How can technology support Indigenous languages, and still keep the languages within the community?

It is not technology’s role to “save” or “solve” the language revitalization challenges facing Indigenous peoples. Technology can support and empower Indigenous peoples as they strive to revitalize the continuance of their living Indigenous languages. The languages belong to the individual Indigenous tribes, and the solutions and collaborations will need to support and work for each respective communities.

Questions to consider before undertaking a tribal mobile language project:

➢ Why does the tribe want to consider a mobile language project?
➢ How will the mobile language project support the revitalization of the tribes’ Indigenous language?
➢ What role will a mobile language project fill within the tribe’s existing language revitalization efforts?
➢ What are the initial and end goals of the mobile language project?
➢ Who needs to be involved in the decision making process of discussing and approving the mobile language project?
➢ What scale will the mobile language project be? Key phrases, words or more extensive?
➢ What is the language level proficiency goal?
➢ Who needs to be involved in the design, approval and implementation process of the mobile language project?
➢ Where will the mobile language project live? Within or outside the community?
➢ When will the phases of the language project take place? Timeline?
➢ Who will be responsible for updating the project once it goes live?
**Access**
When considering a technology project a key discussion to have within the tribal community, and those assisting with the project or the collaborators, is who will have access in all phases of the project? How will the tribal community or end users have access to the project once it is completed?

If the tribe wants the project to stay within the community what security issues will need to be considered and implemented? Will an Intranet or internal network need to be created in order to provide access within the reservation or community boundaries?

**Application**
When considering the application or mobile app consider what technology type the tribe wants the app to be available such as a smartphone, if so which platform - Android®, iPhone® or Windows®? Does the tribe want the app to work on tablets too?

What if access to the Internet or broadband is an issue in the area, will a flip phone be a better fit for the tribes needs? If the tribal language is not written, will a icon and audio based app work the best for the community?

Next, who will build the mobile language app? What is their experience working with tribal communities? Do they have the technical experience to build the app according to the tribes needs and security restrictions? Will they be available throughout the life of the project, and after for long term updates and maintenance?

Does the app design company have in house designers to assist the tribal community with creating a prototype to test out before implementing the language mobile app further? How can the tribe involve the artists and designers within the community to collaborate with the app designers?

How will the content, or the tribal language in written and/or audio form, be accessed by the app designers?

Is there existing source code which the tribe might access and use to create the mobile language app within the tribal community? A great way to get the tribal youth and college students, and educators involved is holding the tribe's own community mobile app-a-thon.

**Collaborators**
Creating a mobile language project takes people power and resources from within and outside the tribal community. Consider who the tribe is already working with on the existing language program, and other existing collaborators the tribe has already built a relationship with and discuss the idea of creating a mobile language project. Reach out to other tribes who have built a language app, and ask questions about their project, and how did they get started. Some possible collaborators to consider:
Libraries
Indigenous entrepreneurs/businesses
Indigenous language teachers and programs
Indigenous professors - Native American/Indigenous Studies, Linguistics, Engineering, Computer Science
Interested learners
Tech companies
Tribal Youth/College Students
Universities, Community Colleges, Tribal Colleges

Decision Makers
Who are the decision makers within the tribal community? Is it an elder council, tribal council, tribal administration, traditional knowledge keepers? Gather those who will determine if such a project will even be considered? How will the community be involved in this entire process?

Would the decision makers consider a prototype of social greetings or phrases which can be heard in every life to be recorded and used in a mobile language project?

Funding Sources
When considering the mobile language projects look at how the tribe's current language program is funded, can this funding be expanded? Are there internal funding sources within the tribal budget? Approach existing funders of other tribal projects and seek their advice on funding the mobile technology project. Think about external sources such as grants which the tribe seeks versus grants which the collaborating partners seek.

Consider funding the project in stages: obtain initial seed money to get a mobile app prototype built, and then seek further development funding to expand the project. Lastly, consider whether the mobile app project will need continued funding for maintenance and updates.

Language
Take a look at the tribe's existing language program and existing language recordings, can these be used to build the prototype of the tribes mobile language app? If so, who will test the app for its functionality?

If the tribe's existing language program does not have language recordings, how is the tribe going to determine who decides what language families or key phrases, words or more extensive dialog will be recorded and used for the audio in the language app?

Who are the tribes most fluent speakers, and who is the tribes linguist or is the tribe working with an outside linguist to record and/or document the language? Will the recording of the language take place in house using portable recorders, or in a studio?
How will the content or the tribal language in the written and/or audio form be gathered, edited and provided to the mobile app designers?

If the language is written, who will be responsible for translating the audio recordings into the written language? If the language is not written, what icons will be used to represent the key phrases, words or sentences?

If the language is not written, you might consider using an Interactive Voice Response (IVR) which allows the interaction with sound via a cell phone keypad. Another consideration is using Short Message Service (SMS) to communicate using icons and audio versus written text.

What parties will be responsible for approving and updating the language recordings and providing it to the mobile app designers to update across the platforms?

**Last thoughts ...**
Remember a project does not have to include the entire and complete language. Sometimes smaller mobile projects make the most impact. Remember mobile technologies are a tool, a tool for tribal communities to consider using and implementing on whatever scale or terms the tribal community decides.

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**Disclaimer**

This resource guide is intended to support and assist tribal communities in considering a mobile language project. Each community may have additional areas which need to be addressed or not included.