Role of AI in Energy Analytics for accelerating clean energy adoption

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Energy-as-a-Service in Microgrids

> What will be the best options for a EaaS company to take up Microgrid Project?

- best financial returns
- ease of deployment

> How can we increase the value provided to the energy customer?

> How can we keep up with shifting customer priorities and goals - ESG or Climate Change, for example.

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Understanding Shifting Energy Demands

1. EV Adoption trends, Heat Pump Adoption
2. Future Solar/Storage development potential in a given region
3. Local Policies and clean energy goals

Illustration: Imagine we are building a microgrid for a community here

A mix of structured and unstructured data, reliable and unreliable data, continuous and static data

Smart Meter Billing Data

Local Econometric Factors → 1. Employment rates 2. Household income levels

Avg distance traveled? → 1. Type of fleet 2. household data

Local ad-spend, social media analysis

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Behind-the-Meter complexity

Microgrid operators (including those providing EaaS) will have limited visibility into the BTM system operation (i.e. they only see the difference between customer demand and storage operation) → **This will hinder their ability to improve their services.**

We believe a hybrid approach is the future.

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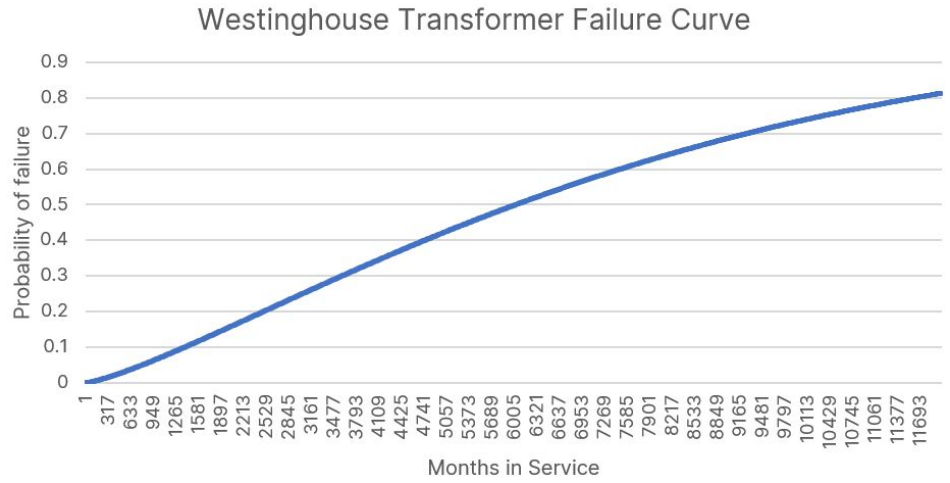
Predictive Asset Health Management

A.I. for Predictive Maintenance will help EaaS companies tailor maintenance routines to each piece of equipment's needs, rather than having them conform to a set schedule.

Market Gaps:

1. How to find pre-trained models for a wide-variety of grid assets?
2. How to factor this in to pricing decisions?



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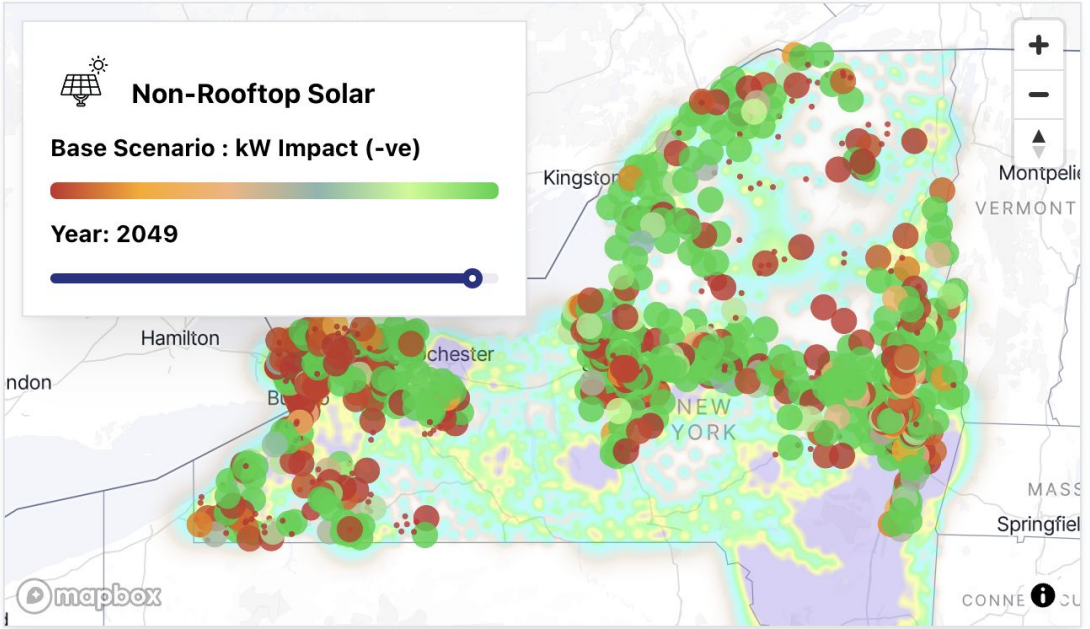
Siting and interconnection challenges

Finding sites based on ease of interconnection

[i.e availability on feeder line and/or substation/ new substations being built].

