

## Value-Co-Creation in Cloud-Computing

*Schmidt Rainer*

**Purpose** – Cloud-computing (Mell & Grance 2009) is a quickly spreading approach for the provisioning of information technology services. It is often considered as another kind of public utility (Carr 2008). Cloud-services are specified using a GD-Logic (Lusch & Vargo 2006) based approach. Thus, cloud-services are specified as a single, uni-directional activity during the operating phase of the cloud-service.

There is growing criticism of this approach. It has been shown, that cloud computing does not fit to the utility model (Brynjolfsson et al. 2010) and that there is the co-creation of value in cloud-computing. However, up to now, no mechanisms for value-co-creation in cloud-computing have been described.

Therefore, this paper introduces a SD-Logic (Lusch & Vargo 2006) based approach for value-co-creation in cloud computing.

**Methodology/approach** – Based on the definition of service systems in cloud-computing, an extended cloud-service life cycle is described. The analysis of the cloud-service life cycle is the foundation for the identification of value-creating interactions

**Findings** – Using the cloud-service life cycle, a number of value-creating interactions are identified. Most of the interactions are outside the operating phase of the cloud-service, which are in the center of existing specification approaches. One example is the definition and reconfiguration of cloud-service. Many of the interactions are asynchronous that means they are not tied to certain point of time.

Also the quality attributes of such interactions contribute to the value created. E.g. if a service reconfiguration takes place quickly, this may be of higher value for the customer.

**Research implications** – The interactions found can be abstracted and applied to different kinds of cloud service. Furthermore, quality attributes can be assigned to them independently of the original service. Therefore, it has to be considered to handle the interaction as separate service. This would allow reuse across different cloud-services.

**Practical implications** – It is easier to compare cloud-service offerings. Two cloud service offerings can be compared using the set of interactions provided.

It is easier to differentiate cloud-service offerings. The same cloud service-offering can be differentiated using different sets of interactions.

**Originality/value** – Cloud-services have been primarily regarded as a utility and cost reduction have been their primary goal. The research shows that cloud-computing can also be an enabler.

Up to now, only functional and non-functional (quality) properties (Glinz 2007) have been used to evaluate a service. The interactions identified, introduce a third dimension for cloud service evaluation.

**Key words** (max 5) Cloud-computing, cloud-service, SD-Logic, interaction

**Paper type** – Conceptual paper /