

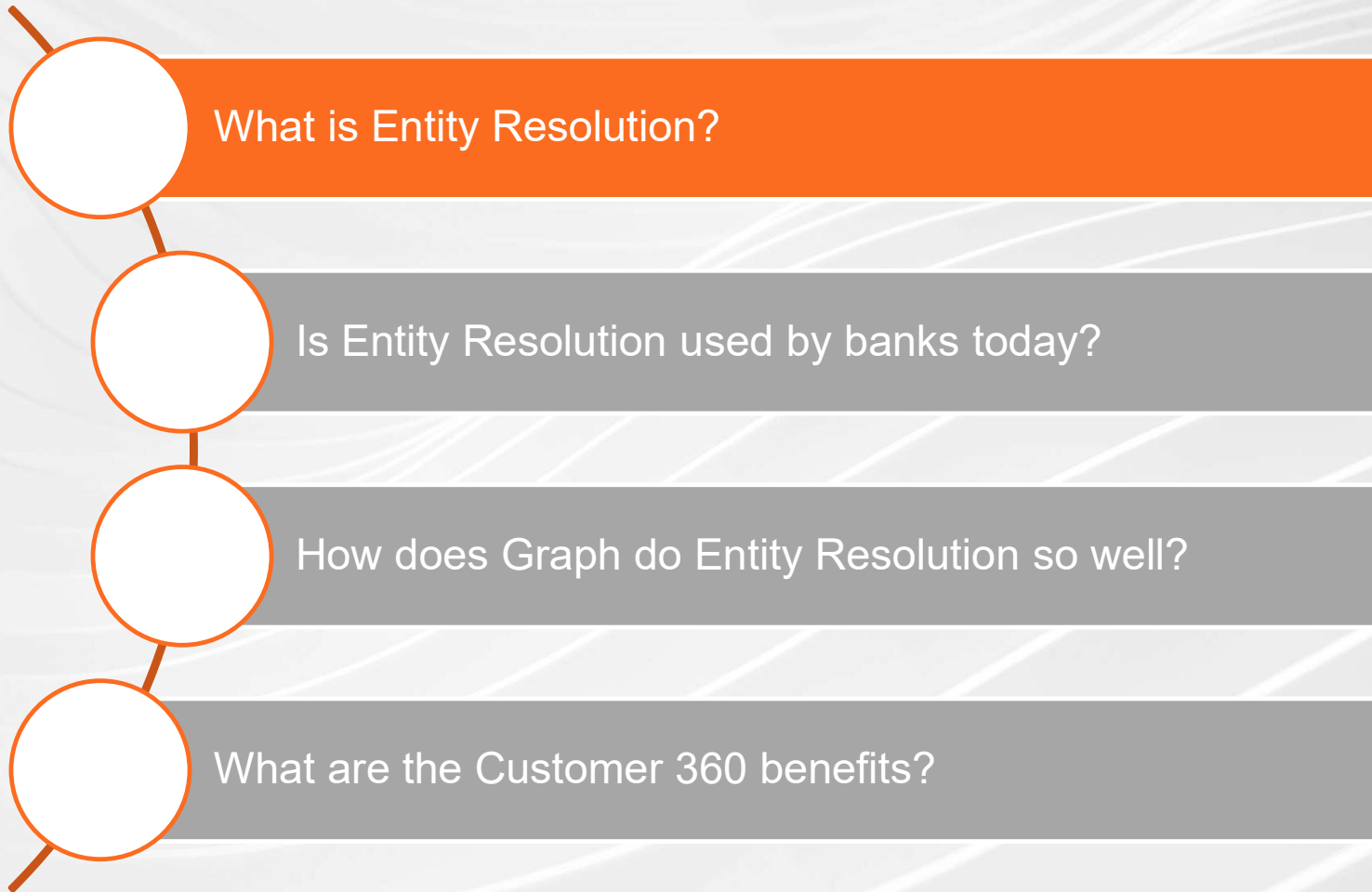


Generate more value from the same existing data - with Graph-powered Entity Resolution for Financial Crime Detection and Customer360

Charlie Beveridge

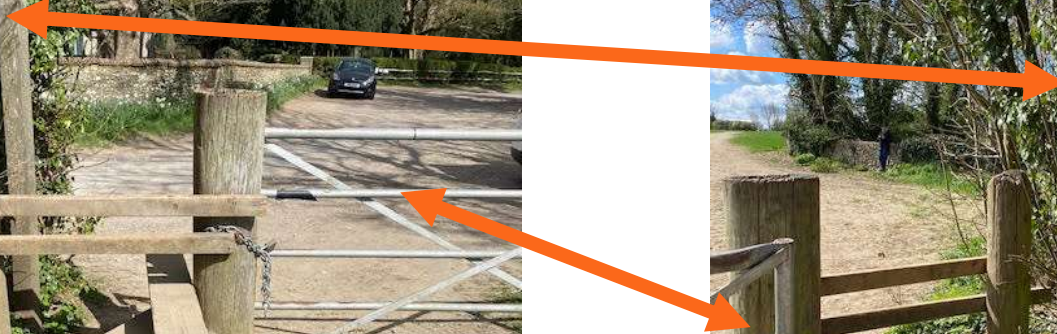
Digital Transformation and Graph Analytics Consultant



















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Sam Wood's Usual Card Activity

