

**ETHTerakoya**

Performance Evaluation Perspectives  
for Business Use of Blockchain Ethereum  
Performance Evaluation Workshop

2021/10/29 18:00~

# About ETHTerakoya

# Purposes of ETHTerakoya



- Narrow down industry themes, dive into issues, and create proposals to Ethereum for the use of blockchain
- Standardize specifications by putting into the context of practical application from various perspectives including business, technology, and law
- Share knowledge widely through practical workshops based on the deepened contents of the working group

**Working group activities by selected members x workshop (6 times in total; 1 per 2wks)**

**Open workshop (1 per 2-3 mths)**

## Technology

- Feasibility
- Current technical challenges
- About solution approach

## Business / Law

- Industry domain challenges
- Obstacles of law / regulation
- Dive into “Why Blockchain”

## Targeted participants:

Engineers and operators who are introducing /may be implementing blockchain business

## Workshop goals:

You will be able to prioritize in your own views based on the judgement of pros & cons of blockchain implementation

# Operation with the Support of Ethereum Foundation

- Transmit information domestically and internationally by collaborating with the Ethereum official team that has the world's largest blockchain development community
- Dive into industry themes, uncover Ethereum challenges, and provide feedback to the main unit for improvements needed to leverage blockchain



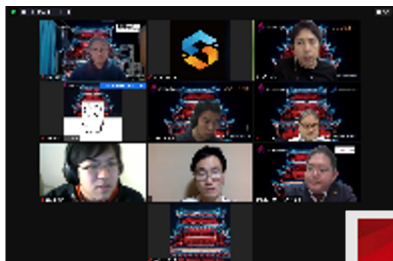
**ethereum  
foundation**

# Previous Activity Achievements

- Past activities include the use of blockchain in voting and workshops dedicated to the technical aspects of Ethereum 2.0.

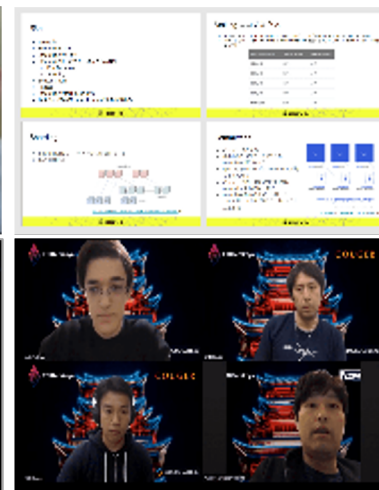
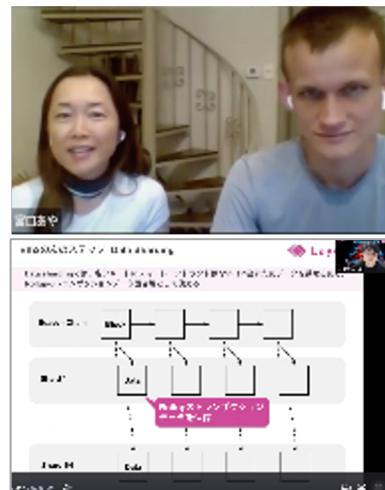
## Working group ① ID x voting x blockchain

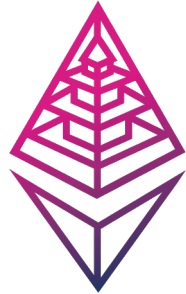
- June 2020 ~ ongoing
- Open workshop was held on 5 November, 2020



## Working group ② Ethereum 2.0

- November 2020 ~ ongoing
- Public workshop was held on the full update of ETH2.0 and scaling technology. Mr.Vitalik, the founder of Ethereum also participated.





**ETHTerakoya**

**【The theme】**

Performance evaluation perspectives required for business use of blockchain  
Ethereum performance assessment workshop

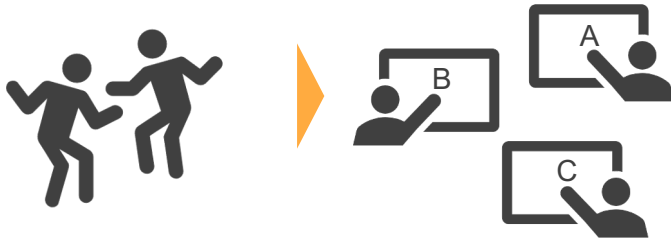
# Challenges and Objectives of this Working Group

## ■ Challenges

No standard metrics in common for measuring blockchain performance

Each company's own standard settings

Evaluation criteria disorder = No comparison



Currently, each company sets its own standards in measuring performance

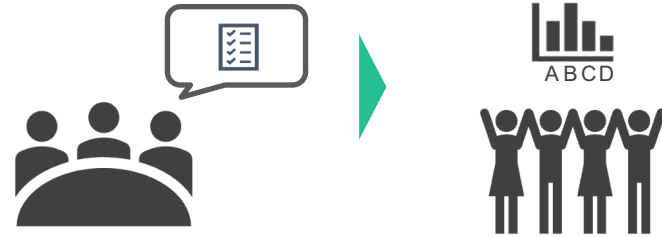
There are examples of measuring transactions for empty data as well as measuring the moment of maximum value in order to show high performance, hence **it's not possible to compare performance side by side**

## ■ Objectives

Develop standards for performance measurements and create metrics

Develop standards for practical use

Enable user performance viewing & comparison

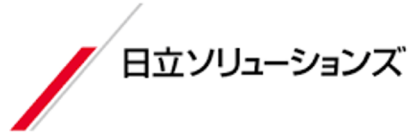


Discuss performance requirements that user companies and developers can “withstand practical use” and set standards required for measurements

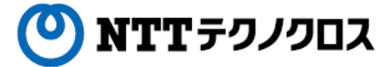
# List of Participating Companies

- This WG's participating companies are as follows:

**HITACHI**  
Inspire the Next



**NTT DATA**



**accenture**

野村アセットマネジメント

 SingulaNet





# The Road to this Workshop

**STEP  
1**

**Investigate requirements  
Sharing case studies &  
issues**

- **Share scaling performance improvement examples, challenges, and requirements for specific products or use cases**

**STEP  
2**

**Understand technical  
elements**

- **Introduce the technical factors that help improving scaling performance**

**STEP  
3**

**Formulation of metrics  
Set up measurement  
methods  
Measure**

- **Discuss about measurement standard based on Step 1**
- **Select tools and software used to formulate specifications for measurement standard**
- **Measure performance**



**Open Workshop : Presentation of results based on the above STEPs**

# Agenda

1. Overview of this initiative | Couger Inc. Atsushi Ishii
2. How to become involved as a business company | Nomura Asset Management Co., Ltd. Teruyoshi Imamura
3. Sharing the results of performance verification in the future of production systems  
| Accenture Japan Ltd. Masatsugu Yamada
4. Items to be described as performance measurement conditions and results | Couger Inc. Keita Shimizu
5. Benchmark tools in blockchains | Hitachi, Ltd. Nao Nishijima
6. Measuring Besu performance with Hyperledger Caliper (Trial & Error)  
| NTT TechnoCross Corporation Kazuhiro Kanematsu
7. Quorum performance verification with Hyperledger Caliper | NTT DATA Corporation Shunpei Shimizu
8. Blockchain infrastructure in the digital content domain | SingulaNet Ltd. Koji Machi
9. Summary

# Event Survey

We appreciate your corporation.

You can also answer the questionnaires from the URL on Peatix page.



**Working group participating members wanted!**

**(engineers, business persons, lawyers, students, professors / researchers)**

<https://ethereum-terakoya.org/> (search: ETHTerakoya): please access to the inquiry page