INDY KITE

A contextualized data model

The new fabric of IAM?

February 22nd

Growing complexity requires a perspective shift

Current data models & static architecture do not reflect the real-world context.

AuthZ logic is typically built directly into applications.

Limited ability to go beyond traditional identity use cases, find new value and truly achieve ROI.

IndyKite allows businesses to take highly sensitive identity data and safely and securely extend and enhance its use.

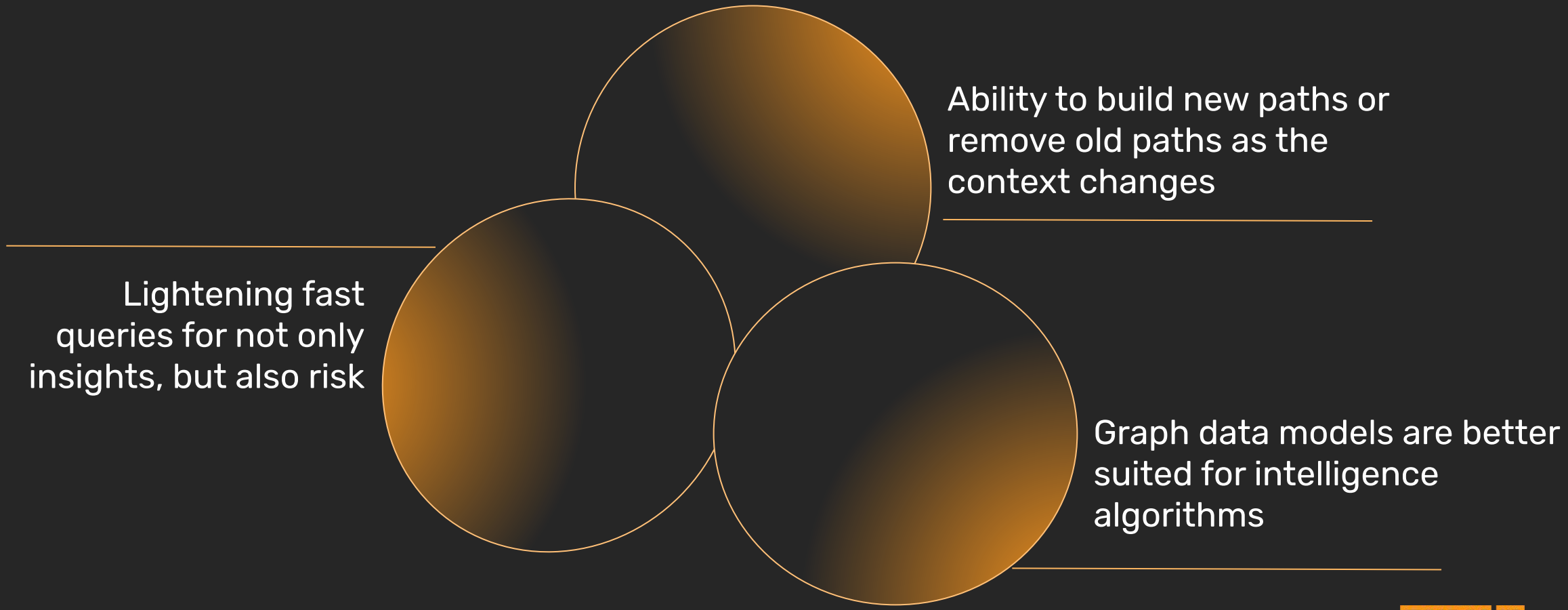
Graph driven Technologies are BOOMING

Gartner estimates that soon, 80% of data and analytics innovations will use graph technology.

