Fellowmind

The Kusto experience in Fabric

Simpson Associates
The Data Analytics Company

Clou

Brian Bønk Rueløkke

Principal & Enterprise architect, Data & AI

Fellowmind

Want to link up https://linkedin.com/in/brianbonk

Read my thoughts https://brianbonk.dk

Download the slides and code https://github.com/brianbonk

MVP Microsoft Most Valuable Professional

Microsoft
FastTrack Recognized
Solution Architect
Power BI
2022 >>

Microsoft
Certified Trainer
Data Platform
2018 >>

The Kusto experience in Fabric

A unified analytics solution for the era of AI

Fellowmind

Real-Time Analytics at scale in Fabric

A unified analytics solution for the era of AI

Fellowmind

Jaques Cousteau
1910-1997

Jaques Cousteau
1910-1997

It all starts with data

Telemetry – a key data for digital transformation

Telemetry – a key data for digital transformation

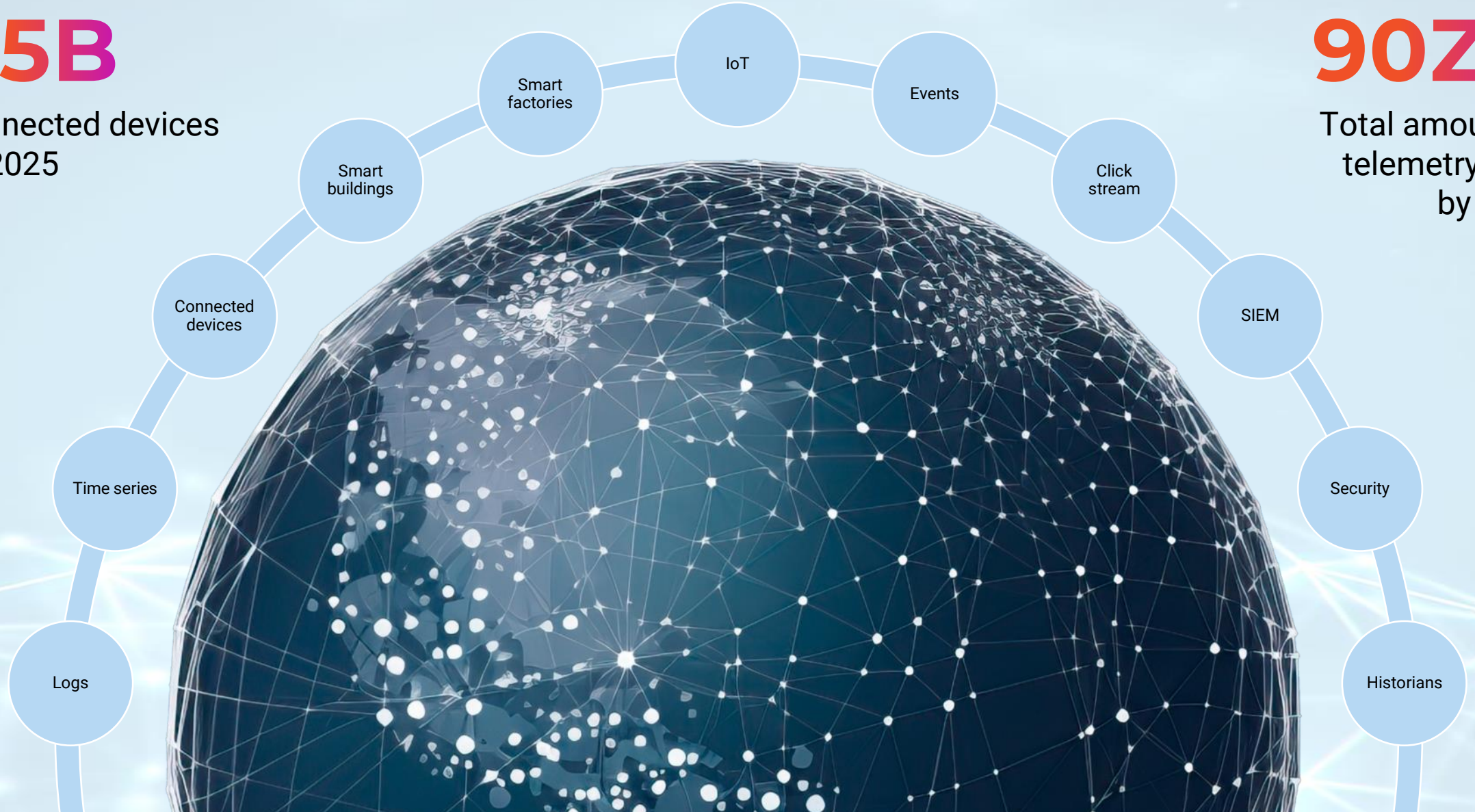
Telemetry – a key data for digital transformation

