# A Study of the Impact of Global Software Development in Packaged Software Release Planning

#### Ricardo Colomo-Palacios

(Universidad Carlos III de Madrid, Leganés (Madrid), Spain ricardo.colomo@uc3m.es)

#### Pedro Soto-Acosta

(Universidad de Murcia, Murcia, Spain psoto@um.es)

### Francisco J. García-Peñalvo

(Universidad de Salamanca, Salamanca, Spain fgarcia@usal.es)

## Ángel García-Crespo

(Universidad Carlos III de Madrid, Leganés (Madrid), Spain angel.garcia@uc3m.es)

Abstract: Today's globalization of software development has its advantages, but also its drawbacks. Software project managers often lead the production of new software versions and their release on the market. This paper analyses the main challenges faced by software product managers in release planning with regard to the adoption of Global Software Development (GSD) practices for developing packaged software. To achieve this objective, two qualitative techniques are used in this study, namely, Focus Group and Delphi Study. The experiment produced two lists, ranking challenges in software release planning. One list was made considering the adoption of GSD practices and the other did not take into account the adoption of these practices. Results show that there are some, apparently solved, challenges for packaged software release planning like "Project monitoring & control" or "Quality management" that become crucial when facing GSD scenarios, while there are other important challenges in traditional software release planning such as "Requirements prioritisation" and "Stakeholders Management" that apparently do not add extra pressure in GSD environments. In sum, GSD is found to be highly influenced by issues concerning personnel and human resources management.

Keywords: Global Software Development; Product Manager; Release Planning, Focus Group,

Delphi Study Categories: D.2.9

## 1 Introduction

Today, globalization has a major impact on the development of software. This is causing software development teams to evolve from a single site to a multiple localization working environment [Hernández-López, 10]. Software development is becoming a multi-site, multicultural, globally distributed process [Prikladnicki, 03], [García-Crespo, 10]. As a result, a new field called Global Software Development