

# Mobile applications fostering situated learning opportunities in Alternative Agro-Food Networks

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Alternative Agro-Food Networks (AAFNs) represent new forms of collaboration between producers and consumers providing a space where a variety of information and knowledge might be exchanged during direct interactions between consumers and producers. Nowadays, mobile applications have the potential to provide ubiquitous and context-aware service to support and extend such information/knowledge exchange and to enhance situated learning opportunities (SLOs) (Lave & Wenger, 1991; Wu, et al. 2013) for producers and consumers. Hence, they might foster mutual understanding and collaboration in AAFNs.

The paper aims to explore the value of the use of mobile applications and services to increase SLOs in AAFNs. In particular, the key research questions are:

- What is the role of apps in increasing SLOs in AAFNs ?
- Can M-Services increase SLOs before, during and after a face-to-face interaction in an AAFN?

The rationale of the research is to maximize the chances of conceiving of new ubiquitous services able to improve the mutual understanding and collaboration among producers and consumers in AAFNs, by reinforcing social capital of local food systems.

The study reports main results from a depth review of 126 mobile apps explicitly oriented to AAFNs. and available on any of the two major mobile applications stores: the app store (IOS) and google play (Android). The main functionalities and services offered by reviewed apps to their users have been classified on the basis of their information flow direction (reporting, informational, interactional) and the function scope (social oriented, decision support oriented) and a discussion on how reviewed apps contribute to increase Situated Learning Opportunities in an Alternative Agro-Food Networks is reported in the paper.

Results from the study show that although, mobile technologies offer the chance to capture and use large sets of user's context data to support and extend SLOs in AAFNs, reviewed apps have a restricted context awareness capacity and use of contextual data appears very limited too. Moreover, despite it is widely recognized that social interaction plays a fundamental role in situated learning process (Lave & Wenger, 1991) the study showed that only a restricted number of apps provide functionalities that could support social interaction for such a process. Similarly, the support of decision support oriented functionalities resulted to do not take advantage of all the opportunities offered by mobile technologies to provide ubiquitous services able to increase and extend SLOs in AAFNs.

The research results can be used to design and develop M-services that, overcoming limits of reviewed apps, could be better able to support Situated Learning in AAFNs in an effective way, and allowing re-connection and close communication among agro-food producers and consumers creating new market opportunities and favorable conditions for cooperation and innovation within the local food system.