75B

Connected devices by 2025

90ZB

Total amount of telemetry data by 2025



Microsoft Fabric

Data Factory

Synapse Data Engineering

Synapse Data Warehouse

Synapse Data Science

Synapse Real-Time Analytics

Power BI

Data Activator (coming soon)

OneLake

Microsoft Fabric

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Digital transformation

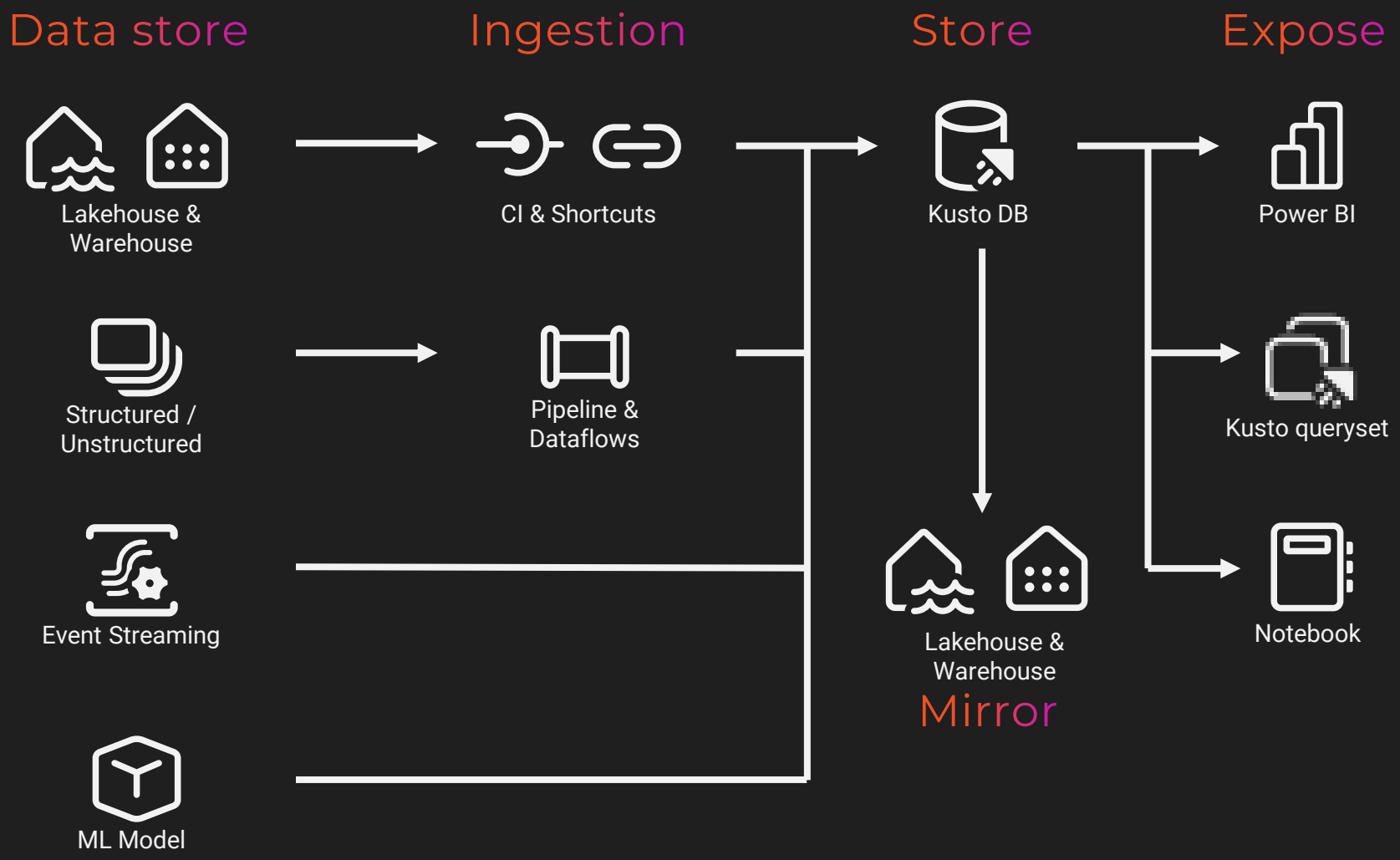
Cybersecurity
Asset tracking and management
Predictive maintenance
Supply chain optimization
Customer experience
Energy management
Inventory management
Quality control
Environmental monitoring
Fleet management
Health and safety

Fabric Real-time Analytics solution enables organizations to consume **vast amount of data**, focus and **scale up** their Analytics solution with **data in motion, empower** their business analysts, and **democratize their data** for citizen data scientists and Data Engineers

KQL database
Key capabilities

Unlimited Scale (query, ingestion and storage)	Any data source	Any data format
Structured Semi-structured Free-text	Real-time transformation og complicated data strcutures	Streaming analytics in Near-Real-Time
High performance Low latency High freshness	Timeseries database	Everything is indexed and partitioned

