TravelSampo System for Creating Mobile Audio Guide Tours
Enriched with Linked Data

Eero Hyvönen, Aleksi Lindblad, and Eetu Mäkelä
Aalto University, Helsinki

TravelSampo [1] is a prototype system, by which museums are able to create interactively audio
guide tours inside museums and outside in the open air. The system includes a web-based editor
by which a curator can describe objects in an exhibition, or in the open air, using a set of shared
ontologies published in the National Ontology Service ONKI (http://onki.fi/), and upload related
audio descriptions, text, and images. Each exhibit object is given an identifier and a geo-location.
When the end-user is near the object, either in a museum or in the open air, information related
to the object can be given to her based on the object's identifier or the mobile phone's GPS
location. A major novelty of TravelSampo lies in its ability to associate the object metadata
automatically with millions of semantically related pieces of information available though the
Linked Data cloud (http://linkeddata.org/) and the CultureSampo system
(http://www.kulttuurisampo.fi/). For example, a painting can be linked, based on the underlying
ontologies and metadata, with the biography of the painter in Wikipedia or in the National
Biography, with other paintings of the artist in the collections of other museums, with photos and
books about the artist, and so on. This gives the end-user a richer experience than is possible
with traditional audio guide systems. For the museums, TravelSampo offers a cost-efficient and
dynamic way of creating information rich audio guide programs, and re-using and linking each
others collections through linked data, leading to a win-win situation in collaborative content
creation. The paper presents and discusses the underlying ideas of TravelSampo and our
experiences in developing the systems especially from the content publishers’, i.e. the museums’
viewpoint.

Interest through Direct and Indirect Associations in Heterogeneous Sources - The TravelSampo