

## **A web forum for communication apps – development and design**

This paper introduces Apps for communication, a web forum available to everyone interested in assistive technology and AAC. The forum serves as a national meeting place for finding and sharing relevant and accessible information on apps for communication.

### **Aim**

The rapid development in technology has given people with communicative disorders increased independence and opened a new market for assistive technology. Tablets and smartphones now offer speech synthesis, picture symbols and photos [1, 2]. Equipped with applications suited for the individual's needs, they can give good support and even replace considerably more expensive assistive technology [3].

However, the selection of communication apps differ greatly in quality and the need for support from professionals to advice suitable choices for the individual is considerable. This, in turn, is a time consuming task for professionals, especially since the growing app market makes it hard to stay updated.

There have been several local initiatives in Sweden to collect information on communication apps, but naturally, this information has been unstructured and difficult to navigate easily, and unknown to many who would need it.

The aim has therefore been to facilitate for individuals with communicative difficulties, their surroundings and professionals to easily find and share updated and relevant information on communication apps.

### **Method**

This project has run for three years and consisted of three parts:

1. Adjustments, testing and evaluation of apps and access methods
2. Development of a web forum for communication apps and access methods
3. Dissemination and maintenance of the web forum and of the adjustments made

The now finished web forum is a result of a several step development. Initially, a questionnaire was sent out to professionals nationwide working with AAC and assistive technology. They were asked to describe how they would like the forum designed regarding the graphical user interface, the functionality and the content. The questionnaire was also sent to disability associations and spread via various web channels to reach as many interested as possible. Together with additional discussions with disability associations, the response was used as a basis for the design of the forum. As soon as there was a beta version, the responders were asked to evaluate it.

Responses from this second evaluation were used to make changes in the design. The design was then implemented in the content management system EpiServer and the module Relate+, which is based on .Net technology. The forum also considered the Web Content Accessibility Guidelines 2.0 (WCAG) from the W3C Web

Accessibility Initiative (WAI) [4]. The forum was then launched nationally and marketed in channels such as mailing lists, Facebook pages, websites and printed information material.

Due to changes in the Swedish Institute for Assistive Technology, the project partner who was originally planned to host the website, this responsibility shifted to DART, Western Sweden's Centre for AT and AAC. Following this shift, the technical platform for the forum was transferred to the open Windows based platform Umbraco.

Based on feedback from users of the existing forum, and structured sessions with disability associations, the forum was redesigned to better meet the users' needs. Changes were made both in the interface, the search functionality and the structure of the categories.

The project also tested apps together with users, and compiled cases based on the results of these evaluations. This is presented in a separate paper.

## **Results**

The web forum is now a national meeting place for communication apps. It is currently mainly maintained by DART, but has its own domain and is available to everyone interested in assistive technology and AAC [5]. It has three subforums; apps for communication support, apps for cognition support and assistive accessories. The content of one of these subforums is maintained by the Centre for Communication and Cognition in Uppsala.

It contains descriptions and reviews of many different types of apps that may give support to persons with communicative and cognitive difficulties, and the number of apps is constantly increasing. The forum is interactive and it is easy for visitors to search information, add and edit content and discuss apps and their use.

Apps can be tagged in various categories and with a number of attributes. These aspects can be used to filter the search result and find the most relevant apps. It is also possible to grade, save favorites and compare apps. Users can contribute to the forum by registering as a member and entering more apps or by editing existing information.

Statistics compiled in October 2015 show that, despite being newly launched, the site draws many visitors and that they stay on the site and utilize the functions.

## **Conclusion**

The project has resulted in a web forum that now is used as a national resource. Information about apps for communication can be shared and found by many more than earlier was possible.

It makes it possible for people to find and share updated, relevant and accessible information on apps for communication. It's possible to find out what features an app has, how much it costs, and to take part of others' experience of using it.

This can serve as a basis to decide on which apps are suitable. Less time needs to be spent on searching and comparing apps to find a suitable one, and contacts with specialist care can be reduced.

The interactivity of the forum and the many users that can share their knowledge, and enter new information makes it an active resource and likely to live on in the future.

### **Declaration of interest**

The authors disclose they have no financial or other interest in objects or entities mentioned in this paper.

### **Acknowledgements**

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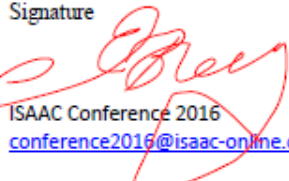
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