London

Monthly Spend in line with population average

Mid-range Supermarket, Tech, Men's Clothes Stores

Device IDs: #111, #888



Sam Wood's Usual Card Activity

London

Monthly Spend in line with population average

Mid-range Supermarket, Tech, Men's Clothes Stores

Device IDs: #111, #888



Echo Transaction

London

Spend in line with average day to day

Online Tech Store

Device ID: #111



Sam Wood's Usual Card Activity

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Device IDs: #111, #888



Echo Transaction

London

Spend in line with average day to day

Online Tech Store

Device ID: #111



Necklace Transaction

Manchester

Very high end spend

Online Women's Jewellery Store

Device ID: #333



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Echo Transaction

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Spend in line with average day to day

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Device ID: #111



Trousers Transaction

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Spend in line with average day to day

Online Men's Clothes Store

Device ID: #888



Necklace Transaction

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Food Transaction

Manchester

Spend in line with average day to day

Mid Range Supermarket

Device ID: #333



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Very high end spend

Online Women's Jewellery Store

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Food Transaction

Manchester

Spend in line with average day to day

Mid Range Supermarket


Device ID: #333

 **Sam Wood's Usual Card Activity**
London
 Monthly Spend in line with population average
 Mid-range Supermarket, Tech, Men's Clothes Stores
 Device IDs: #111, #888

 **Echo Transaction**
London
 Spend in line with average day to day
 Online Tech Store
 Device ID: #111

 **Trousers Transaction**
Manchester
 Spend in line with average day to day
 Online Men's Clothes Store
 Device ID: #888

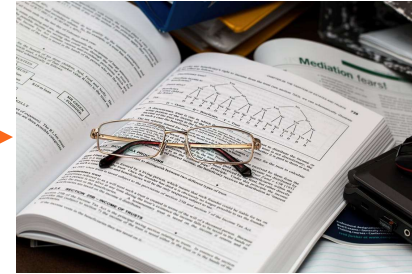
 **Necklace Transaction**
Manchester
 Very high end spend
 Online Women's Jewellery Store
 Device ID: #333

 **Food Transaction**
Manchester
 Spend in line with average day to day
 Mid Range Supermarket
 Device ID: #333











Tanya Banks



**PEP:
Tanya Patel**



**Subpoena:
Tanya Owen**



Shareholder Agreement:
Tanya Banks

PEP:
Tanya Patel

Subpoena:
Tanya Owen



Shareholder Agreement:

Tanya Banks

1st March 1981

5 Yew Drive, London NE1 6DT

tanyabanks@company.com

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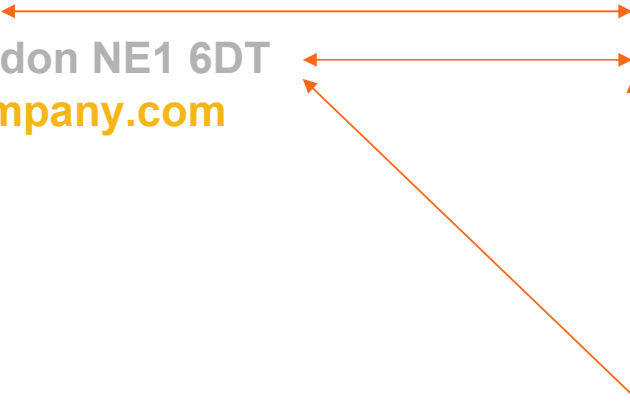
Subpoena:

