The success of Cloud computing has encouraged many application developers to consider migrating their applications to the Cloud. Given the early market dominance of the IaaS service model, many existing works focus on selecting the best service provider for a set of criteria related to the virtualization and hosting of the application. In this work, we aim to progress the analysis tasks in feedback relationships with each other. The research challenges that need to be addressed towards this direction are identified and related to the different aspects of migration of applications to the various Cloud service models.

More specifically, this work takes the position that migrating an application to the Cloud is a multi-dimensional problem with multiple decision points that create feedback loops with each other, and with various analysis tasks related to them. The contribution of this paper is to identify these decision points and related to them. The results, a vision of a Cloud migration decision support system considering these aspects is provided. In order to reach this point however, a comprehensive analysis of the challenges related to migrating to the Cloud is required.

**Further Information**

**Selected Publications**


**Acknowledgments**

The research leading to these results has received funding from the 4Caast project part of the European Union’s Seventh Framework Programme (FP7/2007-2013) under grant agreement no. 258862.

www.4caast.eu