

## The Role of Experts vs. Automation in Constructing FCMs

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### **Abstract:**

This study presents a method to assign relative weights when constructing Fuzzy Cognitive Maps (FCMs). We introduce a method of computing relative weights of directed edges based on actual past behaviour (historical data) of the relevant concepts. There is also a discussion addressing the role of experts in the process of constructing FCMs. The method presented here is intuitive, and does not require any restrictive assumptions. The weights are estimated during the design stage of FCM and before the recursive simulations are performed.

### **Keywords:**

FCM, relative importance (weight), Fuzzy Logic, Soft Computing, Neural Networks.