Developers want to be able to select location based on future value of energy/ future development on that feeder line which would erode energy value.

Piggy back off-of other projects as much as possible to keep costs low.



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How to deal the dynamic shifts in the energy landscape?

Sandbox-as-a-Service ** (Plexflo is a pioneer in this technology with 3 patents)

Simplicity - less dependence on IT/tech talent.

Build your new AI tools in less time. Buy less tools.

Iterate faster.

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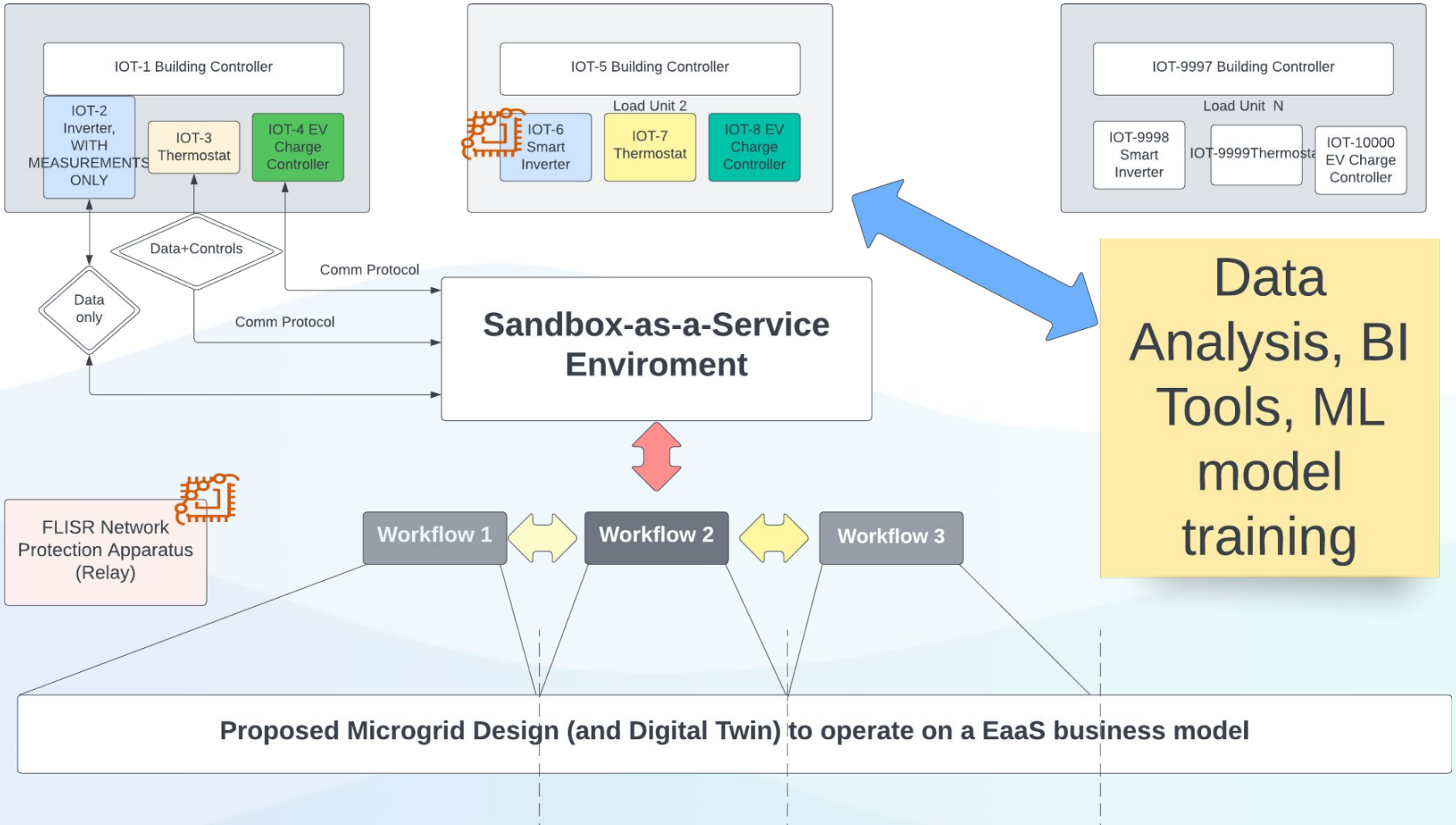
Enabling faster iterations and A/B testing across customer needs



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Customized ChatGPT for Power Grid Analytics:

- Quickly create simulation models using natural language

- Query data like you are asking a co-worker

- Understand regulations better. Let AI unwrap the complexity.

Demo Video

National Grid | Town of Scituate | Hingham Municipal Light Plant

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ChatGPT for the Energy Analytics

Its FREE. Join the waitlist today →

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