Data Visualization and Representation through Internet of Things (IoT)
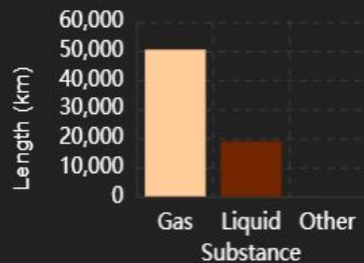
Presented by: Mathew George Binu, Naomi Halder, Meryem Nadak, Huda Nkaili

What is the problem?

- Complex data structure, impossible to organize
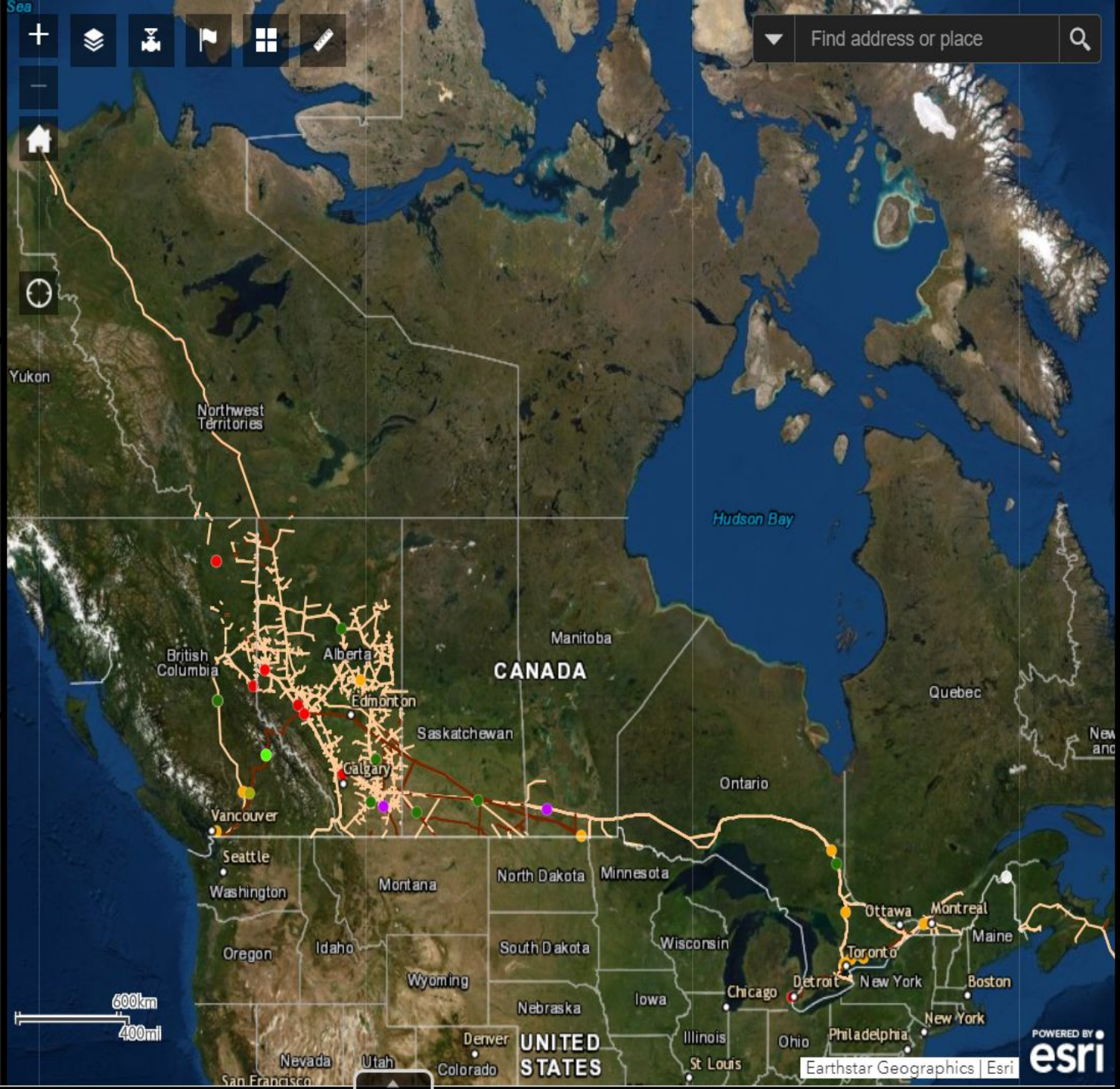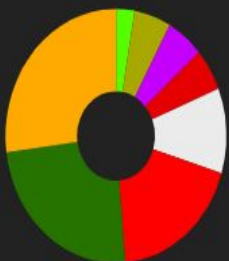
- Mass information

- Difficult to regulate

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Length of Pipelines in View ⚙

Length (km)