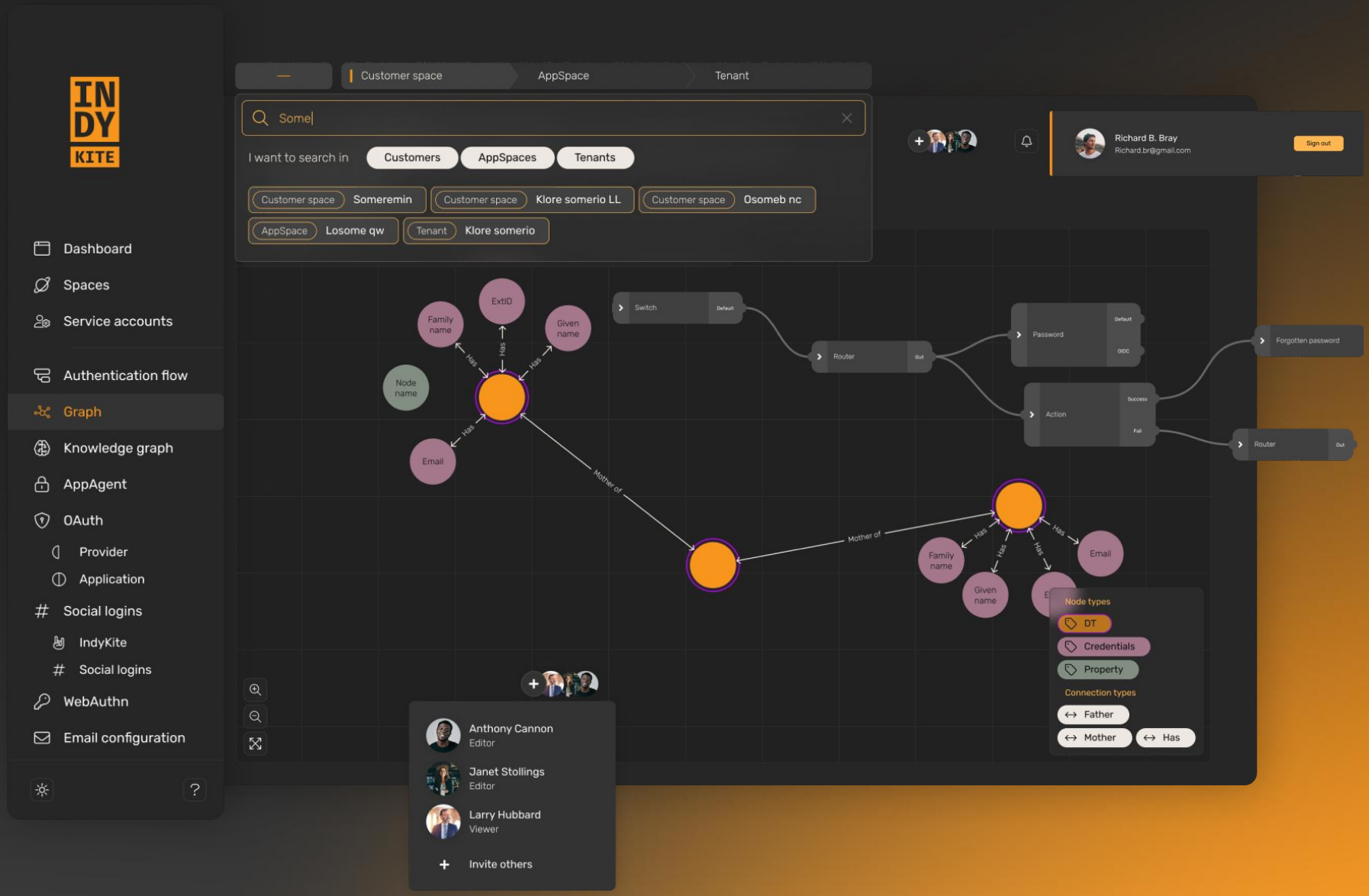
So what if

We applied graph to identity data?

