In the context of the five review elements, please evaluate the strengths and weaknesses of the proposal with respect to intellectual merit.

The proposal is for a planning grant to support the creation of a development plan for a community financial cyberinfrastructure. The PIs argue that need for a more sophisticated financial computing infrastructure, including datasets and computational tools, has been highlighted by the recent current global financial crises. Currently, researchers face the challenge of access to financial data for research because financial organizations don't have an incentive to share such information. Further, the absence of adequate tools monitoring and modeling national and global financial ecosystem makes it difficult to manage overall systemic risk. The PIs envision a financial cyberinfrastructure with appropriate computational research frameworks, models and methods for ingesting and processing numerous streams of financial transactions and economic activity in real time, as well as open standards and shared semantics for cross linking data from different markets, countries and other connected eco-systems. The process of developing such a community infrastructure will borrow ideas from best practices developed in the process of developing similar community infrastructure in other domains such as in bioinformatics.

Another goal to be achieved through the creation and use of such an infrastructure is to educate and train an interdisciplinary scholars in areas computing, statistics, economics, etc., and the creation of interdisciplinary courses between the CS department and the school of business.

The funding requested is to a planning process conducted as a series of meetings of researchers and advisory board members and other stakeholders, to be collocated with relevant conferences like the International Semantic Web conference and top database conferences. The focus of this phase will be the on creating tools and datasets for managing systemic risk. The investigative team is interdisciplinary team of computer science and financial experts with demonstrated success in previous efforts.

Strengths: The need for an adequate financial computing infrastructure is acute given the current economic climate. The intellectual merit of this proposal is in its interdisciplinary approach to try to develop a blueprint for creating a financial cyberinfrastructure that will meet the future grand financial challenges to enable capabilities like the ability to track financial products end-to-end along their supply chain, the ability to produce a "heat map" of our financial system transactions and accompanying economic to enable quick identification of vulnerabilities, knowledge extraction from human activity like comments on social networks.
weaknesses of the proposal with respect to any additional solicitation-specific review criteria, if applicable

Summary Statement

Very important but understudied problem. Very good proposal. Very good team.

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