

Sign Language Machine Translation and Deaf Communities: the case for co-creation

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Sign Language Machine Translation

- Enables translation of a signed into a spoken/written language, and vice versa
- Uses technologies such as natural language processing and machine learning
- **Virtual avatars** often used to display the translation



SignON



EASIER

Co-creation: basic principles

- involve diverse range of stakeholders throughout the design process
- aim: create technologies that are user-centred, inclusive and aligned with the needs of intended users
- fosters a sense of ownership
- active collaboration and engagement in various design activities
- iterative approach: multiple design cycles and feedback loops

Co-creation in SLMT projects: EUD's role

- 2 EU Horizon 2020 projects, combined €9.5M
- Aim to create a multilingual SLMT mobile application
- Large consortia with 15+ partners: including deaf community orgs, academic and industry partners
- **EUD's role** 1) identify appropriate use cases 2) identify user needs 3) gather user feedback



Co-creation in practice with partners

Challenges:

- Accessibility budgeting
- Inaccessible work culture
- Cultural and linguistic sensitivity (additional labour)
- Fear of disapproval
- Expectation management

Co-creation in practice with users

Challenges:

- Expectation management
- Connecting user involvement to communication

Recommendations

- Get involved **from the beginning** in planning and budgeting
- Ensure **tight connection** between communication and user involvement
- **Show the technology early and often** - but manage expectations
- **Seek out deaf people as potential partners** in other domains, not just as users



Is your NAD prepared?

- Awareness of what is happening in SLMT for your (sign) language(s)
- Basic understanding of SLMT development
- Identify gaps in your knowledge
- Clear response on use cases, ethical issues, and quality

Look for what is coming at the horizon, not for what there is now

