

# UNIVERSIDAD DE BURGOS

## ESCUELA DE DOCTORADO

### TESIS DOCTORALES

**TÍTULO:** OPENPLEXUS: A3 -TIERCOLLABORATION AND KNOWLEDGE SHARING ARCHITECTURE FOR VIRTUAL TEAMS

**AUTORA:** GIACINTO, ROBERT  
**PROGRAMA DE DOCTORADO:** INGENIERÍA CIVIL E INDUSTRIAL

**FECHA LECTURA:** 19/01/2016

**HORA:** 10:00

**CENTRO LECTURA:** ESCUELA POLITÉCNICA SUPERIOR. AULA DE GRADOS

**DIRECTOR/ES:** ANA MARÍA LARA PALMA

**TRIBUNAL:** HEIDE FAESKORN-WOYKE

MARIO ARIAS OLIVA

HORST STENZEL

KIYOSHI MURATA

ALFREDO JIMÉNEZ PALMERO

**RESUMEN:** The focus of the project lies on the work in knowledge-intensive companies with innovative teams, where new knowledge is created collaboratively in either an organisational or an inter-organisational context. This new knowledge is the result of a highly individual process in which documents are created, discussed, edited or shared with others who further use them in their own tasks.

One main concern is the externalisation of tacit or implicit knowledge and the support of knowledge reuse processes. In many situations this knowledge is only accessible to a small group of people where it is often buried in folders or email inboxes and is therefore not available to others with related information needs.

An organisational memory that only archives these knowledge assets in a central repository partly solves this issue but does not support easy discovery and reuse since the context in which these documents were used is lost or the category it was filed to does not match the mental model of the user who is looking for this information.

The goal of the project is to support and improve knowledge work processes in an organisational context in three important respects: Firstly, the creation of a common vocabulary that is needed for knowledge sharing and knowledge transfer. Secondly, the modelling of a ontology for contextual meta-information of knowledge artefacts in organisations and thirdly, the presentation of additional, semantically related information of an item in a specific context. These goals are achieved with a distributed system of knowledge processing components that act proactively according to the user's activities and needs.

**Palabras clave:** Information systems, Knowledge management, Knowledge-based systems, Information Retrieval