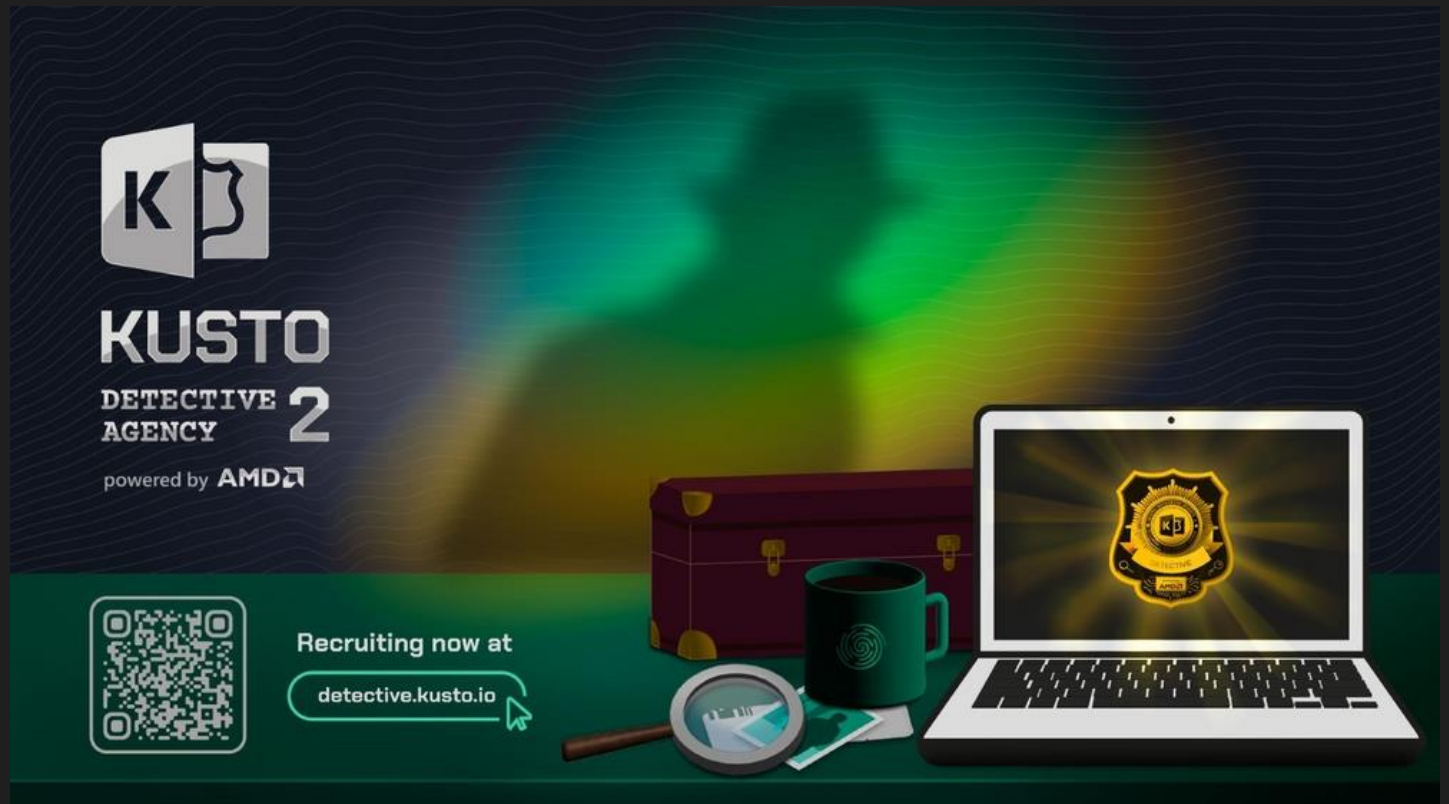
Real-Time Analytics



Get started for free

https://dataexplorer.azure.com/freecluster

https://detective.kusto.io



Kusto in Power BI

Forget everything you know about

query performance vs data types
&
data modelling best practices

Data modelling Kusto in Power BI

- Single table reporting can be a good option, if you can include all columns from dimensions to the table
- M:M relations are hard to avoid, but not a big deal → all queries will be translated to KQL
- All dimensions must be tagged with “IsDimension=true”
- Dimensions can be imported if they are <1 mio rows.
- INTEGER and DECIMAL er slow joins compared to STRING

Harness the Power (BI) of Kusto

Let Power BI build the KQL

- In Power Query
- Using DAX

Or build a Kusto function

DEMO

Live coding
(hopefully no demo-ghost 👻)

Harness the Power (BI) of Kusto

```
.create-or-alter function GetSysLogs(TimeWindow:string , Bucket:string )
{
cluster('help').database('SampleLogs').RawSysLogs
| where timestamp > ago(totimespan(TimeWindow))
| summarize LogCount=count() by name, bin(timestamp,
totimespan(Bucket))
| order by timestamp asc
}

GetSysLogs('5d','1h')
```

Feedback

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