since using DeafTawk



"When an interpreter is available, it gives us confidence. As Deaf people, our confidence is often low, but having an interpreter reassures us that someone understands us and will convey our message accurately. Without an interpreter, we feel worried, especially in emergencies."

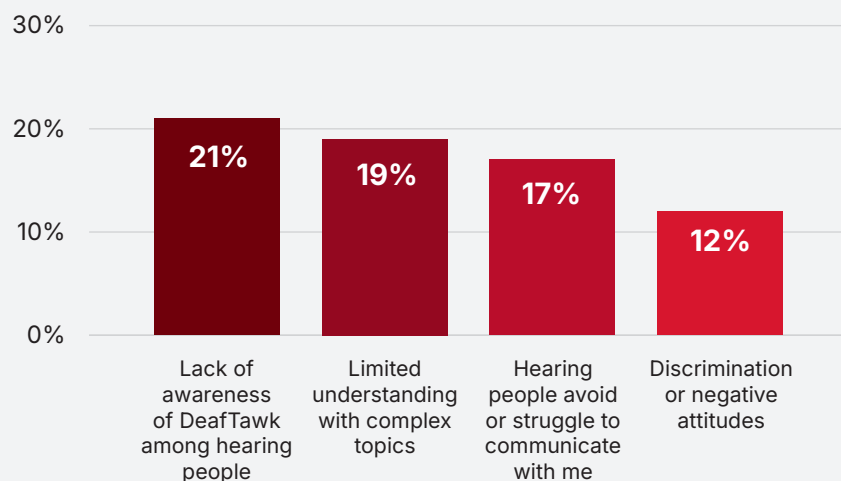
DeafTawk user

"Before DeafTawk, I did not use any other interpretation service. I can speak a little, so I used to communicate through speech, but it was very difficult and stressful. Managing things was not easy. After I started using DeafTawk, communication with hearing people became much easier."

DeafTawk user

When asked what communication and social hurdles they faced since using DeafTawk, 59% of users said none. The remainder agreed with suggestions that lack of understanding, acceptance and attitudes from hearing individuals, as well as difficulty with more complex topics, were continued barriers.

Continued communication challenges since using DeafTawk (n=306)



Improved access to professional and financial services and opportunities

A majority (60%) of users said DeafTawk makes it easier to get jobs or earn money through better communication with hearing people, while 21% reported no change and 19% had not used it for work. A similar number (56%) found it easier to communicate with employers, clients, or customers since using DeafTawk, indicating smoother day-to-day work interactions.

"I am currently working, but my workplace offers a low salary and the environment is not very good. Still, I interact with hearing people at work, and DeafTawk helps me communicate. I am also applying for other jobs and once I get an interview opportunity, I plan to use the app there as well."

DeafTawk user

Close to three-quarters (72%) of users feel more confident managing work or financial tasks independently (e.g., banking, job applications, transactions).

"For example, at the bank, when I try to communicate using sign language alone, hearing people struggle to understand me. But when I use the app, they understand my message clearly and take it seriously. In this way, people now appreciate DeafTawk and listen to us with full attention."

DeafTawk user

Across all of these measures, men reported greater improvements than women.

Varied results for certain groups

Active users

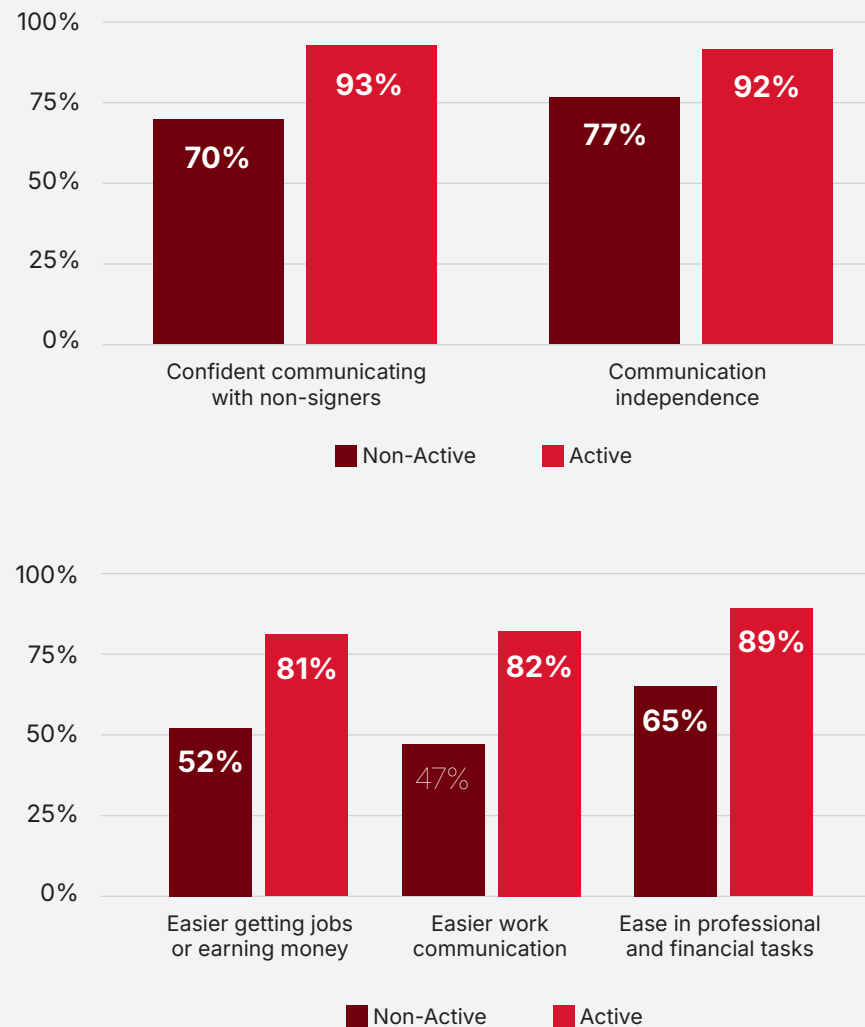
For analysis, we defined active users as those using the platform eight or more times per month. This group represents 29% of total users (88 respondents). As a group, active users are:

- More likely to live in urban areas than less frequent users (90% urban active users vs. 86% urban less frequent users)
- Much more likely to be men (72% male active users, vs. 52% of less frequent users)
- More often using DeafTawk for work (67% vs. 40% of less frequent) and education (35% vs. 17% of less frequent)
- About the same likelihood of PMT scores being poor or financially vulnerable as less frequent users.

