

FluidData Nets

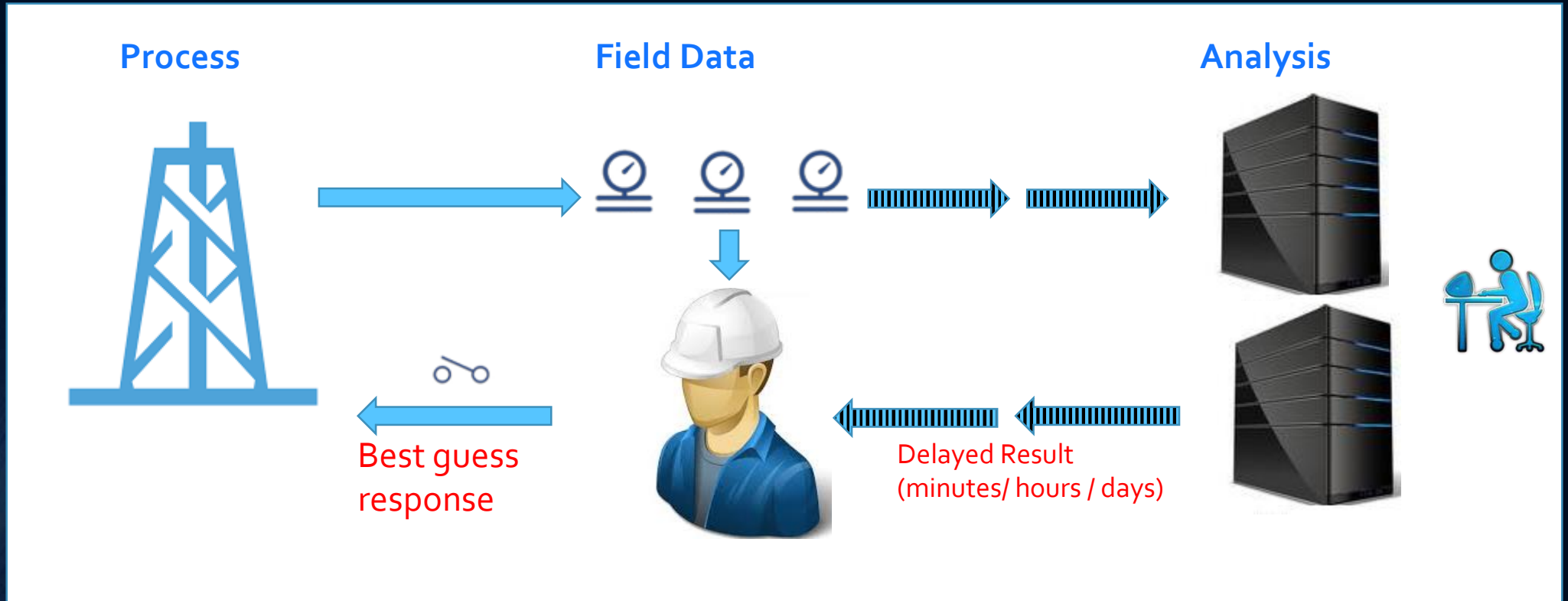
HARNESSESSING THE POWER OF EPHEMERAL DATA

About FluidData Nets

- FluidData Nets is a technology developed by Canada based CloudM Inc, a company that specializes in harnessing intelligence from fast moving data.
- FluidData Nets is a new branch of real time predictive data analytics at the confluence of big data and machine learning
- This technology has been successfully applied to computer vision with astounding results
- FluidData Nets can be applied to other fields of business and this presentation explores application of the technology in the **area of oil and gas prospecting and oil well drilling**

The problem

Field engineers are inundated with fast moving data that makes their decision making hard.