Tanya Owen

London NE1

tanya123@gmail.com

07777888999





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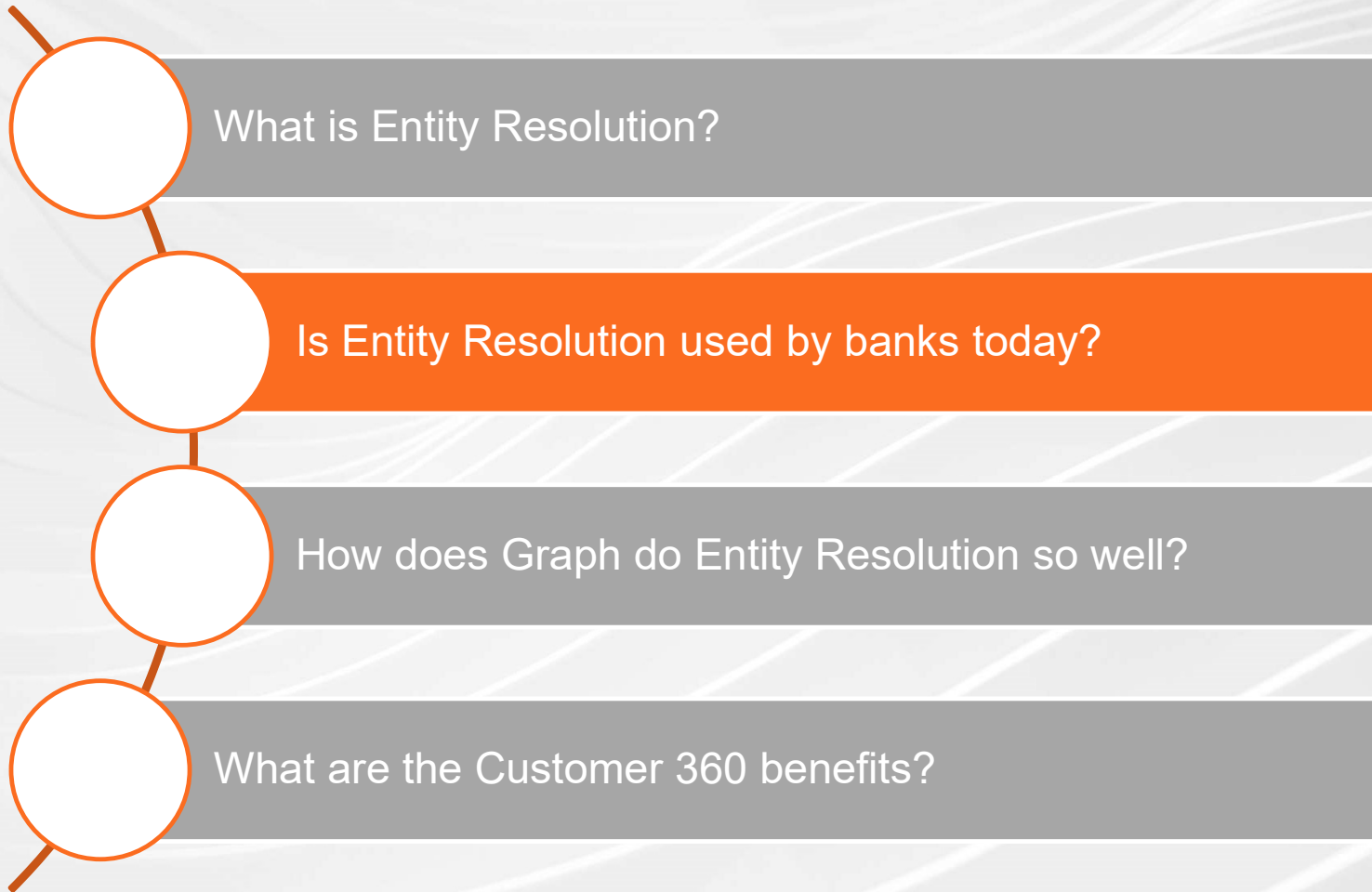
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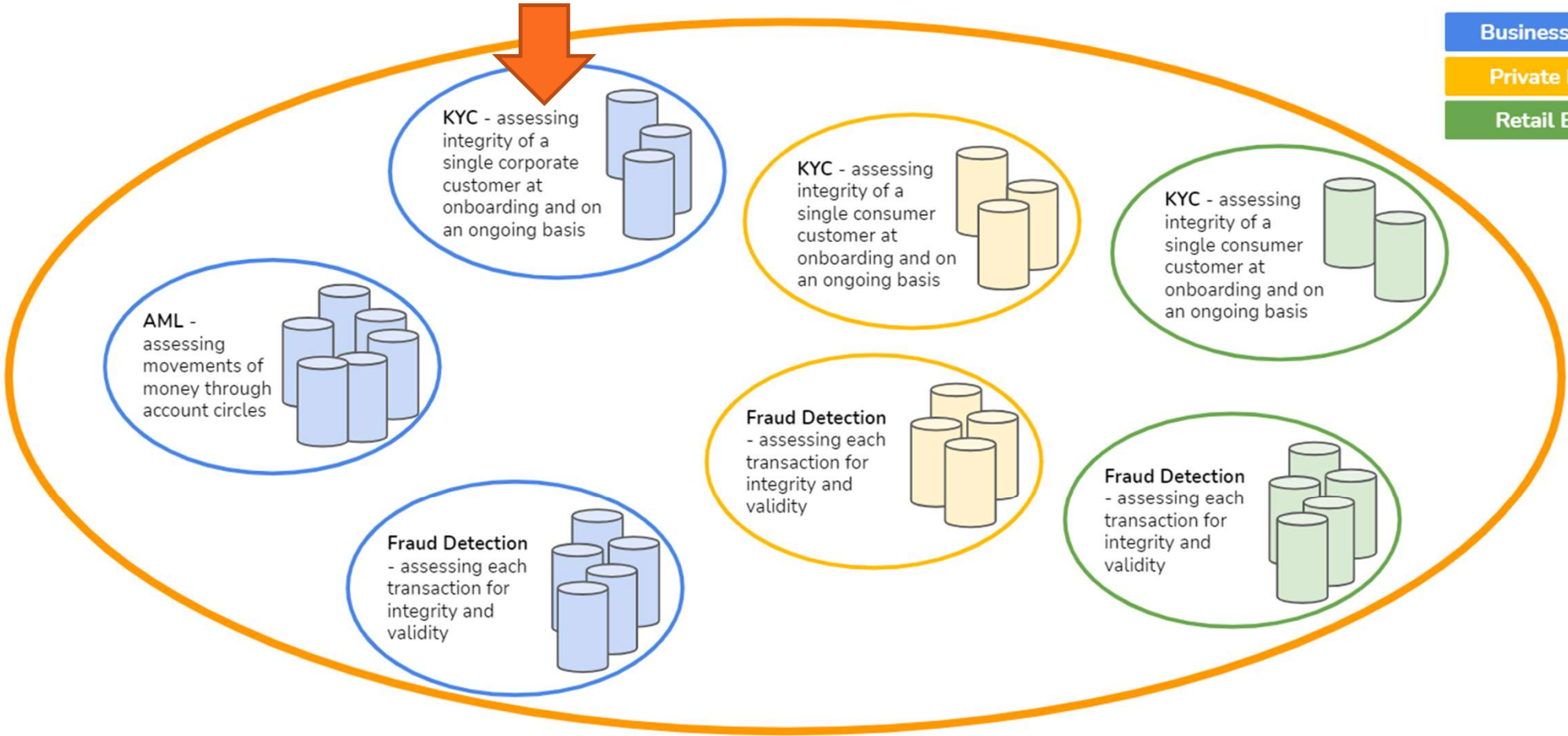
London NE1