Active users reported stronger outcomes across the board than those with less frequent use.

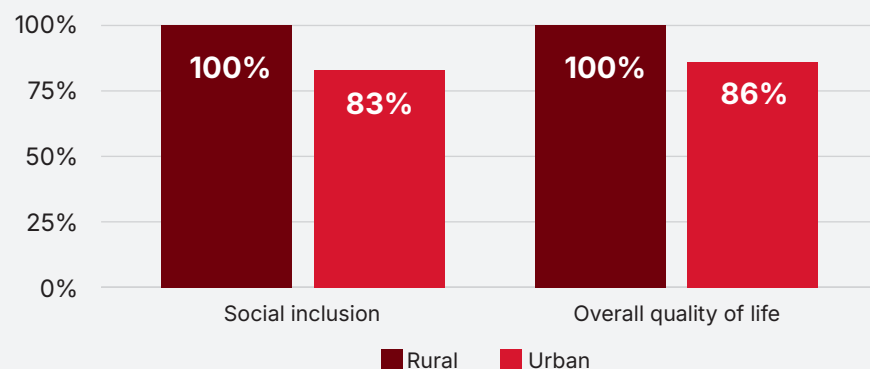
Active users more likely to report benefits of using DeafTawk than frequent users

(Less active users total = 88 Active users = 218)



Rural users reported greater outcomes than urban

(rural total = 40; urban total = 266)



Rural users

Rural users, demographically, are similar to urban users, though slightly more likely to be poor (93% of rural users vs. 80% of urban users) and slightly younger (78% under age 35 rural users vs. 57% of urban users).

Rural users reported somewhat higher improvements in social inclusion and quality of life than urban users. However, there weren't notable differences in responses to questions about increased ease in getting jobs, work communication, or professional and financial tasks. It may be that DeafTawk plays a particularly important role improving day-to-day communication in rural contexts, while economic benefits are more evenly distributed across geography.

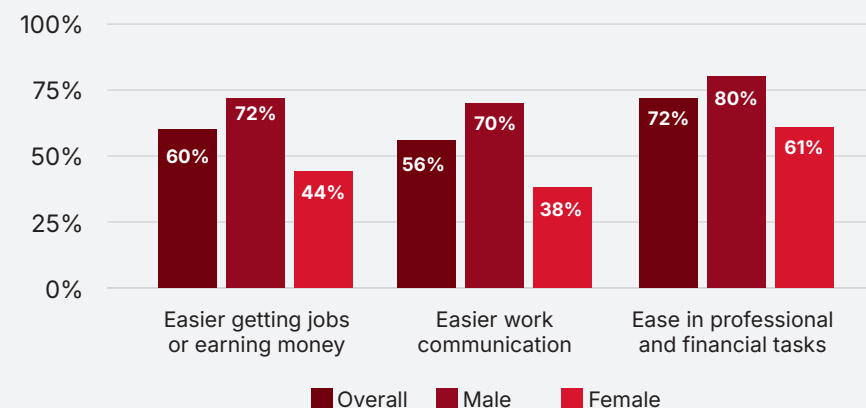
Women users

Female users comprise 42% of the sample overall. Across their app use, rural/urban split, and poverty rate they are similar to the male users in the survey. They are, on average, four years older than the men sampled. They are much less likely to be employed. They are also less likely to have internet access at any time, with only 55% of female users saying they could access the internet "whenever needed" vs. 76% of male users.

Gendered outcome differences are systematic. Men reported higher rates of benefit than women across most outcomes, with the largest gaps in professional and financial areas.

Gender disparities in DeafTawk users' reported outcomes

(total men = 176 , total women= 130)



These disparities, however, were less pronounced within the active user group, where men and women reported similar improvements in quality of life and social inclusion. The sample size of these numbers, however, was quite small. More data would be necessary to understand how, if at all, increased use may correlate with narrowed gender gaps in certain outcomes.

Impact

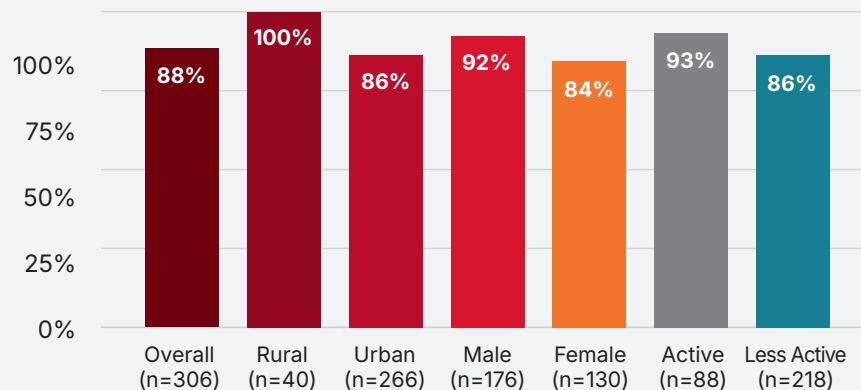


Quality of life

Improvements in communication, access, and independence are translating into meaningful gains in overall quality of life for users. During data collection, enumerators defined quality of life broadly to include general well-being, including the ability to communicate effectively, participate in daily activities and feel satisfied with one's life.

In this study, 88% of users reported their quality of life as somewhat or much better. Rural users unanimously reported higher quality of life, with the largest gap in our analysis between rural and urban users. A gender gap was also present, with men eight percentage points higher than women in responding their overall quality of life had improved.

Percent of users reporting improved overall quality of life



These findings are consistent with earlier results from 60 Decibels's study in December 2022, when 91% of users reported improvements. In that study, 80% of those who experienced improved quality of life attributed it to greater ease of communication, highlighting the central role communication plays in driving broader well-being.¹⁰

Social inclusion

A strong majority (85%) of users said they feel more accepted, respected, and connected within their communities since using the platform, reflecting improved social inclusion and participation in social and cultural life. Social inclusion and quality of life are very closely correlated, 84% of respondents reported an improvement in both. Social inclusion, through relationships, participation, and a sense of belonging, directly shapes people's well-being, autonomy, and access to opportunities.

