Virtual location-based services (VLBS) aim to link physical locations with virtual locations (e.g., a website). Our current working prototype of a VLBS allows Web users as well as mobile user to chat with each other based on a shared location, both physical and virtual. At the moment, however, we make some simplifying assumptions that need to be addressed when aiming for a real-world application.

**Beyond Point Locations.** For the time being, the backend of our prototype contains only point location, i.e., each location/place is represented by a single geo coordinate (latitude/longitude). This is also true for places that have a significant spatial extend (e.g., nature reserves, parks, golf courses). Apart from "just" storing these geographic concepts, important functionalities are operations over them, including the calculation of intersections between regions or between a line and a region. For moving objects, not only the spatial dimension/location is of interest but also the temporal one. For example, the cloud of poisonous fume after an accident in a chemical plant might both grow and move over time. From an academic perspective, these research questions have been addressed over a decade ago towards the development of Geo Information Systems (GIS). It needs to be investigated what types of GIS are (freely) available and to which extend or backend architecture could profit them.

**Beyond Synchronous Communication.** We currently assume that two or users meet at the same (or similar) location at the same time. This reflects the classic synchronous communication in group or private chats. For (virtual) location-based services this can be too restrictive since the probability that two or more users are close to the same location at the same time can be too low for practical purposes. Another step to extend the prototype is therefore to support asynchronous communication like in online fora or Q&A systems. Consider, for example, a user browsing a hotel website to find a room for the upcoming night. The user might want to know whether there is a noisy construction site going on, and can post this question using OneSpace. Apart from mobile users that might be close to the geo location of the hotel, this question can also be forwarded (a) to users that were close to the hotel not long ago or (b) to users at a later time when they pass close to the hotel. Typically, the information needs are both location and time-specific, and the matching between questions (or other types of messages) need to be based on these spatio-temporal information. Given the example above, the user looking for a room might need an answer within the next 2h hours. Also, it is not reasonable to send this question to users that passed the hotel 2 years ago.