tanya123@gmail.com

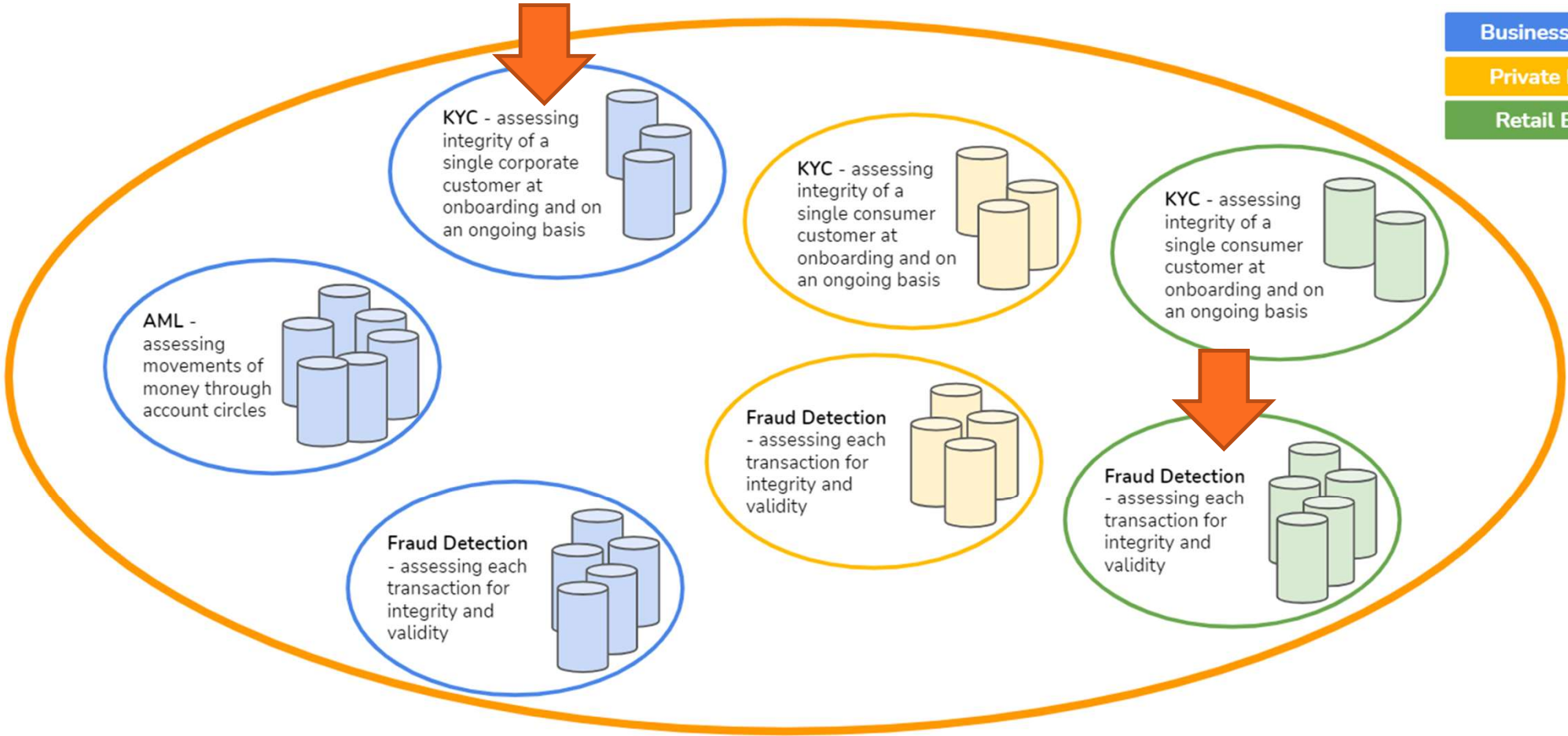
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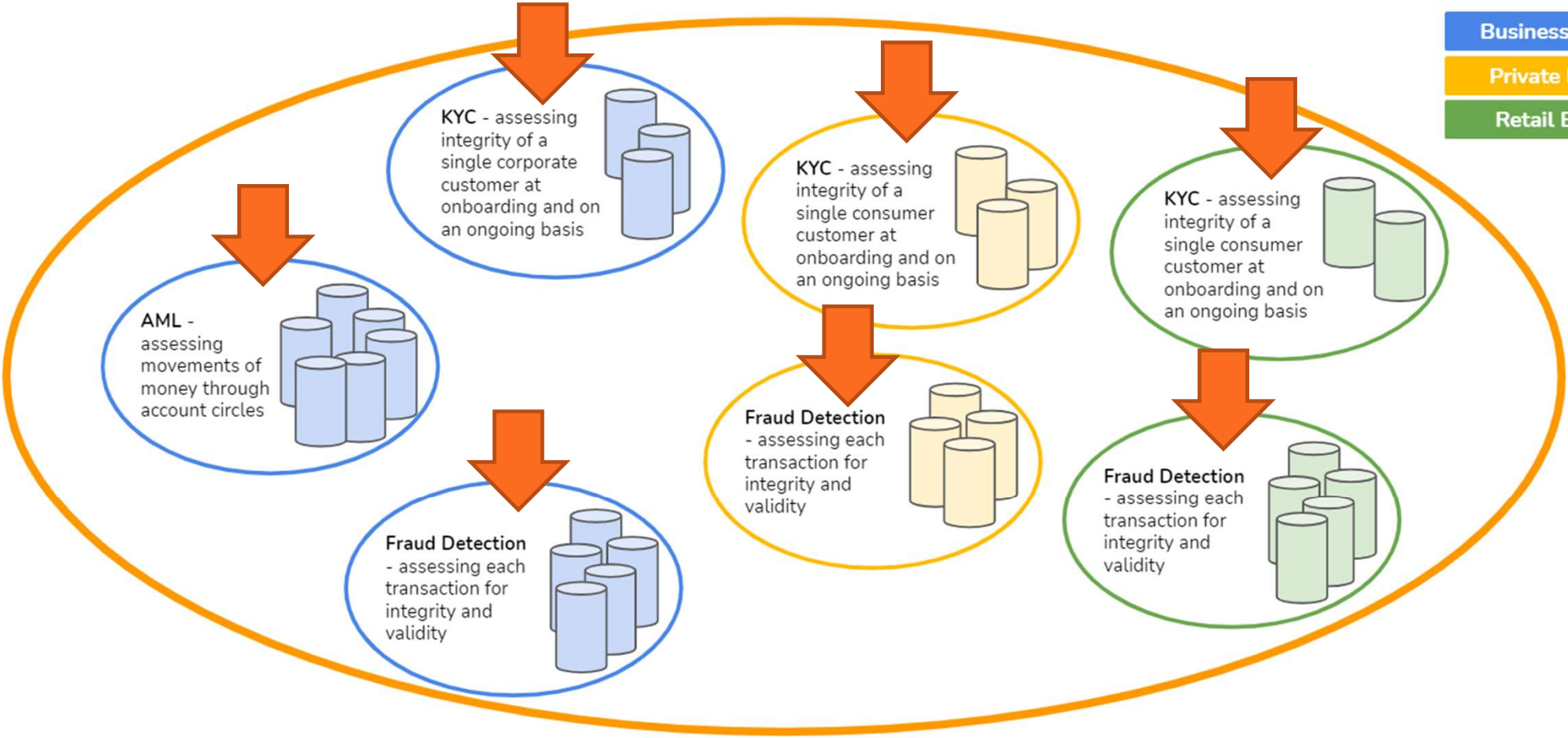
- Business Bank
- Private Bank
- Retail Bank



