The EDM Council is pleased to respond to the Commission’s request for comments for the development of fintech capabilities to support the Commission in the fulfilment of its regulatory duties.

1. Are there subject matter areas or specific topics that the Commission should particularly consider or focus on for a potential prize competition?

The EDM Council believes that one of the fundamental challenges facing financial institutions, regulators and market authorities is the lack of harmonization of the precise meaning of the reference and market data that is used to describe the underlying structure of financial instruments and their transactions. The data harmonization challenge implies three topics for consideration under the SPCA:

   a. The development of a business conceptual model (ontology) detailing the precise reality of how financial instruments, legal entities and associated financial processes work across the global financial industry. The ontology would be a formal model of the legal structures, rights and obligations contained in the contracts and agreements that form the foundation of the financial industry.

   b. The expression of the business conceptual model in the open-source Web Ontology Language (OWL) standard developed by the W3C.

   c. The adoption of business rule standards such as SBVR, RuleML and SHACL for unambiguous expression of CFTC policies, requirements and reporting rules.

   • In each case, what is the relevant challenge to be addressed?

The problem of data harmonization exists because financial market participants have each implemented a multitude of systems leveraging existing data models and using their own data definitions. As a result, we have data concepts that use different words to mean the same thing and the same words to mean different things. This is a genuine problem that inhibits the ability of market authorities (and financial institutions) to accurately classify and aggregate financial exposures, perform consistent analysis, run complex scenario-based models, analyze the obligations
of the various players and understand the complex network of relationships that exist across the financial industry.

- **In what ways can FinTech innovation potentially address this challenge?**
  
  - **Ontology**: an industry-standard ontology would help financial institutions and regulators create and explore connections and relationships between instruments, business entities and counterparties to determine expected cash flow, unravel risk and identify transitive relationships. Precise meaning translates into a common language between systems and sources, reduces the cost of doing business and promotes confidence in data among business users.

  - **Web Ontology Language**: adopting a shared and reusable model in OWL would align baseline concepts to explicit meaning and make it easier to process and integrate data. This would result in fewer errors, enhanced data quality validation and significant cost savings.

  - **Regulatory Business Rules**: aligning regulatory rules with the industry-standard ontology (and published in executable form) would serve to avoid misinterpretation and ensure the consistency of reporting across multiple participants.

- **How would a prize competition spur development, interest or broader adoption?**

  Prize competition under the authority of the CFTC would send an important message to the industry on the value of adopting standards. This would help overcome industry inertia and facilitate adoption. These proposed topics also align with objectives of the TechSprint on “Using Technology to Achieve Smarter Regulatory Reporting” sponsored by the Financial Conduct Authority. The alignment with other regulatory activities would enhance the potential of global partnerships between the public and private sectors.

2. **What criteria should the Commission use to select prize competition topics?**

  Prize competition topics should result in practical outcomes that solve genuine modeling and reporting problems facing both financial institutions and regulators.

4. **What competition topics may help illuminate areas where new technology can reduce costs or improve services for market participants and end-users who depend on these markets to manage risk?**

  In our experience, there are three core areas that create significant costs. The first is the maintenance of systems and processes tailored specifically for regulatory reporting. This is often due to the nature of complex reporting requirements from multiple regulatory bodies as well as to
the fact that the requirements for regulatory compliance are not synchronized with the requirements for internal operations. The lack of synchronization highlights definitional mismatches and process reconciliations associated with unravelling derived calculations and for contextual data aggregation. The second is the risk of error and misinterpretation of regulatory reporting requirements. When something is identified as erroneous, the cost of unraveling the complex data compounding processes (along with the fines associated with enforcement actions) can be higher than the costs of reporting. The most substantial cost is related to the inability of both the firm and the regulator to fully analyze or gain new insight from regulatory reporting data. Data that is not appropriately defined and harmonized cannot be effectively aligned to critical business and risk operations and not put to productive use. All three of these essential challenges are caused by the reliance on multiple, non-integrated, point solutions – none of which can be reconciled without a shared data “lingua franca.”

6. Which existing regulatory compliance or regulator reporting processes do you feel would most benefit from RegTech?

CFTC Final Rule Part 45 on swap recordkeeping and reporting requirements

7. Should competition entries be designated “open source,” or should each participant retain full control of its entry and any decision about its availability?

Competition topics that result in the definition and use of data content standards must be open source to achieve broad, industry-wide adoption. The adoption of open source standards would not be a disincentive for commercial enterprises to participate in the process. In an open source model, competition is based on customer support and enhanced functionality. Open source standards form the backbone behind the creation of a broad variety of implementable commercial products that (because of open standards) would be interchangeable.

Thank you for the opportunity to provide comment on the CFTC prize competition. This is an outstanding initiative and very timely. If we can be of further assistance, please don't hesitate to contact me.

Respectfully

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