You should care about applying graph in identity



A richer view of identity data



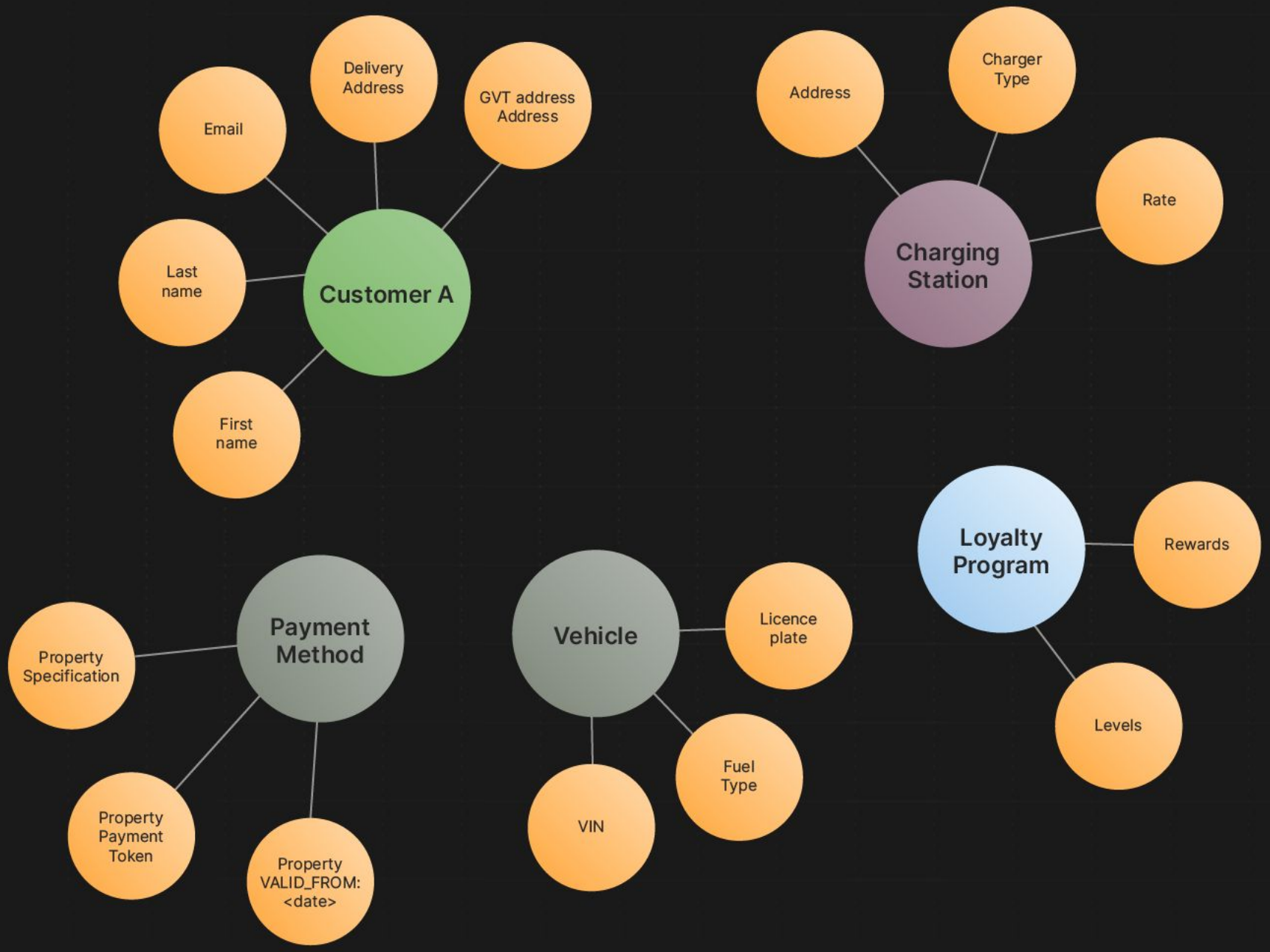
Populating the Identity Knowledge Graph