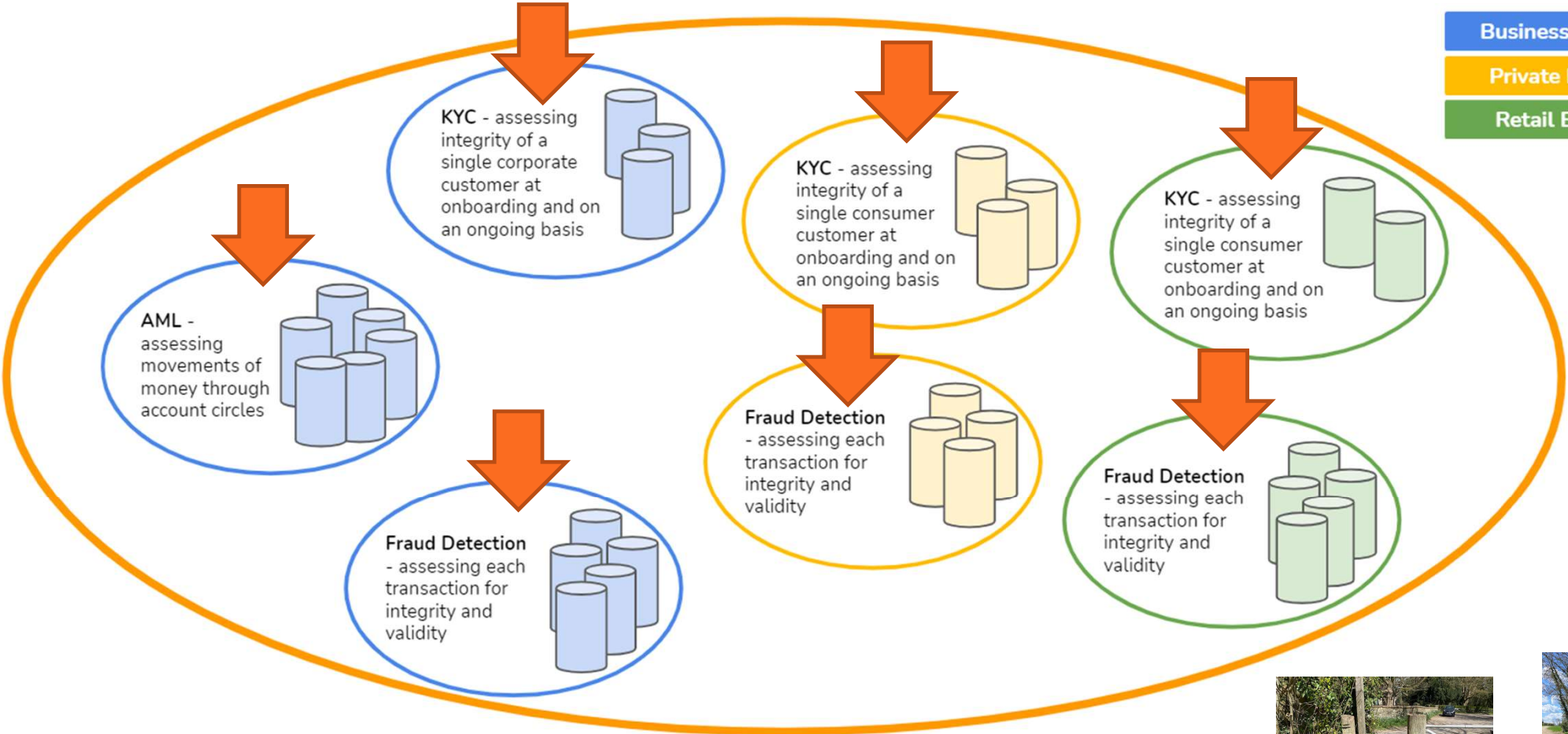
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- Business Bank
- Private Bank
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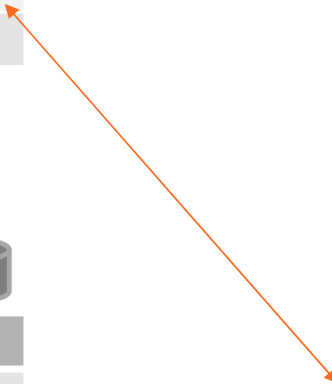