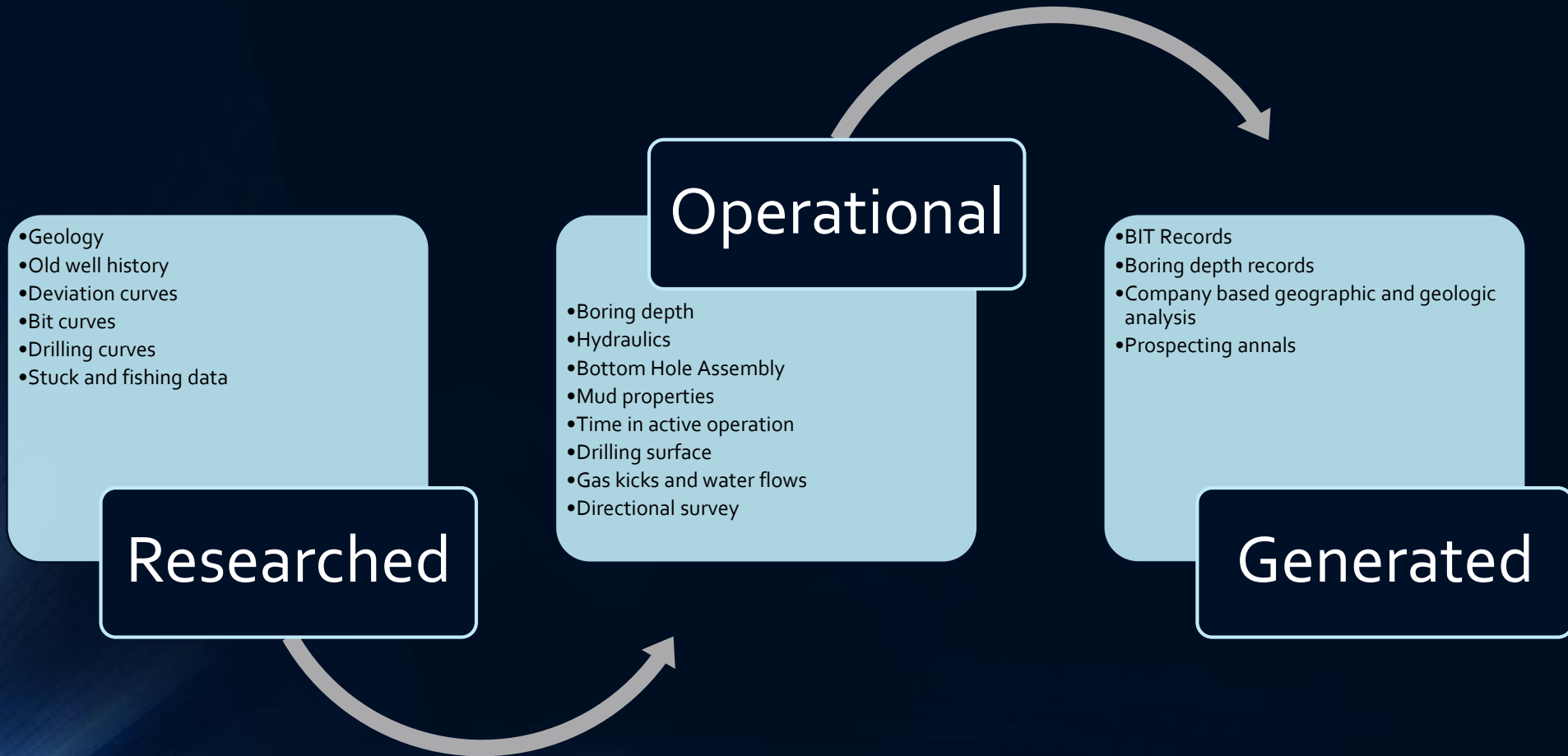


In many domains a delay in analysis of more than one second for a response is not good enough