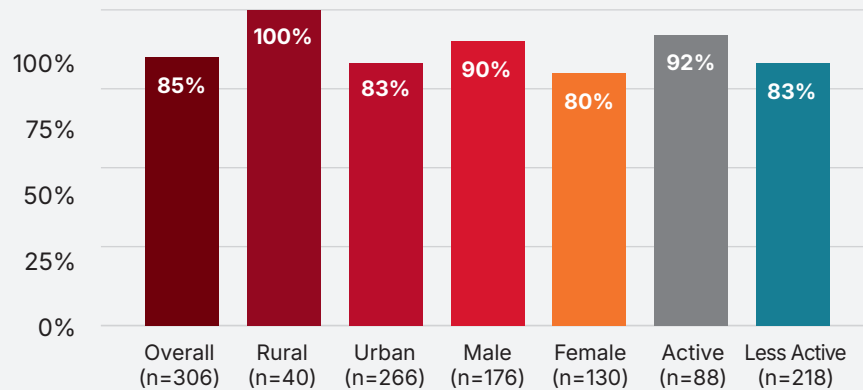
"Because of this app, I can attend events, participate, enjoy myself and feel more connected with people. Before, I often felt isolated, but DeafTawk has brought many positive changes into my life."

DeafTawk user

"I feel much more connected now. . . I can enjoy events, participate confidently and hearing people understand me better. I also participated in the ICF program¹¹ and showcased my products, which helped me feel included and empowered."

DeafTawk user

Percent of users reporting improved social inclusion



As with quality of life, it appears social inclusion plays a particular role for individuals in rural areas and a gender gap in impact persists. This follows gendered norms and rural-urban structural divides which shape individuals' participation in public and economic life. Active users also reported higher levels of inclusion, reinforcing the link between more frequent use and deeper social benefits.

As always, the analysis suggests that who benefits most, and in what ways, depends on patterns of access and broader structural factors, as well as product use. DeafTawk is making a meaningful difference by expanding accessible communication and opening new pathways to opportunity. At the same time, it illustrates how technology can begin to bridge systemic gaps in inclusion. Ultimately, social inclusion should be measured by how well society accepts, respects and includes deaf people, with technology serving as a catalyst, not a substitute, for that change.



Role of mobile technology



The degree to which products rely on mobile technology to deliver benefits, where 1 could deliver without mobile and 5 mobile is entirely necessary.

The benefits of DeafTawk cannot be realised without mobile.

Mobile technology adds value by facilitating the following:

1 Proximity – enabling connections across distance

DeafTawk connects users to sign language interpreters without having to share the same physical space. This substantially increases access to the service and ease.

2 Timeliness - enabling faster and more immediate transactions.

Services are available on demand within a matter of moments. This service increases the opportunity to use sign language interpretation, realising improved communication in a variety of circumstances.

3 Customisation - enabling more tailored and user-specific experiences (e.g. via GeoTag, Unique ID, algorithm etc.)

While not a key aspect of DeafTawk's value proposition, being able to request a female interpreter or an interpreter with specific industry experience adds to users' experience, and outcomes with sign language interpretation.



Scaling social impact

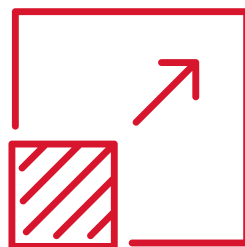
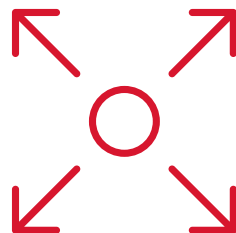
Scaling out – expanding reach to new people and geographies

DeafTawk is scaling out through a combination of user growth, product diversification and geographic expansion. Since the end of the grant, the platform has grown to a larger and more globally distributed user base, while also expanding its Business to Business (B2B) footprint. This shift towards B2B clients has strengthened sustainability and enabled subsidised access for deaf users. At the product level, DeafTawk has evolved beyond real-time interpretation to include AI-enabled translation. The company is working to position itself not just as an interpretation tool, but as a broader social ecosystem for connection, education and employment.

Geographically, DeafTawk has expanded beyond Pakistan and Singapore into Denmark, United States and Kenya, with upcoming launches in Malaysia and Philippines. The company is now using a licensing model to scale more efficiently and effectively in new markets, partnering with local organisations to build capacity and accelerate adoption. DeafTawk estimates there are 120 million deaf people with smartphones around the world, a number growing as handset affordability and connectivity spread. This is the population they perceive as their potential market.

Scaling up – strengthening and influencing broader systems to improve how they work for people who are deaf and hard of hearing

DeafTawk's scaling strategy increasingly engages with the broader systems that shape accessibility for deaf communities. In

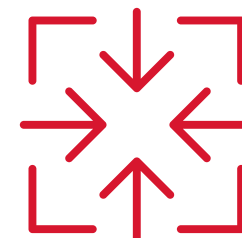


many of its core markets, gaps in policy, infrastructure, and public investment remain significant barriers to inclusion. DeafTawk is working within these constraints by partnering with mobile network operators, financial institutions, and other private sector actors to embed accessibility directly into existing systems. Through its B2B model, DeafTawk enables organisations to integrate interpretation and accessibility features into their customer interfaces, helping shift how services are delivered to deaf users at scale. While government engagement remains limited, there is potential for public sector adoption over time, particularly as accessibility becomes more visible and normalised through private sector uptake.

Scaling deep – shifting behaviours and norms

Using an interpreter is not a significant behaviour shift for potential DeafTawk users, nor is doing this work a change for interpreters. However, DeafTawk is contributing to deeper shifts in how deaf and hearing individuals interact, not by introducing entirely new behaviours, but by transforming how and how often interactions occur. DeafTawk is making interpreter services more available, affordable and integrated into daily life.

DeafTawk's broader vision to become a platform for Deaf communities has potential to create deeper cultural shifts by positioning deaf users not as service recipients but active participants in digital and economic ecosystems. This has potential to shift societal expectations towards more proactive, system-wide inclusion.



