

4 Conclusions and future work

In this paper, a methodology for modeling software requirements of AmI applications is presented. This methodology consists of five models. In phase 1 we captured part of the context sensitivity with the business modeling. In phase 2 we captured part of the context sensitivity defining the environments in addition to capture the intelligence with the tasks and goals. In phase 3 we capture the ubiquity defining the technological elements of communication and also we capture the natural interaction with the actor associations indicating the type of interaction, the phase 5 show us overview of goals of the application. The results on the validation of our approach with the case study showed better clarity in the specification of the interaction between the user and the system. In addition to a concrete definition of the objectives and goals of the analysts. Currently, we are working on refining our proposed methodology for validating the identification of all elements of an AmI application. For to do this, we are working in several case studies reals of AmI applications.

References

1. J.C. Diane, K. Sajal. Smart Environments Technologies, protocols and applications. Ed John Wiley & Sons, Inc. New Jersey. 2005.
2. J. Sen. Ubiquitous Computing: Potentials and Challenges. Proceedings of the International Conference on Trends & Advances in Computation & Engineering (TRACE), 25-26 February 2010.
3. K. Ducatel, M. Bogdanowicz, F. Scapolo, J. Leijten, J-C. Burgelman. ISTAG Scenarios for Ambient Intelligence. IPTS-Seville 2010.
4. G. Báez, Silvia I. B. Brunner. Metodología DoRCU para la Ingeniería de requerimientos. WER (Workshop in Engineering of Requirements) p./pp.210-222. 2001.
5. L. González, G. Urrego. Modelo de requisitos para sistemas embebidos. Revista: Ingenierías, Universidad de Medellín, Colombia. 2008.
6. C. Evans, L. Brodie, J. Augusto. Requirements Engineering for Intelligent Environments. In Proceedings The 10th International Conference on Intelligent Environments (IE'14), pp. 154-161. IEEE Press. 2014.
7. A. Martinez, B. Vazquez, H. Estrada, L. Santillan, C. Zavala. Incorporating technology in service-oriented i* business models: a case study. Springer-Verlag Berlin Heidelberg. 2016.
8. L. Irazabal. Inteligencia ambiental ¿Una oportunidad para una mejor calidad de vida?. DYNA, 79(8). 42-43. 2004.
9. I. Vazquez, D. Lopez. Inteligencia Ambiental: La presencia invisible. Solo programadores, ISSN 1134-4792, N° 127, pags. 16-19. 2005.
10. J. Augusto, P. McCullagh. Ambient Intelligence: Concepts and Applications. Computer Science and Information Systems, Vol. 4, No. 1, 1-28. 2007.
11. H. Estrada, A. Martínez, O. Pastor. Goal-based business modeling oriented towards late requirements generation. Lecture Notes in Computer Science. 2003.
12. V. Ortiz. Implementacion automatica del modelo de detección de aislamiento social en adultos mayores a traves de inteligencia ambiental. Master thesis. CENIDET, Cuernavaca, Morelos, Mexico. 2016.