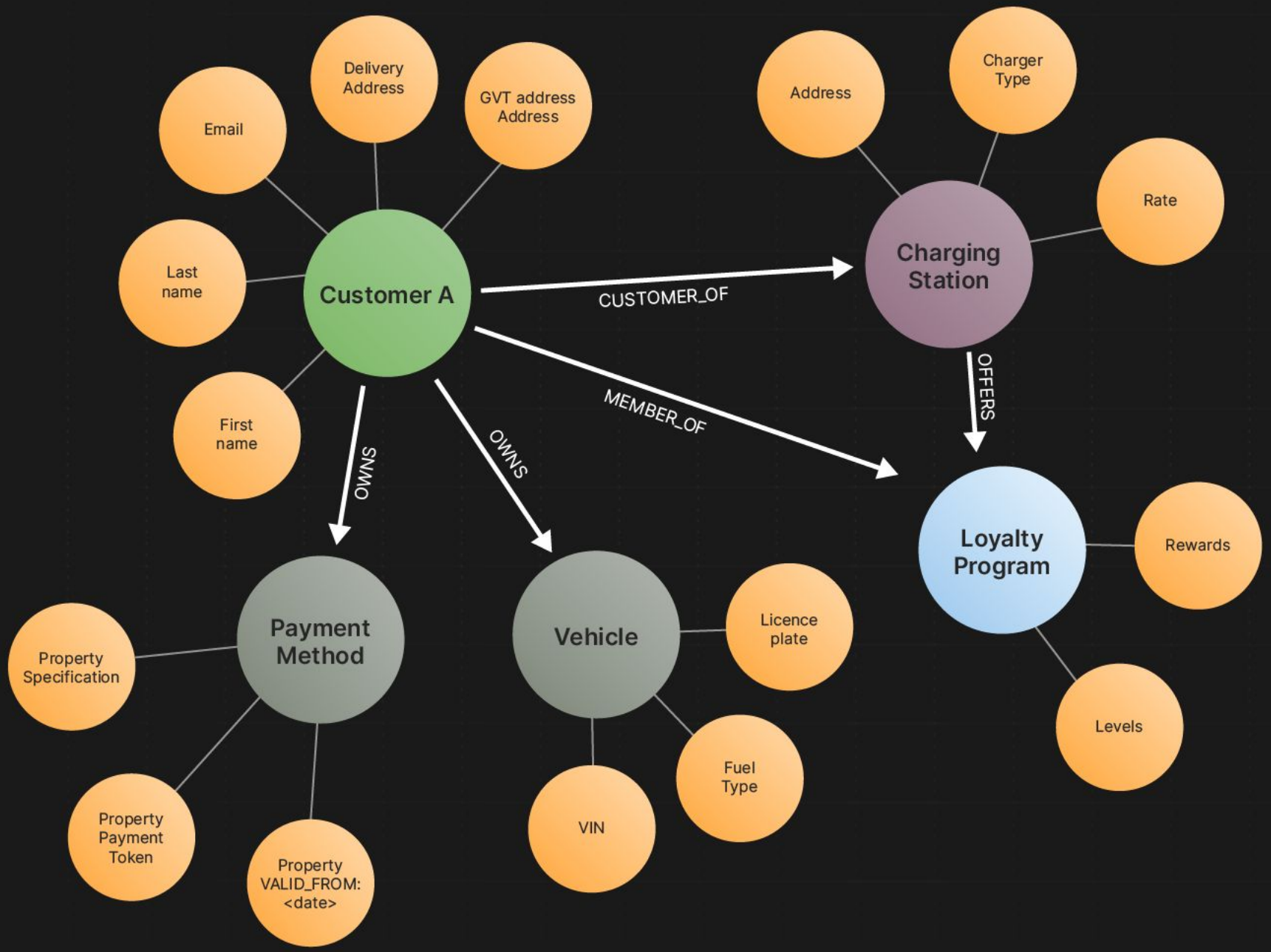
Ingest

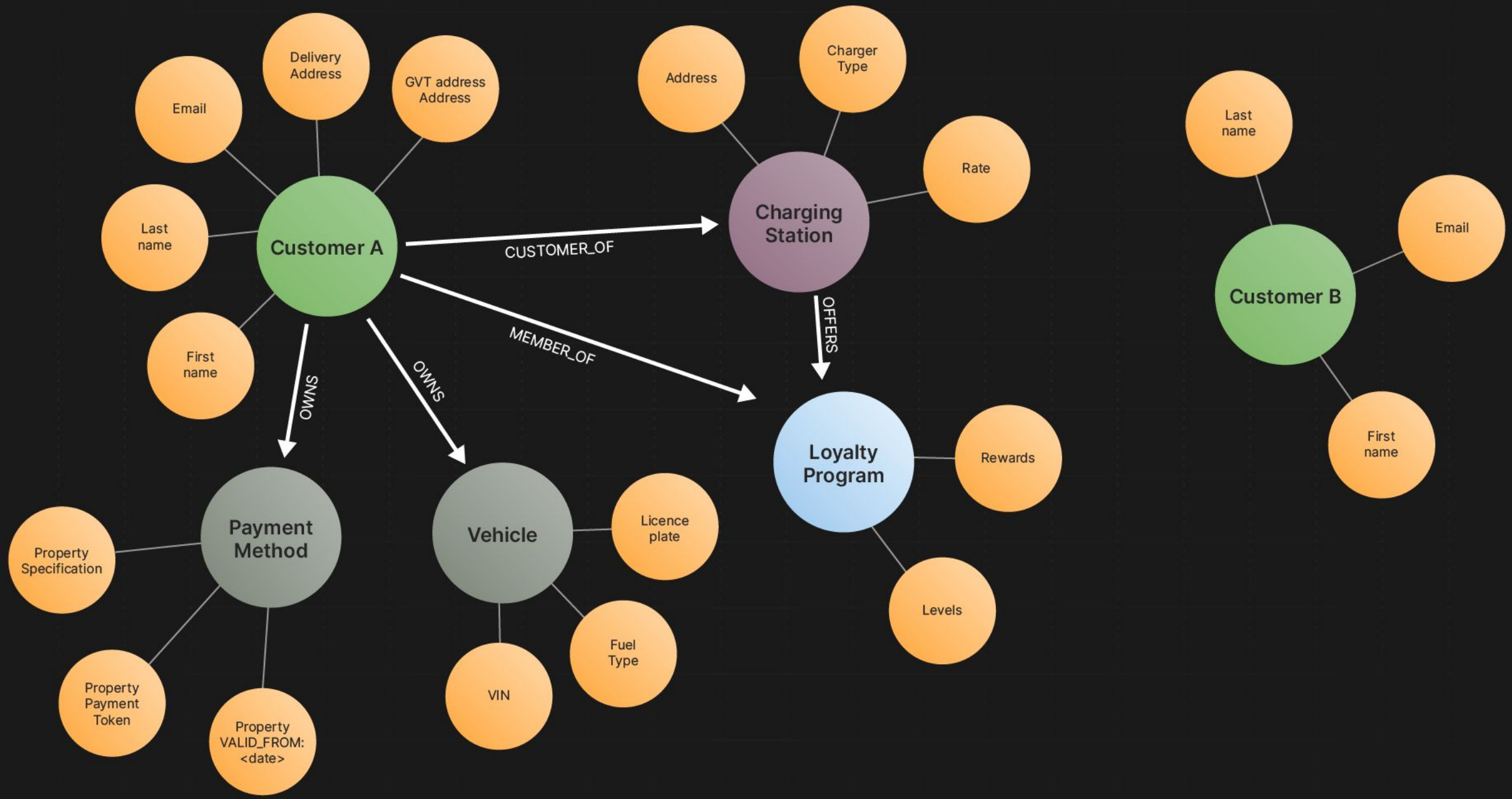
- Initial data onboarding
- Continuous sync from data stores