Social impact scaling and commercial growth

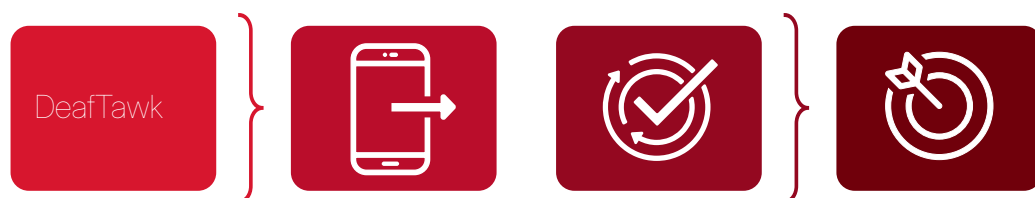
The likelihood of social impact scaling alongside commercial growth, as well as the timeframe needed to do so, is most influenced by two things: (1) how easy it is for customers to adopt the product and (2) how intertwined revenue source and growth is with the social impact pathway.

Ease of adoption

Users readily understand both the need for and value of sign language interpretation. DeafTawk solves a real and immediate issue that makes product adoption attractive for potential customers.

However, adoption is still limited by structural and technological factors. While the app itself has a relatively low learning curve for existing smartphone owners, Pakistan's overall mobile use context still demonstrates large rural and gender gaps in those able to afford or use devices. Limiting factors include the high cost of smartphones, inconsistent connectivity, gendered disparities in device ownership and digital access, and limited digital literacy. DeafTawk is addressing some of these barriers through partnerships that subsidise connectivity and enable free communication with key service providers. Yet, these remain the constraints to DeafTawk's potential user base.

At the same time, DeafTawk's B2B offering, including plug-and-play integration for service providers, reduces friction for organisations. As a result, DeafTawk is increasingly scaling both by increasing individual users and through institutional channels in tandem.



Revenue links to social impact pathway

DeafTawk's revenue is generated through user payments for interpretation services and business subscriptions for accessibility solutions. This means DeafTawk's commercial success is closely tied to how frequently and effectively users engage with the platform, particularly in professional and institutional contexts. This model aligns financial sustainability with impact; increased use drives both revenue and socio-economic and inclusion outcomes.

While the platform continues to generate revenue from individual consumer use, it is moving to increasingly subsidise individual service with a B2B model, where businesses subscribe to accessibility solutions with higher margins. This allows DeafTawk to reduce the financial burden for users while achieving financial sustainability.

DeafTawk is mission-driven. Their mission is 'Ensuring full and effective participation of the Deaf community across the globe through quality sign language interpretation services.' When a business identifies its value through a social lens, it is often more likely to make future revenue and business decisions that prioritise and maximise this value.¹² There are several ways DeafTawk is already investing in this mission beyond explicit revenue-generation, through contributions to new signs and language documentation and their [Innovation Challenge Futuremakers](#) entrepreneurs with disabilities accelerator. They are committed to expansion in low- and middle-income markets, and further looking to align revenue and impact by investing in features that extend beyond interpretation into education, employment and community-building.

DeafTawk also recognises that quality language interpretation services rely on individuals willing and able to provide those services. It is a dependable source of work and meaning for sign language interpreters. Even with technological advancements of AI, DeafTawk recognises interpreters as an important part of its platform ecosystem.

Creating socio-economic impacts through mobile businesses

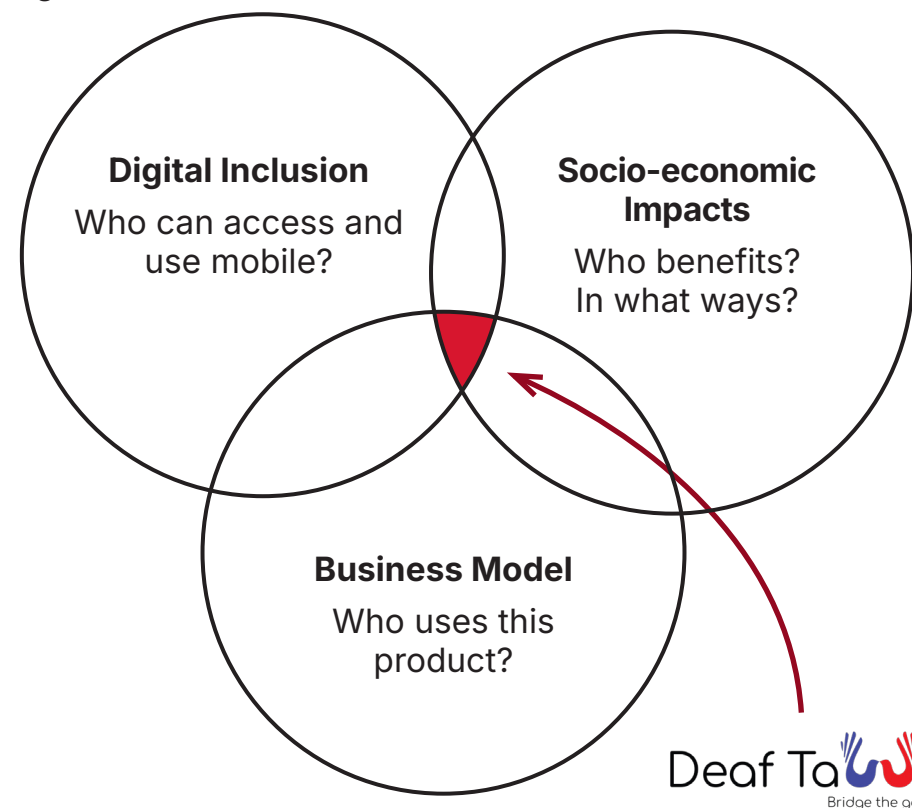
DeafTawk is an example of a business model that leverages mobile technology and creates positive socio-economic impacts as a matter of conducting business. Yet, it is reliant on how digitally included its customers are in order to realise benefits; digital inclusion itself is not currently part of the business strategy.

- **Digital Inclusion:** Pakistan has substantial gaps in device affordability, mobile internet use and digital skills. DeafTawk provides a meaningful use case that may help to include previously uninterested or unmotivated users. Its outcomes were particularly strong with rural users, yet this is where Pakistan's digital divide is greatest and most persistent.¹³ The majority of the population (61%) resides in rural areas, representing a substantial potential customer base, but digital inclusion is likely to continue being a limiting factor for realising the benefits offered via DeafTawk.¹⁴
- **Business Model:** DeafTawk's two main payers are individuals and businesses. On the B2C side, making sure service affordability is not an additional barrier is an important access and business growth issue. Currently, DeafTawk offers a sliding fee option, yet the customer is dependent on the corresponding interpreter being willing to work for less, ultimately limiting the availability of service. Ideally, providing this type of subsidy to increase access would not come at the cost of the employee. As it stands, DeafTawk is accessible to those who can afford it. This study indicates many can afford to use it, but not always with great frequency, therefore unlikely to be fully meeting the true need.