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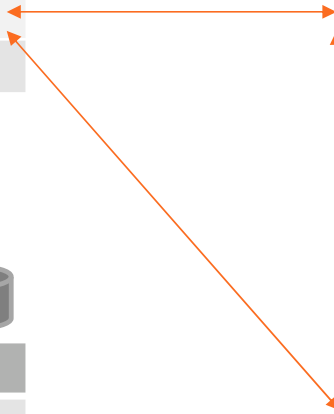


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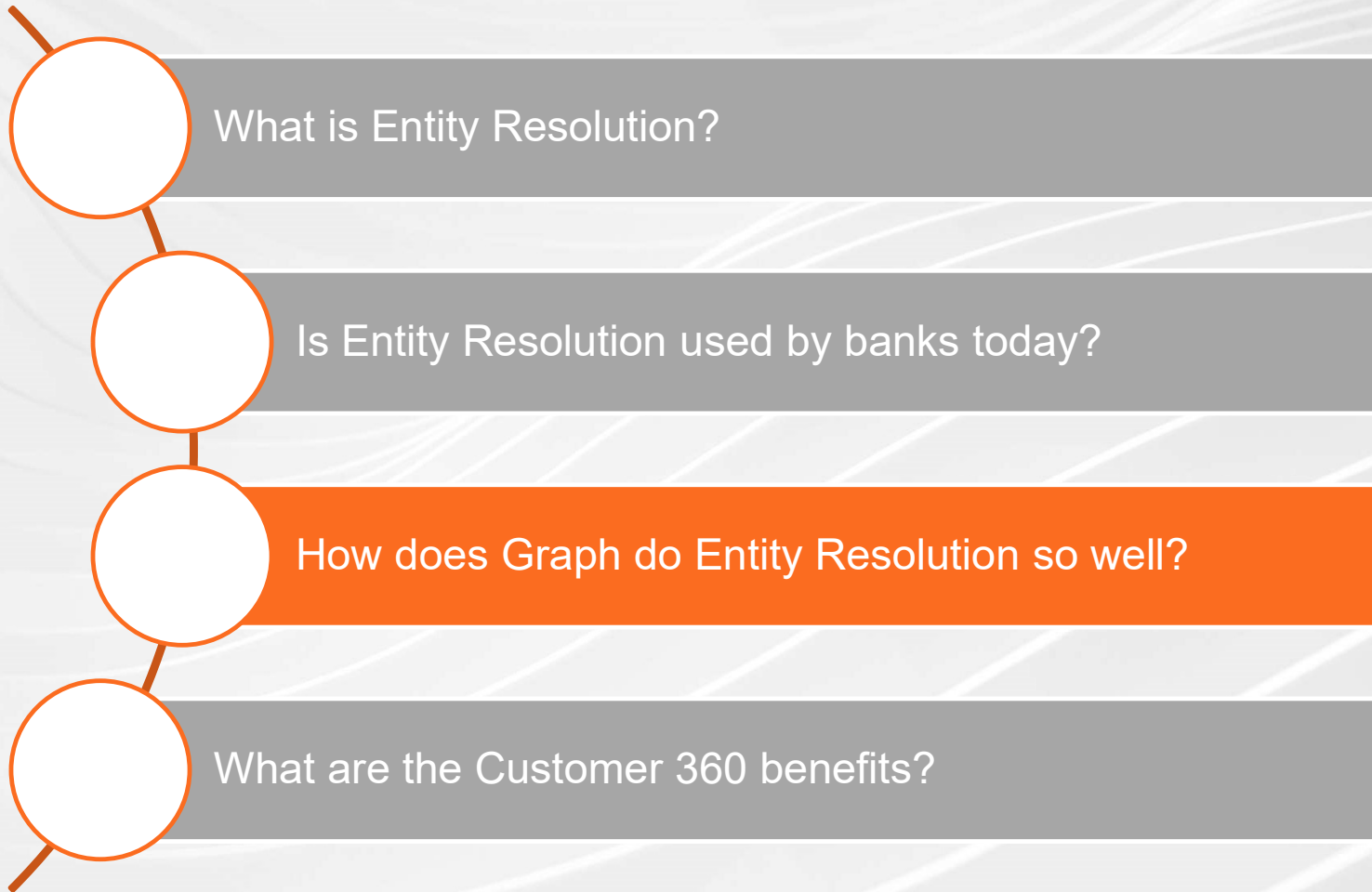
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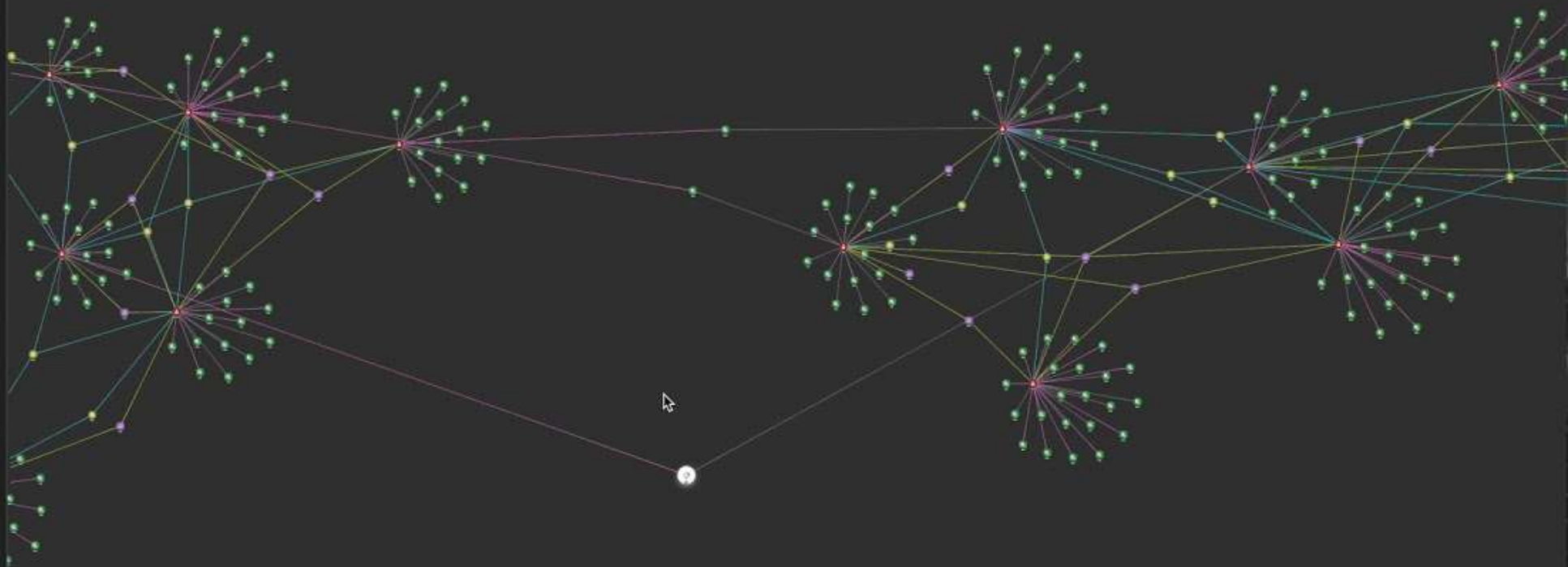
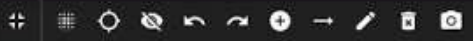
London NE1