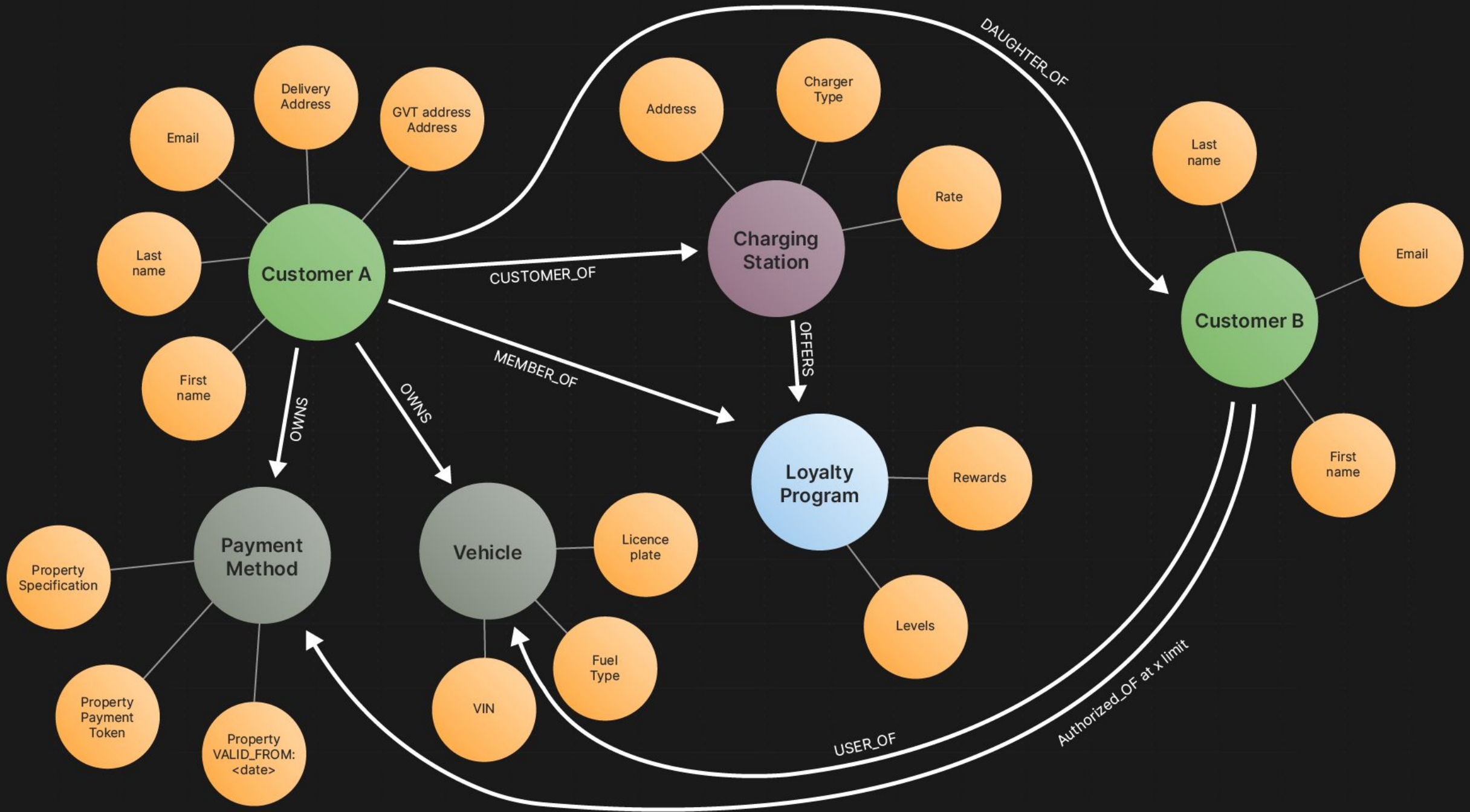
Knowledge API

- Create, Read, Update, Delete
- Useful for everyday operations in your application