The B2B customers, on the other hand, can pay and create access across their customer sets which represents a tremendous opportunity to amplify impact, particularly with the finance sector clients with which DeafTawk works.

- **Socio-economic Impact:** A majority of users report improvements in their ability to navigate daily life, confidence, communication with non-signers and participation in professional and financial activities. For many, these outcomes translate into greater overall quality of life and social inclusion. However, the extent of these gains is not universal. Structural factors such as gender shapes how and to what extent users benefit.

Figure 4



Conclusion

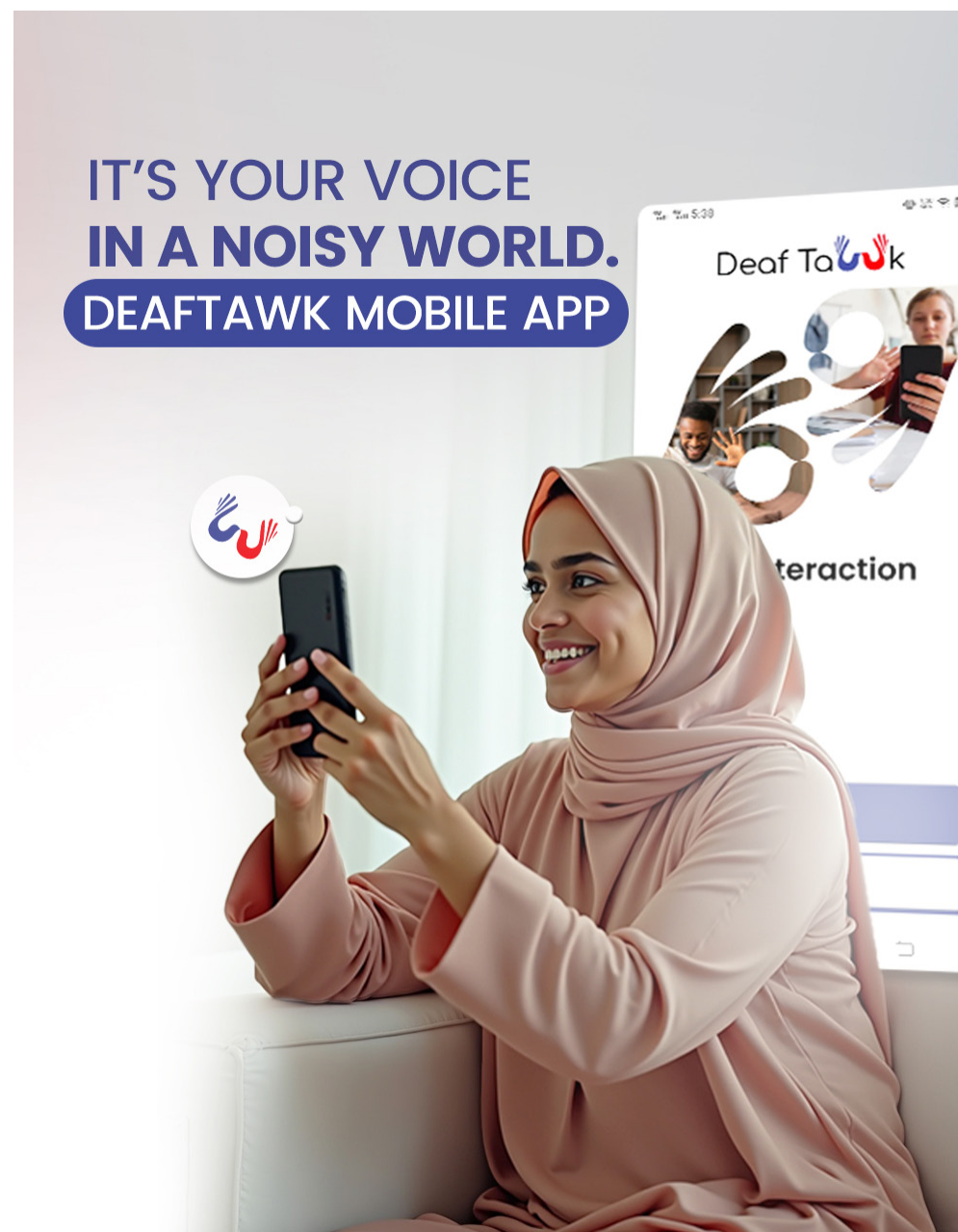
DeafTawk's services improve quality of life for users

DeafTawk demonstrates how mobile-enabled assistive technology can expand access to communication and participation for people who are deaf or hard of hearing.

- 88% of users report their quality of life is somewhat or much better since using the platform, and 85% feel more accepted, respected, and connected in their communities.
- Rural users reported the strongest quality of life and social inclusion gains of any group in the study, pointing to a particular need and impact outside urban centres.
- Women, who make up 42% of the user base, benefit meaningfully but consistently less than men. The platform represents a promising model for leveraging mobile technology to drive inclusion. Still, long-term impacts for users will remain dependent on cost, access and broader societal attitudes shaping who and how various individuals are included.

Opportunities for DeafTawk to scale impact

- Prioritise growth that reaches users with the greatest barriers to access
- Expand partnerships with businesses and the public sector to shift the cost of accessibility away from individual users
- Strengthen the ecosystem of sign language interpretation, including interpreter livelihoods and language development, as the platform evolves.



Another impact pathway: DeafTawk Interpreters

Who are they?

