# Chapter 4 A Requirements Approach for Building an Enterprise Cloud Service Catalog

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#### **ABSTRACT**

In the context of cloud computing, the service catalog is a critical component of the cloud computing architecture. Most cloud computing projects will invariably begin with a discussion of what IT services an enterprise needs. Even when end users have a cloud environment, the business still wants to know which cloud services we need and how much does it costs. Information Technology Infrastructure Library (ITIL) service design defines a service catalog as a list of technology-enabled services that an organization provides, often to its employees or customers. More specifically, the service catalog is an expression of the operational capability of a service provider or enterprise within the context of an end customer, a market space, or an internal business unit stakeholder. Unfortunately, most service catalogs are built by technologists for technologists. This design methodology is fine assuming the user of the catalog is an information technology professional.

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#### INTRODUCTION

In the context of cloud computing, the service catalog is a critical component of the cloud computing architecture. Most cloud computing projects will invariably begin with a discussion of "what IT services does an enterprise need?" Even when end users have a cloud environment, the business still wants to know which cloud services do we need and how much does it cost? Information Technology Infrastructure Library (ITIL) service design defines a service catalog as a list of technology-enabled services that an organization provides, often to its employees or customers (Cisco, 2011). More specifically, the service catalog is an expression of the operational capability of a service provider or enterprise within the context of an end customer, a market space, or an internal business unit stakeholder.

Unfortunately, most service catalogs are built by technologists for technologists. This design methodology is fine assuming the user of the catalog is an information technology professional. Most service catalogs require a tremendous amount of training and education before the user can be proficient. However, one potential user of the catalog is the business user or cloud architect who is designing an infrastructure for a specific set of business requirements. These users shouldn't be forced into extensive training programs due to the high degree of complexity of the application. Good design techniques will help reduce this complexity and provide real business value for the enterprise. The key is to get your service customers to understand what cloud-based services are available, what they cost, and what they provide for greater customer satisfaction. Increased satisfaction leads to greater utility and an increase in service utilization.

This paper will review the foundational background which will include the basics of cloud computing, usability and design concepts, and the traditional functionality of a technology register. We will also introduce a collection of business requirements for a cloud service registry with a specific focus on the end user experience. An end user service cloud catalog will bridge the gap from the design requirements to the technology delivery organization. Once in the hands of IT, a more traditional service catalog can be used to leverage the service orchestration and delivery components. Finally in this paper, we will look at an actual case study to review the impact of this research. Success will be measured by reviewing the business metrics in order to show the criticality of great design techniques and using familiar models like e-commerce.

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