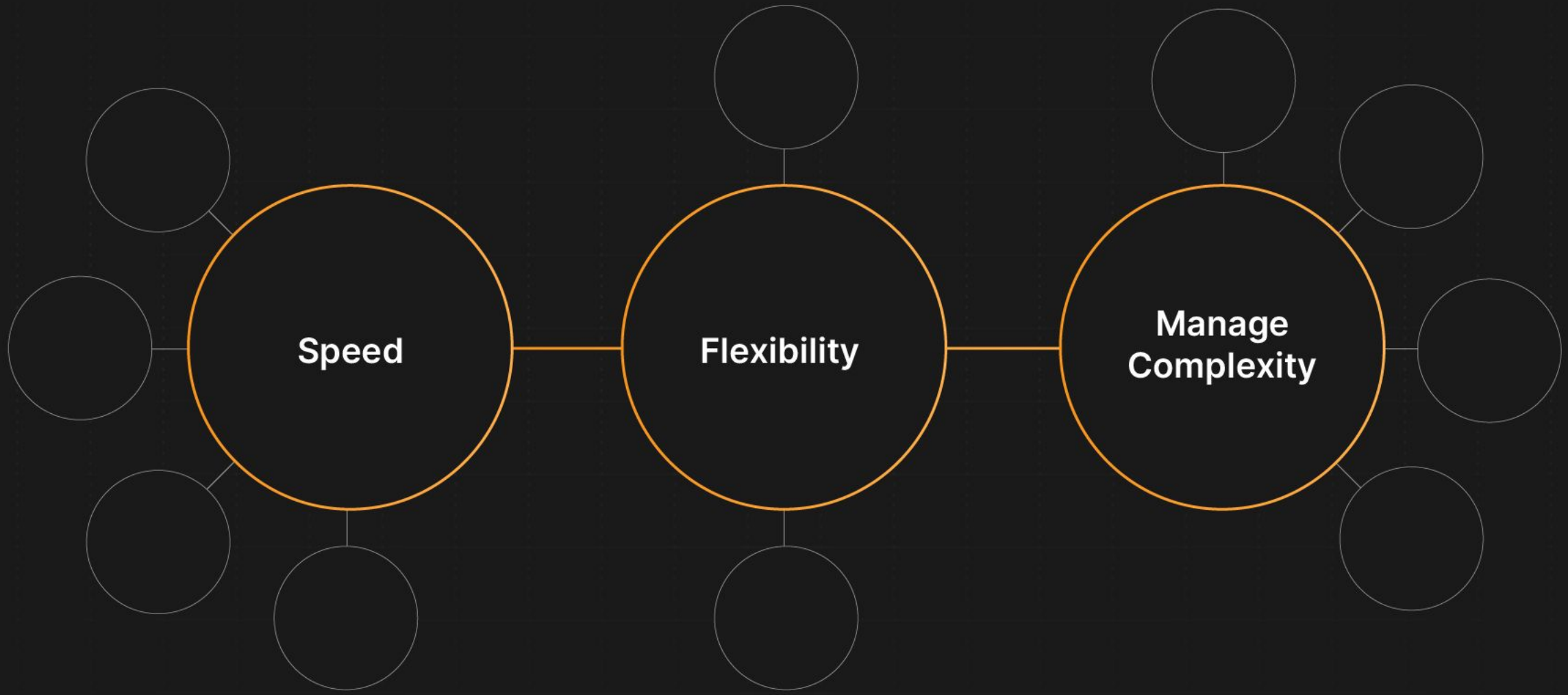

Delivery Address
Email
GVT address Address
Last name
Customer A
First name
Address
Charger Type
Rate
Charging Station
Loyalty Program
Rewards
Levels
Payment Method
Property Specification
Property Payment Token
Property VALID_FROM: <date>
Vehicle
Licence plate
Fuel Type
VIN