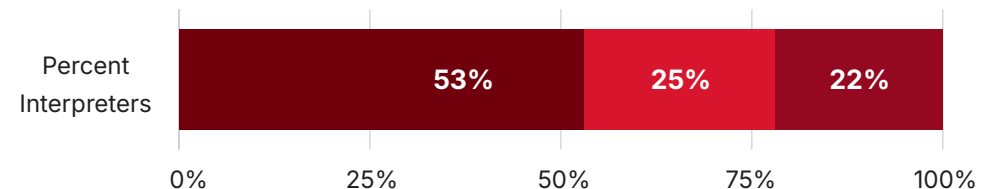
A “typical” DeafTawk interpreter is:

- Female between the ages of 25-44
- Living in the Punjab province
- Educated, with post graduate education
- Considered poor or vulnerable based on the nation's PMT

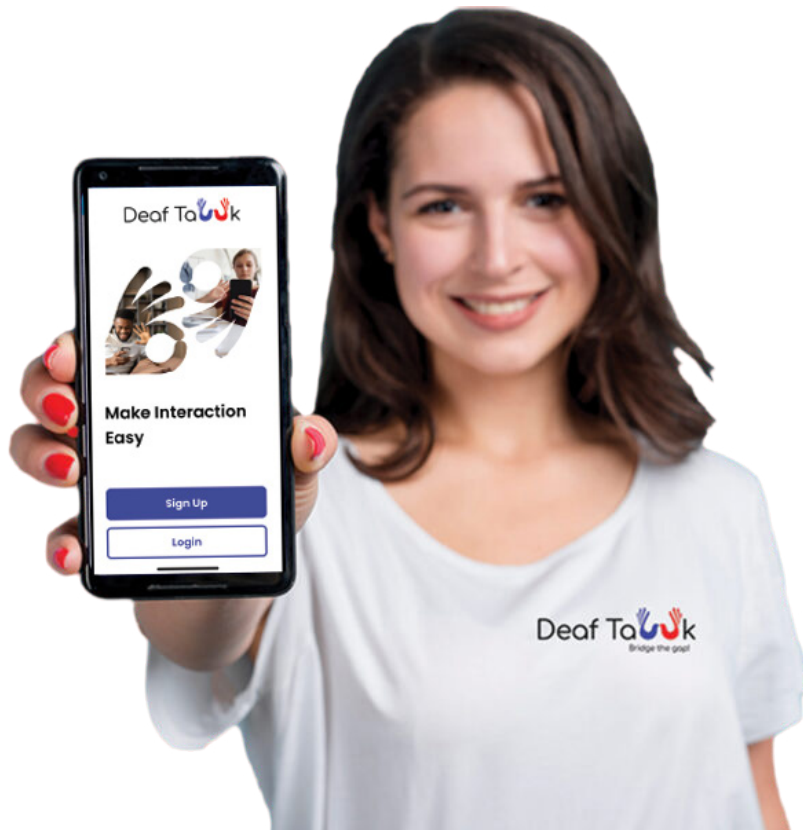
The majority of interpreters surveyed (73%) have never provided their services through a digital platform before DeafTawk. Slightly more than half (52%) were relatively new to interpreting with only 1-5 years of experience.

Close to half were also interpreting full-time. Given this, it was surprising that more than half (53%) had not received a request for interpreting through DeafTawk in the past month. DeafTawk was also surprised by this finding and looked into it immediately. They found their algorithm was excluding interpreters who had turned down more than ten requests, even though this was a common occurrence. There was also an issue with interpreters unknowingly being logged out of the app. DeafTawk is working on both issues.

Number of jobs interpreters received in the past month. (n=152)



Active interpreters - the 47% with at least one request in the past month, are much less likely to be experiencing poverty than their peers. While 78% of the overall sample were considered poor based on the PMT, that percentage dropped to just 37% of those with active work on DeafTawk.



What do interpreters like about using DeafTawk?

DeafTawk was also highly rated as a positive and safe work environment, with respectful interaction norms and no harassment.

"When they are giving us assignments, they have done so much of their own investigation that we do not have to face a problem. They prioritise our safety, dignity, and comfort above everything else."

DeafTawk interpreter

Interpreters appreciated the opportunity to grow their professional skills, learn new signs and gain confidence in their role.

"Our work is such that we keep on getting training experience all the time and get learning experience. There are a lot of opportunities through DeafTawk acting like a learning platform"

DeafTawk interpreter

Mostly, interpreters just appreciated that DeafTawk helps them continue what they reported to be very meaningful, fulfilling work. The top stated reason for using DeafTawk had less to do with the app itself and more to do with the job—the high sense of purpose and job satisfaction.

"This work itself inspires me daily and I am grateful for the opportunity that DeafTawk has given me."

DeafTawk interpreter

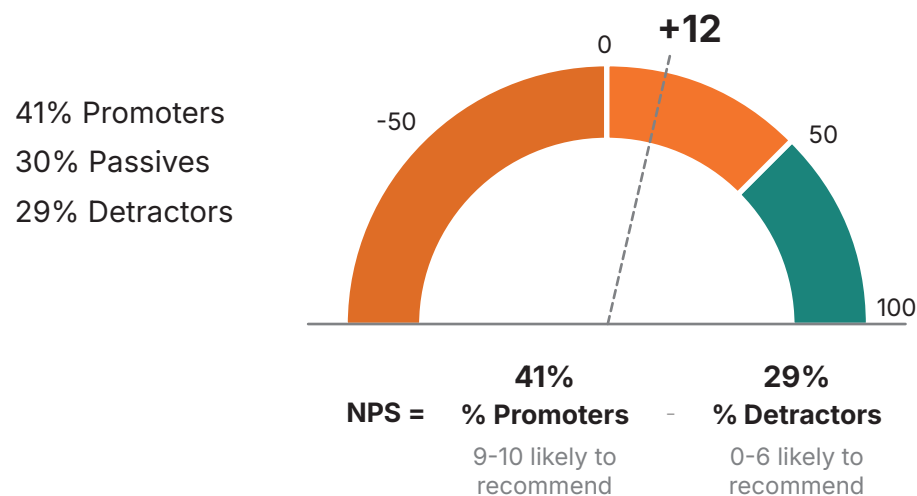
"One of my most meaningful experiences with the DeafTawk platform has been supporting employment opportunities for deaf individuals. I became a communication resource and focal person, helping connect deaf individuals with the right opportunities and guiding them to suitable workplaces. This role allowed me to serve as a bridge between employers and deaf individuals seeking jobs."

DeafTawk interpreter

From interpreters surveyed, DeafTawk had a positive Net Promoter Score (NPS) of +12, indicating reasonable satisfaction among users with room for greater loyalty and recommendations. In focus groups, interpreters praised DeafTawk for quickly resolving technical issues.