60,000
50,000
40,000
30,000
20,000
10,000
0

Gas Liquid Other
Substance

2

Number of Incidents in View

37

3

Breakdown of Incidents in View ⚙

Find address or place

Sea

Yukon

Northwest
Territories

British
Columbia

Alberta

Edmonton

CANADA

Saskatchewan

Manitoba

Calgary

Vancouver

Seattle

Washington

Montana

North Dakota

Minnesota

Ontario

Quebec

Hudson Bay

New
and

Oregon

Idaho

Wyoming

South Dakota

Wisconsin

Ottawa

Montreal

Maine

Toronto

New York

600km

400mi

Nevada

Utah

San Francisco

UNITED
STATES

Denver

Colorado

Nebraska

Iowa

Illinois

St Louis

Ohio

Chicago

Detroit

New York

Philadelphia

Boston

Earthstar Geographics | Esri

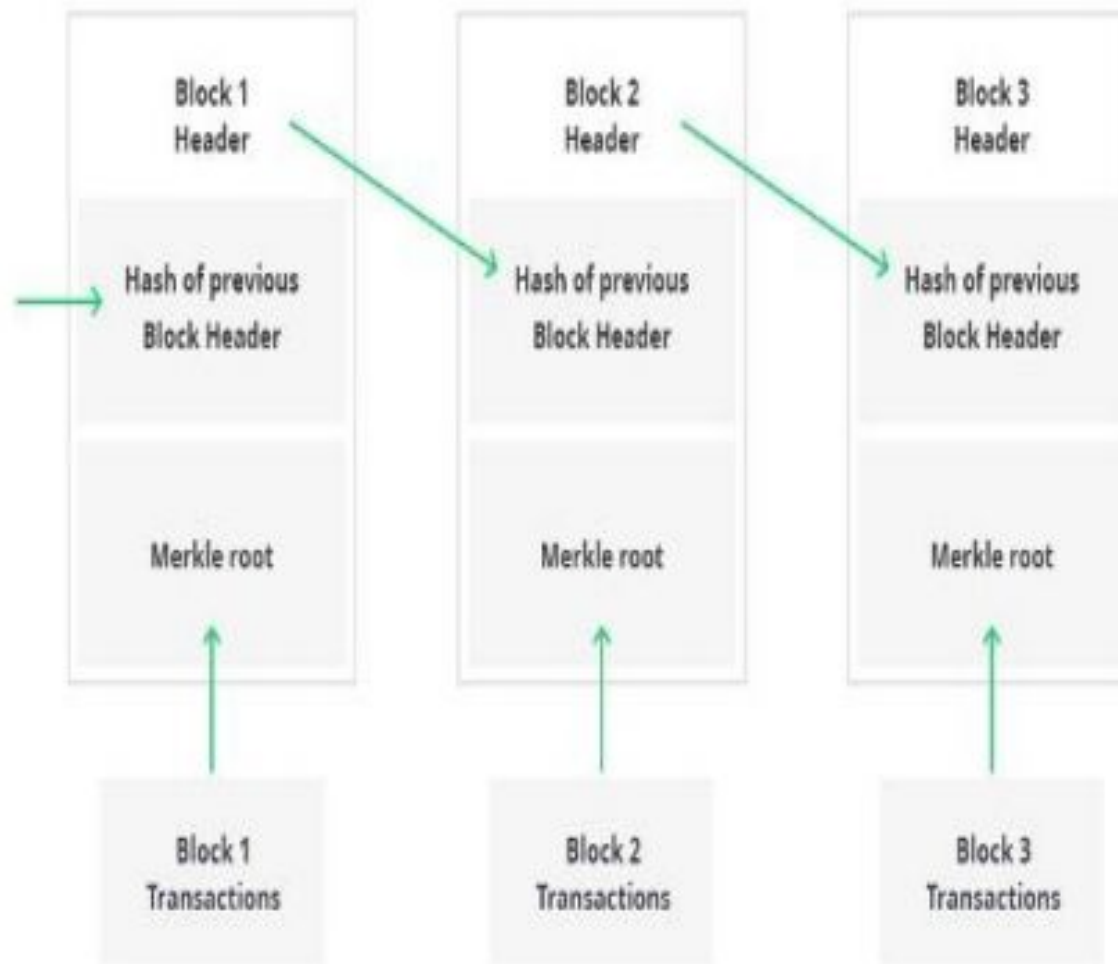POWERED BY
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Solution - Internet of Things (IoT) and Blockchain for data storage

- IoT is a network that is able to connect many objects to the internet via a large number of devices.

- Big Data → Many Unspecified Devices or Processes → Blockchain

- No central authority → security and credibility of data

- IoT device transactions are recorded as ethereum smart contracts

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Blockchain-based analytics

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Why it is relevant to our society?

- Environmental Factors

- Indigenous Safety

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