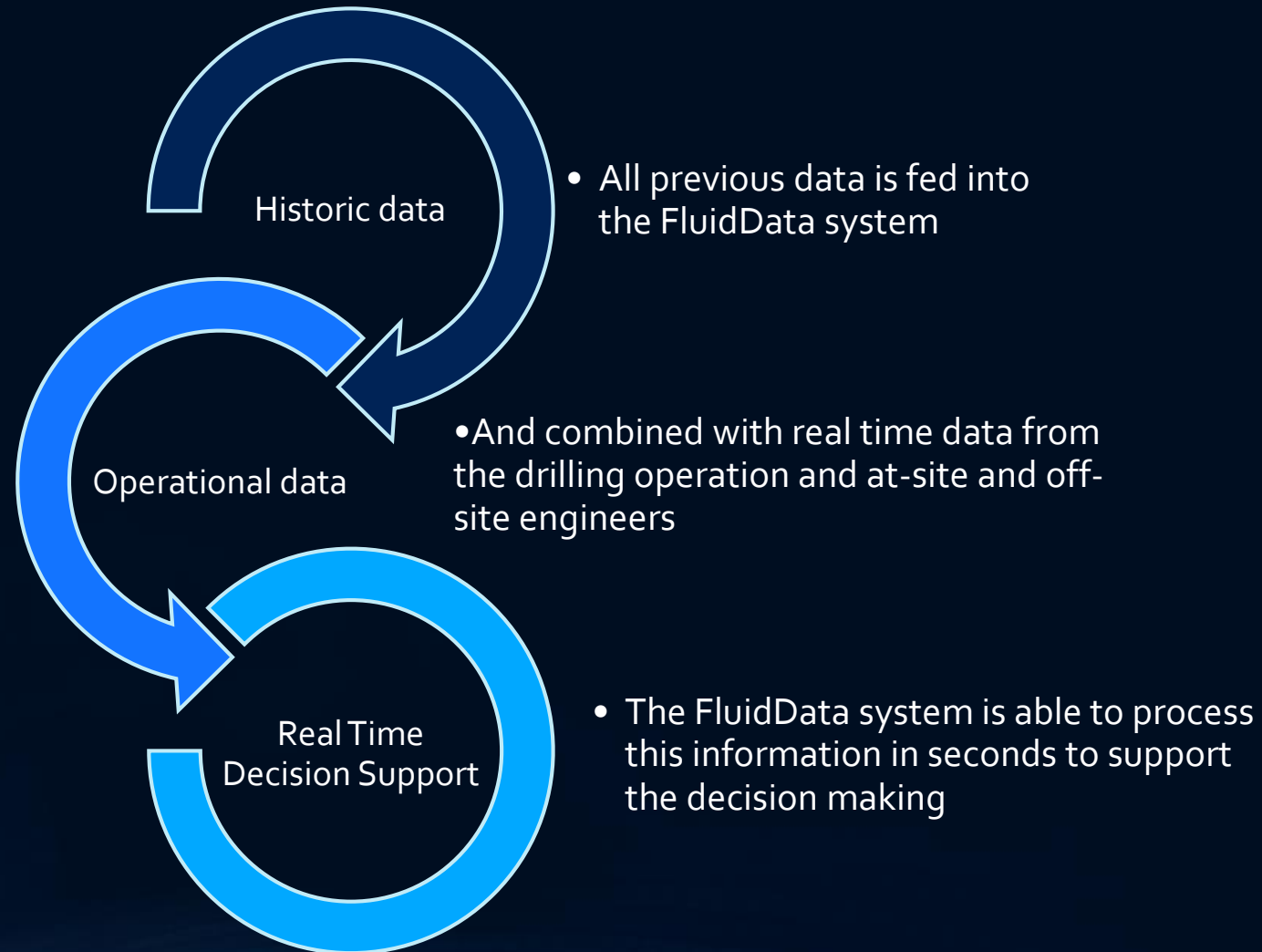
Some Facts

- Drilling is a costly operation and requires process optimization at several stages
- Almost all American oil companies are using well prepared datasets for oil well exploration and time tested techniques for well establishment
- Few American oil company has a real time decision support system in place for crunching the data at the time when the drilling process is running.
- Many hundred of thousands of dollars are lost due to inefficiencies in the management of the drilling process.