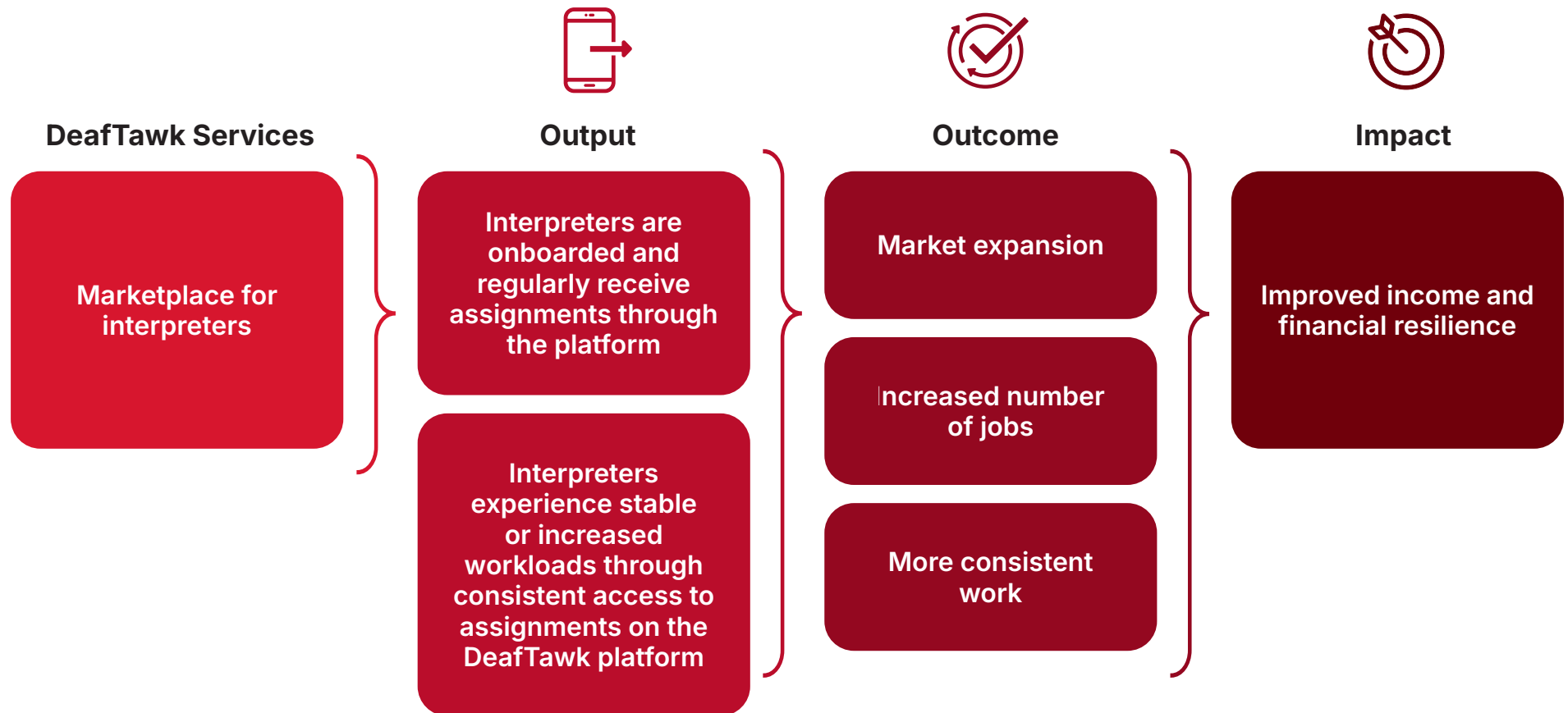
"I really like my association with DeafTawk and the fact it makes my work easier."

DeafTawk interpreter



DeafTawk Interpreter Impact Pathway

DeafTawk's primary purpose is to serve and connect the Deaf community. However as part of this mission they have an interest in developing skills, language and support needed for high-quality sign language interpreters. The app effectively creates a digital marketplace for interpreters to connect with demand for their services. In terms of benefit to the interpreters, ideally they can reach new customers and get more and more consistent paid work for overall increased financial resilience.

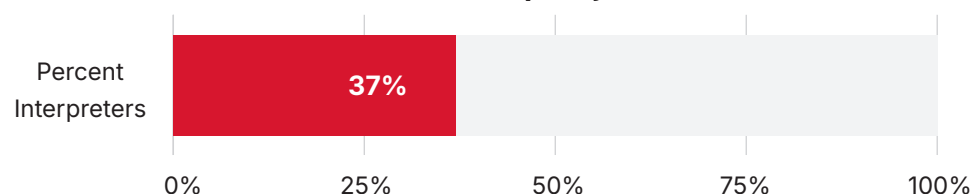


Outcomes

Market expansion

Almost three quarters (72%) of interpreters surveyed were serving new locations or sectors since using DeafTawk. Forty-percent said they were now interpreting for new sectors (e.g. healthcare, financial services), 20% said they had new work outside of their province and 11% now work outside their district. This market expansion is closely linked with an increase in paid jobs and an increase in the consistency and predictability of work.

37% of interpreters report both market expansion and an increase in paid jobs.



While DeafTawk interpreters are connected with new types of clients, focus group participants mentioned there is limited direct client-building outside of the app and little to no spillover opportunities of independent contracts or referrals that resulted from their association with DeafTawk. The platform is a relatively contained ecosystem for interpreters' new business.

Increase in paid jobs and work consistency

Just less than half of interpreters surveyed reported an increase in paid jobs and work consistency, with 35% reporting "somewhat of an increase and 9% reporting significant improvements. This aligns directly with the percent of interpreters reporting increases in income, meaning for those who are getting work through DeafTawk, the outcomes are leading to impact as intended.

Impact

Financial Resilience

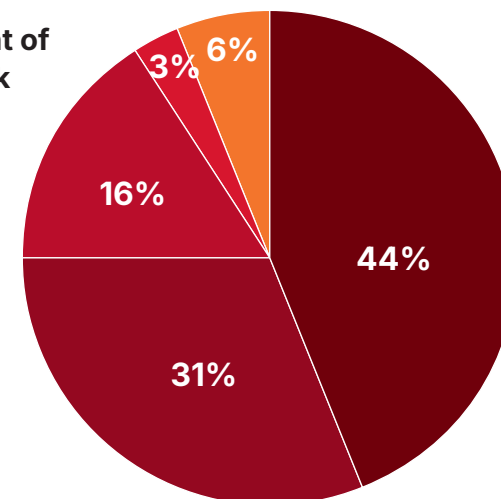
Consistent with previous findings from 60 Decibels' impact study in 2022, 43% of interpreters reported an increase in income. This income improvement strongly correlates with having both an increase in paid jobs and market expansion—80% of those with more income also have more paid jobs and market expansion.

