

*Involving Seniors in Developing Privacy Best Practices:
Toward Responsible Development of Social Technologies for Seniors*

**SCAN OF THE SOCIAL SUPPORT TECHNOLOGIES
BEING DEVELOPED AND/OR MARKETED TO
SENIORS FOR HOME USE**

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I. STATUS OF THE ONGOING SCANS:

We completed two scans for the *Involving Seniors in Developing Privacy Best Practices: Toward Responsible Development of Social Technologies for Seniors Project*, which resulted in two ongoing research collections of materials. The first research collection comprises *Social Support Technologies*. The second, a more developed curated collection, involves companion robots and is called *Robots That Care*. Both are publicly available at Fabric of Digital Life, housed at Ontario Tech University. Materials are added to the collections on an ongoing basis.

II. Fabric of Digital Life (fabricofdigitallife.com)

Fabric of Digital Life (fabricofdigitallife.com) is a large research database that provides researchers a means to archive representations of technologies to create a repository of artifacts. The database has developed and continues to evolve a customized data ontology based on the Dublin Core metadata scheme. Fabric uses the CollectiveAccess open-source collections management and presentation software, which provides a relational database that enables cataloging, searching, and browsing of web-based special collections. Primary research artifacts including videos, texts, and audio material are uploaded and stored in the database. It uses 19 metadata fields.

III. Social Support Technologies for Seniors Collection

We conducted a scan of social support technologies being developed and/or marketed to seniors for home use. These advertising videos were created by companies depicting products or pre-release technologies (i.e., selling or being developed) marketed to seniors for home use (e.g., aging-in-place, etc.). They do not include technology for seniors homes or hospitals. Using keywords, we can identify a range of features geared specifically to social support interpreted in multiple ways. Some include companion robots in direct social interaction with seniors providing their personal data through their interactions, while others involve collecting data from sensors to send to family members and friends absent from the physical space. One finding is that seniors are increasingly positioned within an ecosystem of data devices that mediate human interaction. This collection provides a scan of the broader advertising domain in order to contextualize the much more specific digital technologies used in the study focus groups and workshops, as well as the *Robots that Care* collection.

- The collection includes 44 advertising/marketing videos produced by companies and developers
- Technology platforms: wearable technologies (20), robots (12), smart home (11), mobile app (1).
- Significant keywords: Aging (44), Surveillance (20), Health (36), Independence (25), Safety (27), Peace-of-Mind (19), Protection (17), Emergency (21), Social interaction (9), Caring (42), Communicating (23), Controlling (17)

It can be viewed here: [Social Support Technologies for Seniors](#)

IV. Robots that Care collection

The Robots that Care collection is a small, focused collection of 12 artifacts that include company advertising videos that describe robot products claiming to provide social interaction in some capacity. Social interaction may involve serving as a companion, reminder system, entertainer, caregiver, amongst other roles. The robots are Misty, Temi, Zenbo, Rudy, Elli.Q, Rudy, Mabu, and Buddy. After analyzing each artifact for visual, textual or oral information conveyed during the videos, four categories of keywords are used to classify each item: technology, marketing, general, and augmenting. For the technology category, each artifact has been categorized according to a taxonomy of 60 technology keywords relating to Robots, Human-Robot Interaction (HRI), Human-Robot Communication and Human-Computer Interaction (HCI). The collection provides a way to easily compare the marketing claims of companies across the collection.

It can be viewed here: [Robots That Care](#)

V. Other Materials Relevant to the scan

Artifacts from both collections are also included in two other large research collections in the Fabric of Digital Life database and repository, which helps to contextualize the analysis in a much broader sphere of research including journalism, press releases, academic papers, patents, film clips, and other textual materials:

- [Aging, Culture, and Technology](#)
- [Humanoid Robots](#)

VI. Ongoing Work

One key finding is that the marketing materials ignored reporting to consumers some key issues for this study, including privacy, so they are not generally included in the keywords. New specific keywords for these collections will be applied arising from the study, namely: privacy, safeguarding, reassurance, encouragement, cognitive stimulation, ethics, and legal.