# Paper Review Measuring the Mutual Information Based on Triple and Quadruple Helix Model

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#### 1 Summary of Paper

This paper applied the triple and quadruple helix model to quantify the relation between industrial location and vertical industrial linkage. However, the reason for using this model is not clear. The enumeration of existed literature are not well organized to persuade the benefit of such a model.

#### 2 Methodology

The author should be more careful in choosing terminologies to clarify mathematical relations. To name a few,  $H_{XY}$  denotes joint entropy rather than common entropy, correlation is not the same as dependence. The specific method and data requirement to calculate high dimensional entropy should be clarified. The difference between discrete and continuous entropy should be clarified. A lot of work remains to be done before the paper can be accepted.

### 3 Empirical Basis

The postcode in the data description table are useless. Same name but different classification numbers are allocated in Table 3.

#### 4 Results

The unit of entropy should be bit. The realistic significance of the calculations should be stressed.

## 5 Organization

It is astonishing that the first paragraph of the paper is from a template description. There are more than 40 citated papers however only the first 26 were listed in the Reference section. The author should be serious about his/her work. The English language of this paper is poor, also.