When interpreters do have increased income, a third said they then feel greater confidence in handling an unexpected expense from an emergency, a measure of financial resilience. In focus groups, interpreters discussed that while their income may be better with DeafTawk, it is still not as robust as they would like. They held an expectation that rates and volume of work would increase working with DeafTawk over time.

For interpreters, DeafTawk is rarely their sole source of income and for almost half, it is not generating income. This matches the number of requests for interpretation they report having in the prior month.

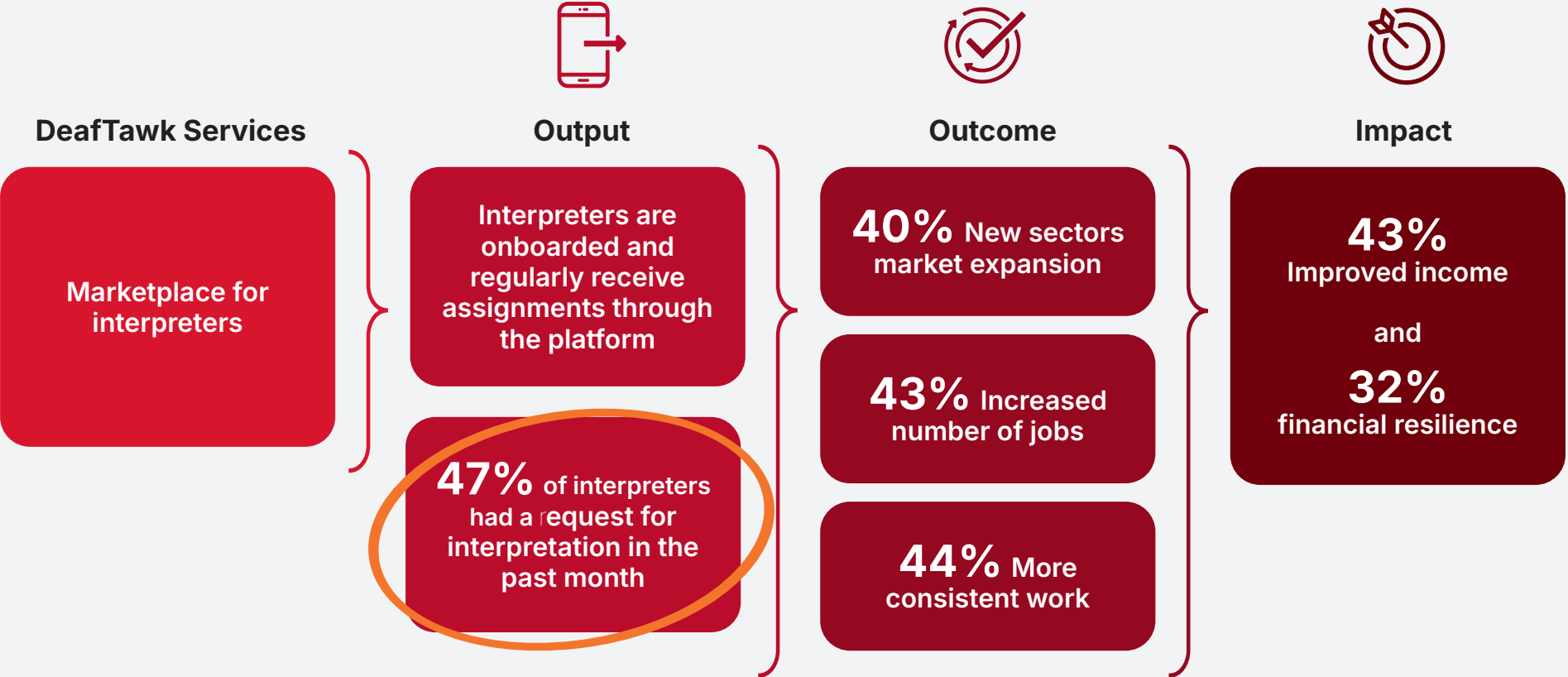
DeafTawk interpreters' percent of income coming from DeafTawk
(n=152)

44%	0% income
31%	1-25% income
16%	26-50% income
3%	51-75% income
6%	76-100% income



All of this suggests that when interpreters are receiving work through the app, the impact pathway is effective. The income can be enough to support greater financial stability. The impact pathway is realised for the 40-50% of interpreters who receive requests on the app. When DeafTawk solves the issues with its algorithm and automatic log-out, DeafTawk will be well-positioned as a meaningful source of income uplift for all interpreters actively using the app.

Percent of surveyed interpreters reporting:



Endnotes

- 1 [Benazir Kafaalat Programme](#), Government of Pakistan.
- 2 UNESCO, 2021.
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- 6 The GSMA Innovation Fund, Realising Pakistan's aspiration to become a digital nation, 2024.
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- 12 The GSMA Innovation Fund and Radicle Development, Scaling and Impact Learning Paper, 2025.
- 13 M. Rehan, [Bridging the Digital Divide: Infrastructure Deficits, Policy Frameworks, and Socio-Economic Imperatives in Pakistan's Pathway to Global Digital Competitiveness](#), Criterion Quarterly, August 2025.
- 14 Pakistan Bureau of Statistics, 2023 Census.



Acknowledgements

The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive. Representing mobile operators and organisations across the mobile ecosystem and adjacent industries challenges, the GSMA delivers for its members across three broad pillars: Connectivity for Good, Industry Services and Solutions, and Outreach. This activity includes advancing policy, tackling today's biggest societal issues, underpinning the technology and interoperability that make mobile work, and providing the world's largest platform to convene the mobile ecosystem at the MWC and M360 series of events

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Radicle DEVELOPMENT

Radicle Development

Radicle Development partners with foundations, businesses, and social innovators to turn data into strategy and insight into action. We design research, learning systems, and facilitation that help organisations understand what's working and what to do next.

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