tanya123@gmail.com

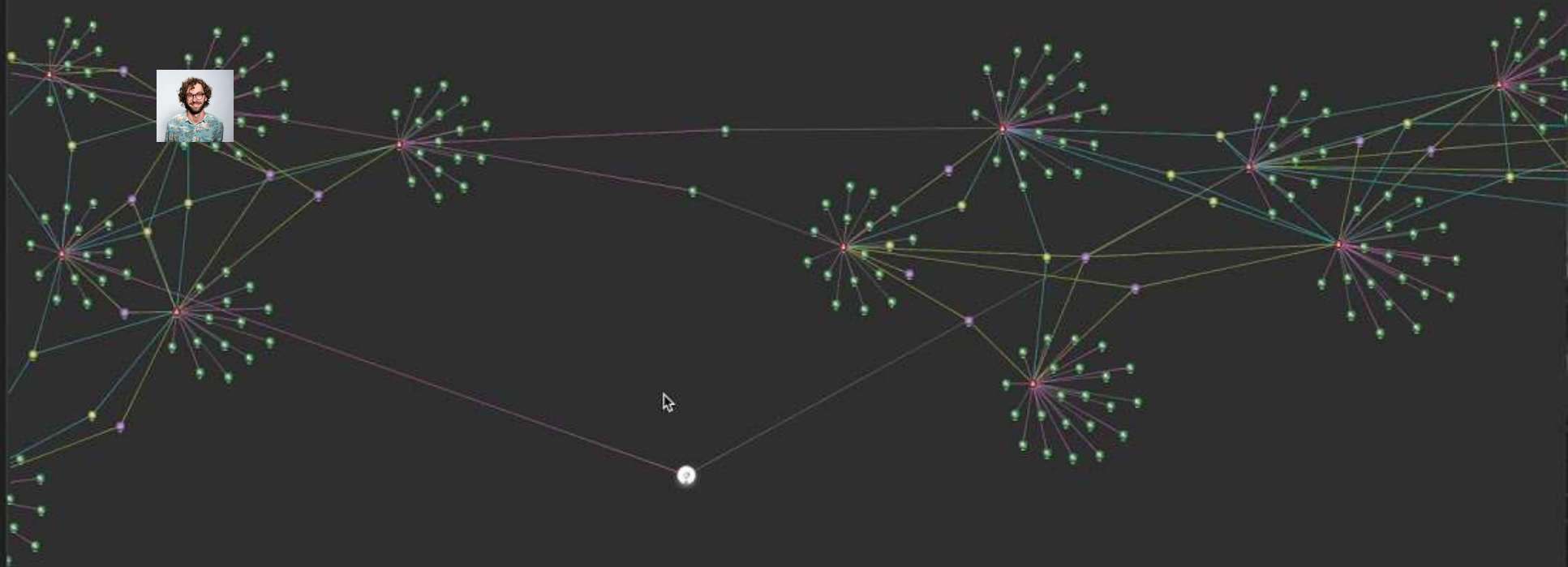
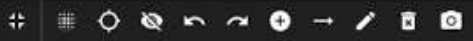
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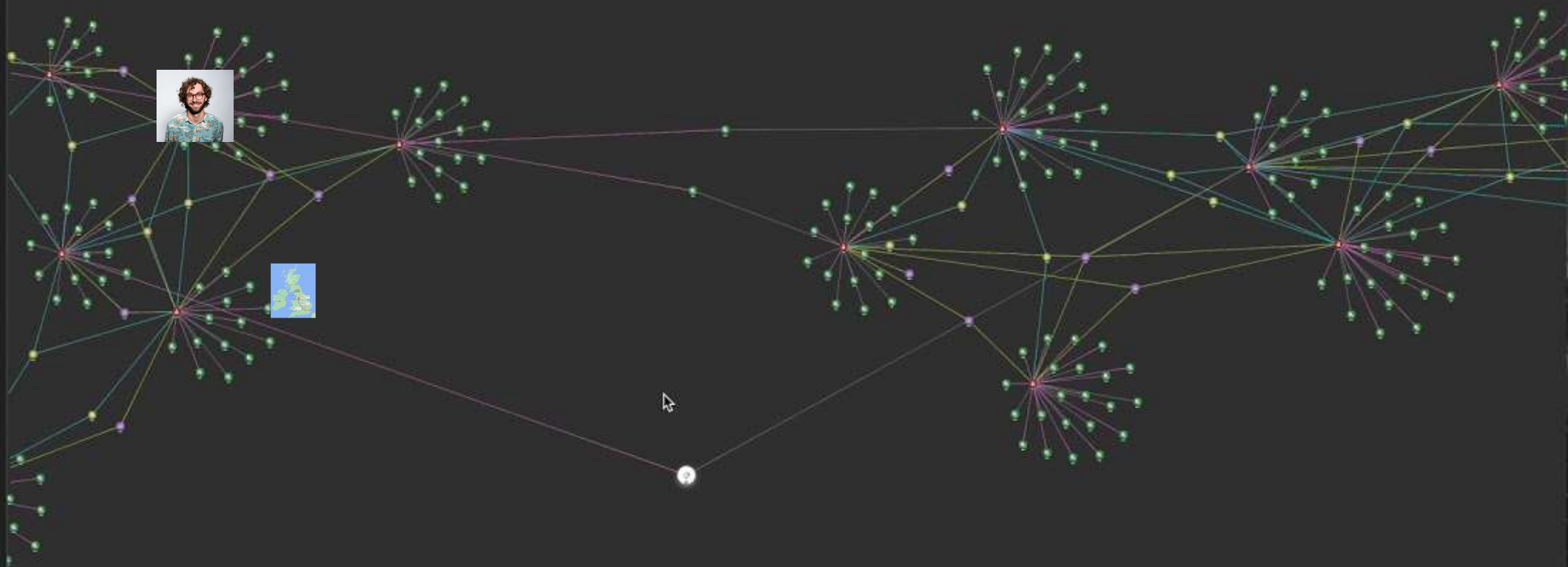
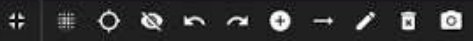
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- Write Queries