Email
Delivery Address
GVT address Address
Last name
Customer A
First name
CUSTOMER_OF
Address
Charger Type
Rate
Charging Station
OFFERS
MEMBER_OF
OWNS
OWNS
Loyalty Program
Rewards
Levels
Property Specification
Payment Method
Property Payment Token
Property VALID_FROM: <date>
Vehicle
Licence plate
Fuel Type
VIN


Email
Delivery Address
GVT address Address
Last name
Customer A
First name
CUSTOMER_OF
Address
Charger Type
Rate
Charging Station
OFFERS
MEMBER_OF
OWNS
OWNS
Last name
Email
Customer B
First name
Loyalty Program
Rewards
Levels
Property Specification
Payment Method
Property Payment Token
Property VALID_FROM: <date>
Vehicle
Licence plate
Fuel Type
VIN


Email
Delivery Address
GVT address Address
Last name
First name
Customer A
DAUGHTER_OF
Address
Charger Type
Rate
Charging Station
CUSTOMER_OF
OFFERS
MEMBER_OF
OWNS
OWNS
Last name
Email
Customer B
First name
Loyalty Program
Rewards
Levels
Payment Method
Property Specification
Property Payment Token
Property VALID_FROM: <date>
Vehicle
Licence plate
Fuel Type
VIN
USER_OF
Authorized_OF at x limit

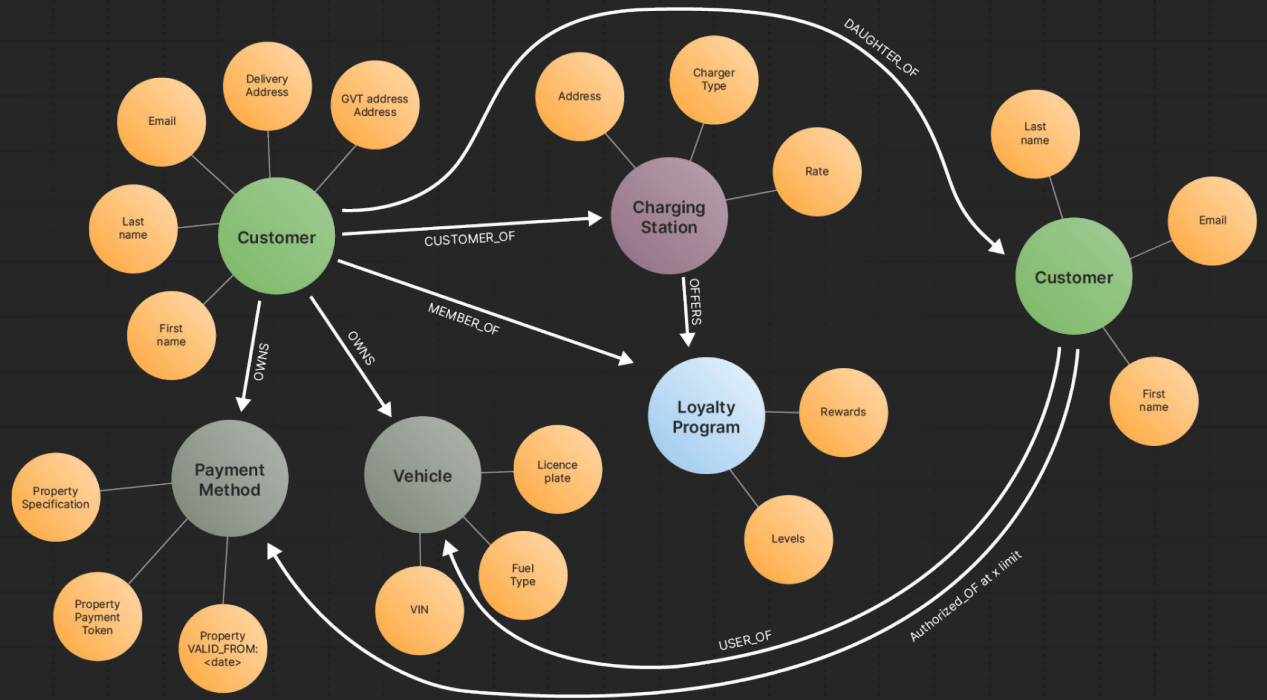
Graph delivers in C/IAM



Graph enables complex, granular authorization

Knowledge-Based Access Control

- Model the business without abstraction
- Capture rich relational context
- Define intuitive authorization policies
- Flexibly extend and adapt the graph
- Keep it in sync with business data
- Drive contextual and real-time decisions



