Critical issues across saas development: learning from experience

ABSTRACT

The cost-efficiency with which customers are able to use remote software resources can be reduced by maximizing the number of customers capable of accessing each instance of an application, a concept known as the Software as a Service (SaaS) model. Further to incorporating the general requirements of cloud computing, it is essential that SaaS systems are designed to be scalable, customizable and able to support multiple tenants if their development is to succeed. In this paper, the process of developing one such application is described, which consider the requirements and features of SaaS. The prototyping as part of Waterfall methodology and Model View Controller (MVC) design pattern were employed to facilitate development process. From this experience, this paper aims to strengthen and broaden the understanding of issues that are critical to the development of SaaS. These issues are presented from different perspectives, i.e. the customizability, the scalability, and regarding the development methodology.

Keyword: Customization; Issues; SaaS DLC; SaaS requirements; Scalability; Software as a Service