HARBINGER 2023

Reserve Bank of India's Second Global Hackathon

A hackathon is an event organised to bring together people and entities for the development of innovative solutions for the existing challenges in specified area through problem statements. The problem statements are worked upon by the participants who include, but not limited to, individuals, teams, entities from the hardware/software and coding community during the limited time-period of the hackathon. The modus operandi of a hackathon is a competitive event where the participants submit ideas, create solutions, exhibit the prototypes, and the solutions are judged by a panel to arrive at the winner/s of the hackathon. The solutions thus achieved are primarily technology driven innovative solutions which can be used or promoted by the organisers to refine the existing processes.

About HARBINGER 2023

With the successful completion of HARBINGER 2021, it is time for the next edition of the RBI global hackathon – 'HARBINGER 2023 - Innovation for transformation' with a new theme and new set of problem statements. India has witnessed significant development in the fintech sector, which is transforming the delivery of financial services through innovative products and services. Whether it is payment systems or credit delivery, new-age technology has been playing an impactful role. Services like UPI123Pay, digitalisation of rural finance, open banking in the form of Account Aggregator framework and pilot launch of Central Bank Digital Currency (CBDC) are efforts towards making the financial services more inclusive, accessible and secure. However, there still exists challenges when it comes to having a seamless inclusive digital financial service. We have tried to address these challenges through our problem statements viz. efficient use of RegTech technology, new use cases for CBDC in retail, niche digital financial services for differently abled with a view to have a robust, inclusive and efficient financial services ecosystem in the country.

In order to encourage innovation in these areas, Reserve Bank of India is organising its second global hackathon - **HARBINGER 2023** with the theme 'Inclusive Digital Services' with four problem statements to shape the future of digital financial services in India. The hackathon invites your innovative ideas for these select problem statements.

Problem Statements:

HARBINGER 2023 aims to identify and enable solutions and/or business models that have the potential to make digital financial services more accessible, efficient, compliant and effective, enriching the experience of the users while exploring the technologies that can make the systems more robust and scalable.

It aims to solve the following challenges in the digital financial services landscape:

1. **Innovative, easy-to-use, digital banking services for differently abled (Divyaang).**

   In order to empower the differently abled (Divyaang) people of the country with digital banking services, easy-to-use innovative solutions for digital banking services such as digital payments, account opening, account statement, payment of utility bills, usage of debit/credit cards, etc., may be explored. This would provide equal opportunity to the physically challenged without any discrimination and enable them access in availing financial services.

2. **RegTech solutions to facilitate more efficient compliance for Regulated Entities (REs).**

   RegTech, or Regulatory Technology, applies innovative capabilities and techniques to help financial institutions improve their regulatory governance, reporting, compliance and risk management. For example, classification of loans under priority sector needs to be compliant with priority sector lending guidelines issued by Reserve Bank of India. In addition, through efficient classification, banks are also able to monetize the priority sector portfolio through trading in Priority Sector Lending Certificates (PSLCs). While reporting of the priority sector data is fetched by RBI in an automated way, the classification of the loans at banks is a manual process. RegTech tools that facilitate automated classification of loans under priority sector as per prescribed guidelines and enable banks to comply with same shall be of immense use to the industry. Similarly, other RegTech solutions may be explored for efficient compliance by REs.

3. **Exploring use cases/solutions for CBDC-Retail transactions, including transactions in offline mode.**

   Retail CBDC brings immense scope for innovation which can have positive impact on the banking and financial services. While disbursal of social benefits could be one of the use case, offline use is considered another core feature of a retail CBDC (CBDC-R) and integral to the continued public access to central

bank money. It is also key to financial inclusion and accessibility, where use of physical cash may be constrained by geographic remoteness and/ or a lack of a communications network or power infrastructure. We may explore such use cases/solutions for CBDC-R transactions, including transactions in offline mode, where the wallets must be able to independently verify the authenticity of any CBDC transaction without communicating with the server during the transactions, while mitigating the risk 'of double spending'.

4. **Increasing Transactions Per Second (TPS)/ throughput and scalability of blockchains**

The development of technologies that increase the transaction rate of blockchains has been an important area of research over the years. These decentralized networks pose completely new challenges in terms of their ability to scale for increased demand. However, TPS isn't the only parameter that determines a blockchain's speed. Transaction finality time (the time it takes to confirm a transaction as immutable) is just as important. Together, these parameters describe a blockchain network's scalability, which is the network's ability to handle an increasing number of transactions. Lack of scalability is a significant challenge in the broader adoption of blockchain technology for financial services, as may be in the case of CBDC-R. We may explore technology solutions which may increase the TPS and scalability for broader adoption and exploring more use-cases of blockchain.

Where to Apply?

The hackathon is owned and sponsored by Reserve Bank of India and is hosted on Application Programming Interface Exchange (APIX) platform. A participant may click on the following link to register for the hackathon and submit the proposal after the registration.

https://hackolosseum.apixplatform.com/h1/harbinger2023

Applications will be received only through the online process. RBI will shortlist the most promising solutions for further stages of the hackathon.

Who Can Apply?

All entities, teams or individuals (eighteen years and above) who are eligible to enter into a contractual agreement are eligible to apply. Further the product/solution should have an element of innovation or novel application of technology serving common good.

Participants from all backgrounds and geographies are welcome, albeit knowledge about the Indian financial services market and consumers is preferred. All relevant and impactful solutions will be considered irrespective of the stage.

How to Apply?

Please click on the link for registration.
https://hackolosseum.apixplatform.com/h1/harbinger2023

Once registered, select the problem statement, and submit your proposal. Please fill in the responses for all the proposal questions.

You may apply for more than one problem statement if you fulfil all the criteria set out in each category. Your solution can aim to address the needs covered by more than one problem statement. We are looking at the uniqueness of the proposition and feasibility of the business model alongside to achieve the desired goal.

What is the layout of the event?

Applications will be received only through the given link. The Hackathon shall run in three phases with Ideation in the first phase and Solution Development in the second phase and Final presentation in the third phase. RBI will shortlist the most promising solutions for the finals. Wherever needed, these solutions will be provided with technical and regulatory support so that demo-able products can be created. The shortlisted entities need to submit a working solution which would be evaluated to decide the winners. The winners will be selected based on certain evaluation criteria inter alia understanding of the problem, innovation, solution comprehensiveness, ease of implementation, demonstration/user experience, etc. during the finals.

Important Dates:

Stage	Start	End
Registration & submission of the proposal	February 22, 2023 (Wednesday)	March 24, 2023 (Friday)

Prizes:

Winners in each category of problem statements will get prize money as given below:

Winner - ₹40,00,000 (Rupees Forty lakh)

Runner-up - ₹20,00,000 (Rupees Twenty lakh)

Contact Us:

For **HARBINGER 2023** related queries, the participants may send a mail to

harbinger2023@rbi.org.in

For technical queries during registration or proposal submission process, please reach out to

apixsupport@synfindo.com

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