



Knowledge Dispersion Index for Measuring Intellectual Capital

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In this paper we propose a novel index to quantify and measure the flow of information on macro and micro scales. We discuss the implications of this index for knowledge management fields and also as intellectual capital that can thus be utilized by entrepreneurs. We explore different function and human oriented metrics that can be used at micro-scales to process the flow of information. We present a table of about 23 metrics, such as change in IT inventory and percentage of employees with advanced degrees, that can be used at micro scales to wholly quantify knowledge dispersion as intellectual capital. At macro scales we split the economy in an industrial and consumer sector where the flow of information in each determines how fast an economy is going to grow and how overall an economy will perform given the aggregate demand. Lastly, we propose a model for knowledge dispersion based on graph theory and show how corrections in the flow become self-evident. Through the principals of flow conservation and capacity constrains we also speculate how this flow might seeks some equilibrium and exhibit self-correction codes. This proposed model allows us to account for perturbations in form of local noise, evolution of networks, provide robustness against local damage from lower nodes, and help determine the underlying classification into network super-families.

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