Abstract

Interpretive structural modeling (ISM) is a well established methodology for identifying the interrelationship between the variables influencing the system. ISM approach starts with the identification of variables affecting the system. The strategy of cloud computing is subjected to many enablers. This paper deals with the representation of ISM to explicit the interrelationship between the enablers of cloud computing. After listing the enablers a structural self interaction matrix (SSIM) is developed based on pairwise comparison of variables. Transitivity is checked on the reachability matrix obtained from converting SSIM. The enablers are classified into four clusters based on their driver power and dependence. A diagraph is constructed, then ISM model is derived. In this paper key concepts mitigating the most sensitive enablers are discussed in detail.

References

- Tim Mather, Subra Kumaraswamy, Shahed Latif, "Cloud Security and Privacy- An
Enterprise Perspective on Risks and Compliance; O Reilly
- Ambikadevi Amma, T., Dr. Radhika, N Dr., Pramod V. R., ISM for Analysing the interrelationship between the inhibitors of cloud computing; International Journal of Computer Applications in Engineering Sciences, Vol. II ISSUE III, September 2012.
- Hwang, K.G., Fox, and Dongarra, J., Distributed Systems and Cloud Computing:
- Quan Liu, Lu Gao, Ping Lou, "Resource Management Based on Multi-Agent Technology for Cloud Manufacturing," IEEE 2011

**Index Terms**

Computer Science  
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**Keywords**

ISM  SSIM  driving power  dependence diagram  cloud computing