
Increasing Access to Citizen Services With Conversational AI

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ABSTRACT

CUIs have significantly increased access to information and services, particularly through the financial services and public sectors. This position statement highlights some examples of these developing using boost.ai's platform, and potential areas for future collaborative research. It is shown that CUIs have demonstrated support in the Nordics for individual health and wellbeing, for example those shielding during the pandemic, as well as sharing insights from boost.ai's delivery strategy to enable and encourage diverse CUI user groups, and recruiting non-machine learning experts into the development of CUIs.

POSITION STATEMENT

CUIs have significantly increased access to information and services, particularly through the financial services [1][2] and public sectors [3][4]. This position statement highlights some examples of these developing using boost.ai's platform, and potential areas for future collaborative research. It is shown that CUIs have demonstrated support in the Nordics for individual health and wellbeing, for example those shielding during the pandemic, as well as sharing insights from boost.ai's delivery strategy to enable and encourage diverse CUI user groups, and recruiting non-machine learning experts into the development of CUIs.

CUIs can enhance an individual's personal health and well being by being a readily-available service through hospitals to provide 24/7 access to information and services. The low-threshold nature of talking to a robot means people with questions they might be embarrassed to ask another human can be addressed by anonymous support services. Previous research has indicated that some groups find it easier to open up about mental health issues when engaging with a virtual avatar rather than a human therapist[5]. Helsinki University Hospital has deployed a virtual assistant, Milli, which helps young people get help for conditions such as depression. Milli operates via a chatbot interface and allows users to describe their situation, and they then receive clinical advice and are triaged to the right person to help them. During the current pandemic, with increasing potential for loneliness and social isolation, access to a service like this may offer much needed avenues to support.

Individuals who are self-isolating during the pandemic have been supported by CUIs developed in collaboration with boost.ai in the Nordics both in the public and private sectors. The Norwegian Labor and Welfare Administration (NAV) which administers a third of the national budget of Norway through schemes such as unemployment and sickness benefits, has developed a virtual assistant which saw a spike in volumes during the lockdown. One of our banking clients used their virtual assistant to proactively inform their

customers about mortgage and debt payment deferrals. Although information about these benefits were available through other media channels, high conversation volumes around these topics suggests it has helped large numbers of people.

CUIs are aiming to support diverse user groups in the Nordics, particularly in the public sector. The Finnish Immigration Service, MIGRI, have been engaging immigrants to Finland through the development of a Virtual Agent Network (VAN). The idea behind this project is to have one centralised interface which can support multiple language, for all immigrants to Finland. It is particularly aimed to support asylum seekers who may not know what services are available to them.

The boost.ai platform is especially designed so that non-machine learning experts can build and train enterprise level virtual assistants. The idea is that people with industry experience and knowledge about people and users train the AI rather than coders. We view this as critical, firstly because content and natural language understanding can be developed by a more diverse set of individuals potentially representing a wider range of communities in the development of the AI.

These are a few examples of how CUIs are being deployed in the Nordic countries. Although we have a broad understanding of user needs and volumes, empirical data is lacking around how users experience these service provisions, and how access to them could be improved.

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