The power of graph extends far beyond authorization

Representing the real-world	**Enabling action**	**Building knowledge**
Relationships first, rich context	Direct insights into how things relate	Add semantic information to the graph
Visual and intuitive	Discovery of nested or indirect relationships that otherwise are hard to detect	Leapfrog automation and improve decision making
More information beyond the data points themselves	New algorithms used to improve the power of machine learning	Uncover opportunities with knowledge discovery

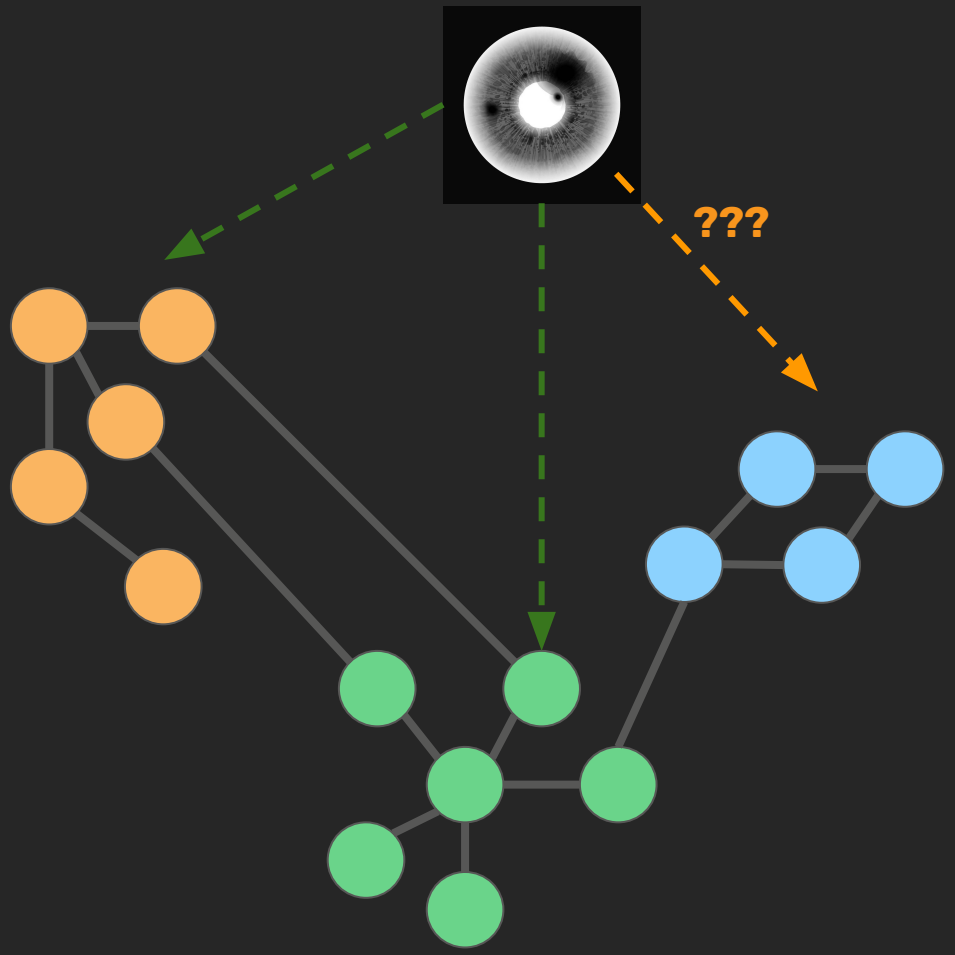
The power of graph extends far beyond authorization

- Graphs are *relations-first* data structures: capture rich context
- Direct insight into how people, organizations, things relate
- Discover nested or indirect relationships that are otherwise hard to detect
  - Community structures, families, collegial networks
  - Interests, activities, possessions
  - +++
- => The *structure* of the graph provides information beyond the data points themselves
- New algorithms use these graphs to improve the power of machine learning and predictions by taking the relationships into account
- For example for a far more holistic perspective on how *similar* people or networks are

Knowledge graphs

- Add semantic information to graphs, providing *meaning* of the data and its relationships
- A way to leapfrog automation, improved decision making, and knowledge discovery

Graph analytics:
Change of behaviour as a warning flag for snooping



Semantic similarity analysis of graph data allows us to detect when a user changes their center of attention or the context in which they operate.

Perhaps the user is *technically* authorized, but the behaviour is a major deviation from their norm. **Indicates higher risk.**

Not only that it is a different place in the dataset or differently labelled nodes, but that it is a **different *kind of information* being accessed or in a different *context*.**

INDY KITE

Connected data models are the future of C/IAM

Are Businesses Utilizing the Full Power of Privacy?

29 March 2023 at 3PM CET