**Wk1 - Project Planning Activity**

**Task 2 - Secondary Market Research**

A sign language interpreter is a wearable device designed to help those who are deaf and hard of hearing to communicate easier with others.

**Market Size**

The primary target market for the product is deaf, hard of hearing and mute people. According to the 2021 Australian Census, approximately 16,000 use Auslan, the Australian Sign Language (Deaf Connect, 2022). This number is a rise from approximately 5,300 users in 2001, indicating a clear increase in Auslan usage at home and is expected to continue to rise (Deaf Connect, 2022). Furthermore, according to the 2022 Australian Deaf Census, the majority of respondents were between the ages of 25 to 59 years, meaning that our primary target market would consist of those within this age range (Deaf Australia, 2023). According to the 2022 Australian Deaf Census, 1 in 3 students were offered no communication access options in secondary school, only 59% of those employed are provided with an in person Auslan interpreter by their employer, and only 1% of people have a GP who uses Auslan (Deaf Australia, 2023). These statistics clearly show the lack of accessibility that deaf, hard of hearing and mute people have in many critical aspects of life. Many people who need to use Auslan to communicate simply aren’t offered adequate services to help them or are unable to obtain them. Hourly rates for Auslan interpreting begin from $127.50, which some people simply cannot afford, particular those who may have low income or support. In Australia, there are about 3.6 million people with some form of hearing loss and the number is expected to double to 7.8 million by 2060 (Department of Health, Disability and Aging, 2024). Also, according to the Medical Services Advisory Committee, each year, more than 500 children are born with moderate to profound permanent childhood hearing impairment (MSAC, 2007). All this information strongly indicates the need and benefit of a sign language interpreter for young to pre-senior adults.

**Related Existing Products**

Existing solutions for sign language interpreters typically fall under the categories of wearable devices or online websites or apps. The main competitor to our wearable sign language interpreter is a company called Brightsign. They produce a wearable glove called the Brightsign Glove which translates over 300 different sign languages into over 40 different languages, outputting to a wearable speaker or mobile app. This is the only commercially available wearable device on the market and although it is they present their strengths, there are a few issues with it. Firstly, the availability. The product is currently sold out with no indication of when they will be in stock again and doesn’t indicate whether Auslan is included or not. And secondly, the cost. The product costs 4,415 USD which is approximately 6,800 AUD, a very steep price point (Brightsign, 2025). Other competitors are mobile apps and websites such as SignAll which use an AI and computer vision through a mobile app and requires a phone and internet connection, however, there is a waitlist for it (SignAll, 2025). Or Signapse AI or DeepASL, however, most of these solutions typically only translate American Sign Language (ASL) and not Auslan.

All the above products have a common issue; it is not readily accessible in Australia to Auslan users. Mobile apps and online solutions also present the problem of requiring a mobile device and internet connection for the translation. Although most people in the target market would typically always carry a mobile phone with an internet connection, some people may not be able to afford mobile devices or suitable devices capable of running these applications, which must be accounted for. A wearable device which outputs to a speaker or LCD screen is a much more suitable option for the target market. Furthermore, a wearable device would be much more suitable in emergency wear the user needs to quickly communicate key information quickly, without the need to open and set up an mobile application. A product that is easily accessible in Australia for Auslan users is necessary to help those who are deaf, hard of hearing or mute to communicate to others through Auslan.

**References**

Australian Institute of Health and Welfare (2016). *3.15 Vision and hearing disorders | Australia’s Health 2016*. [online] Available at: https://www.aihw.gov.au/getmedia/48ee92a8-d373-4354-8df2-d664a974034f/ah16-3-15-vision-hearing-disorders.pdf.aspx [Accessed 8 Jun. 2025].

Brightsign (2023). *BrightSign Glove*. [online] BrightSign. Available at: https://shop.brightsignglove.com/collections/frontpage/products/glove [Accessed 8 Jun. 2025].

Deaf Connect (2022). *Auslan User Statistics | 2021 Census - Deaf Connect*. [online] Deaf Connect. Available at: https://deafconnect.org.au/our-news/auslan-user-statistics-2021-census [Accessed 8 Jun. 2025].

Deaf Australia (2023). *A Snapshot of Deaf People’s Experiences Briefing Paper*. [online] Available at: https://deafaustralia.org.au/wp-content/uploads/2023/02/Deaf-Census-Snapshot.pdf [Accessed 8 Jun. 2025].

Health (2024). *About ear health*. [online] Australian Government Department of Health and Aged Care. Available at: https://www.health.gov.au/topics/ear-health/about [Accessed 8 Jun. 2025].

MSAC (Medical Services Advisory Committee) (2007). *National performance indicators for neonatal hearing screening in Australia*. [online] Available at: https://www.aihw.gov.au/getmedia/8df964e6-e1ff-469e-b350-846e82e74c15/15996.pdf.aspx?inline=true [Accessed 8 Jun. 2025].

SignAll (2024). *SignAll Sign Language Translation App*. [online] Signall.world. Available at: https://signall.world/ [Accessed 8 Jun. 2025].