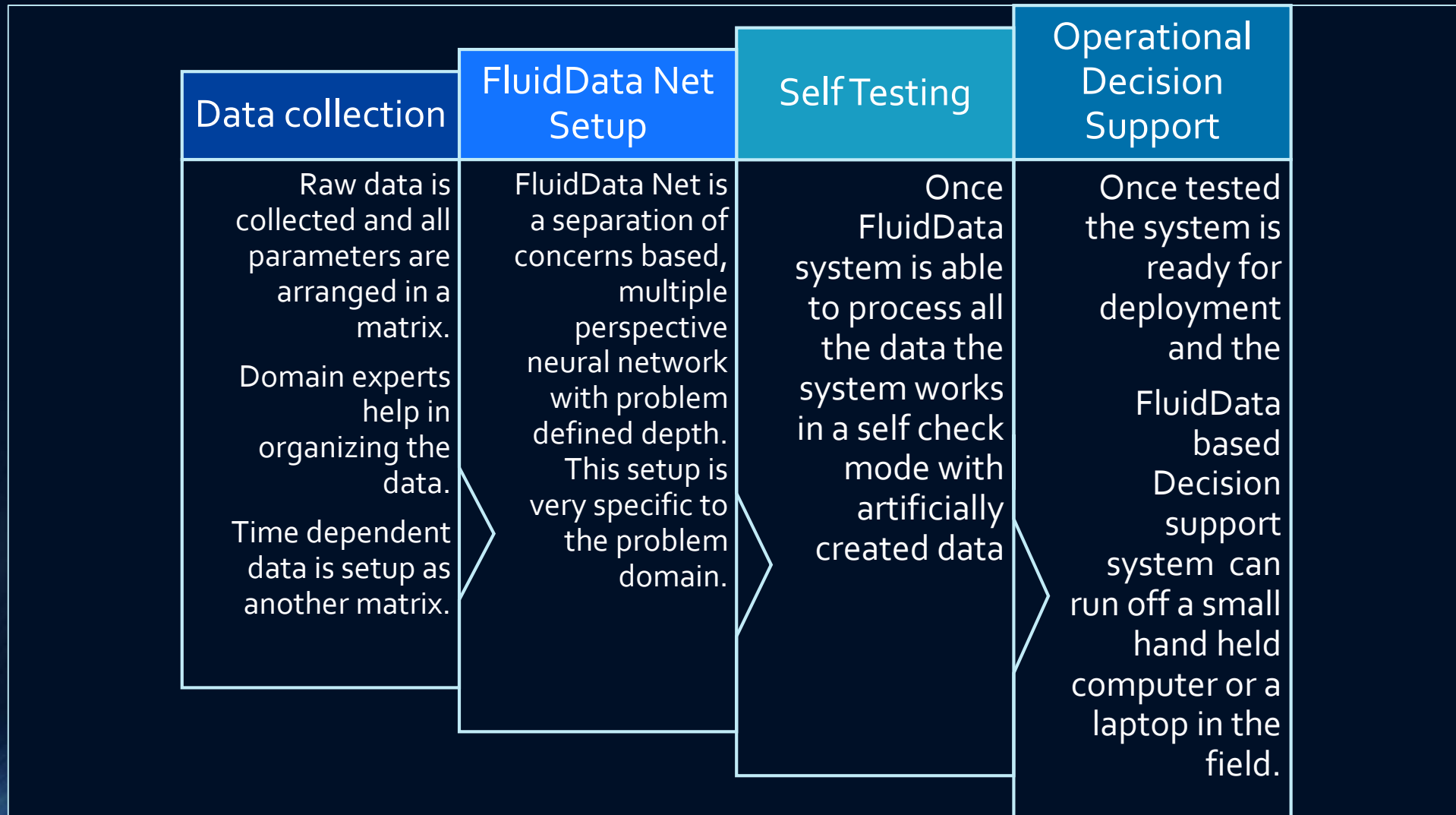
Oil Well drilling data :



FluidData for real time decision making



How FluidData works



The mathematical principals powering FluidData Net

- Every multiple variable problem has a solution set that can be defined by a single mathematical equation.
- In complex probability based problems where the solution set can have high variance, the mathematical equation should be able to handle all the statistical probabilities of all the linked parameters and their weights.
- FluidData Net uses a system of deep learning methods using short data cycle learning to produce a bias free, high fidelity black box equation to describe any problem that has one or more solutions.

Example of FluidData at work

- Computer vision is one of the most difficult areas where artificial intelligence can be applied.
- FluidData based PhantomEye sensor, can detect objects in 20 milliseconds that appear for less than 2 seconds in its field of view.
- The sensor does not need millions of images to train (unlike typical deep learning networks). 50 images per category is all it takes.

Advantages of FluidData Decision Support

- In difficult areas of operation like oil well drilling, where lots of real time data is generated, FluidData can be applied to help the decision makers fine tune their actions
- Sensors and site-engineers input can be fed into the system and FluidData can immediately provide feedback
- Field engineers can run scenarios using expected data and prepare for the different outcomes
- It is a smart tool for smart people

Next Steps

- Deploying FluidData net is well defined process that is curated for the specific problem that needs solving
- Our engineers will work with your engineers to define the problem and identify the data, isolate the parameters that play key roles and define the boundaries of FluidData
- Once the system has learned from the data, your engineers can deploy and use it across the enterprise. In many cases existing laptops and cell phones can run the solution. Except where interfacing with sensors no specific or special hardware is required
- FluidData empowers enterprises to use their data to build better and custom real time decision support systems
- A typical development to deployment cycle is domain specific and can be from 3-18 months long

It is time to unlock the latent intelligence in your data

Thank you.

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