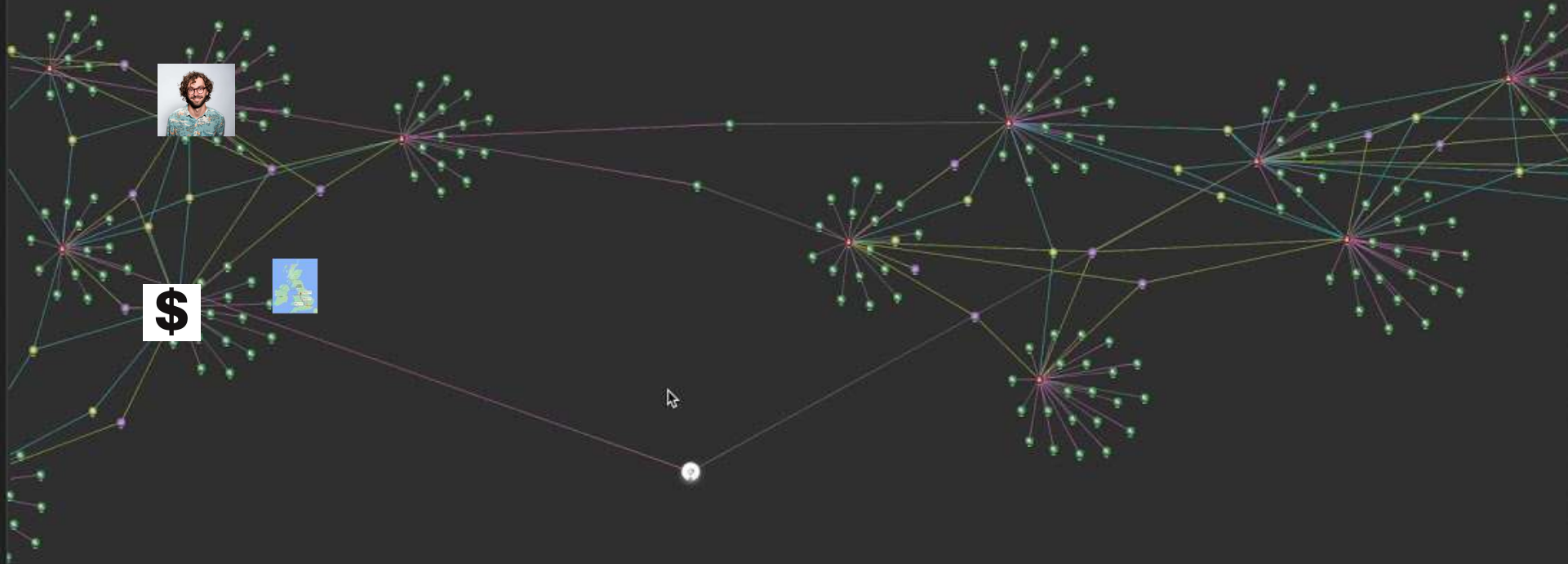
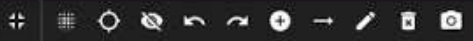
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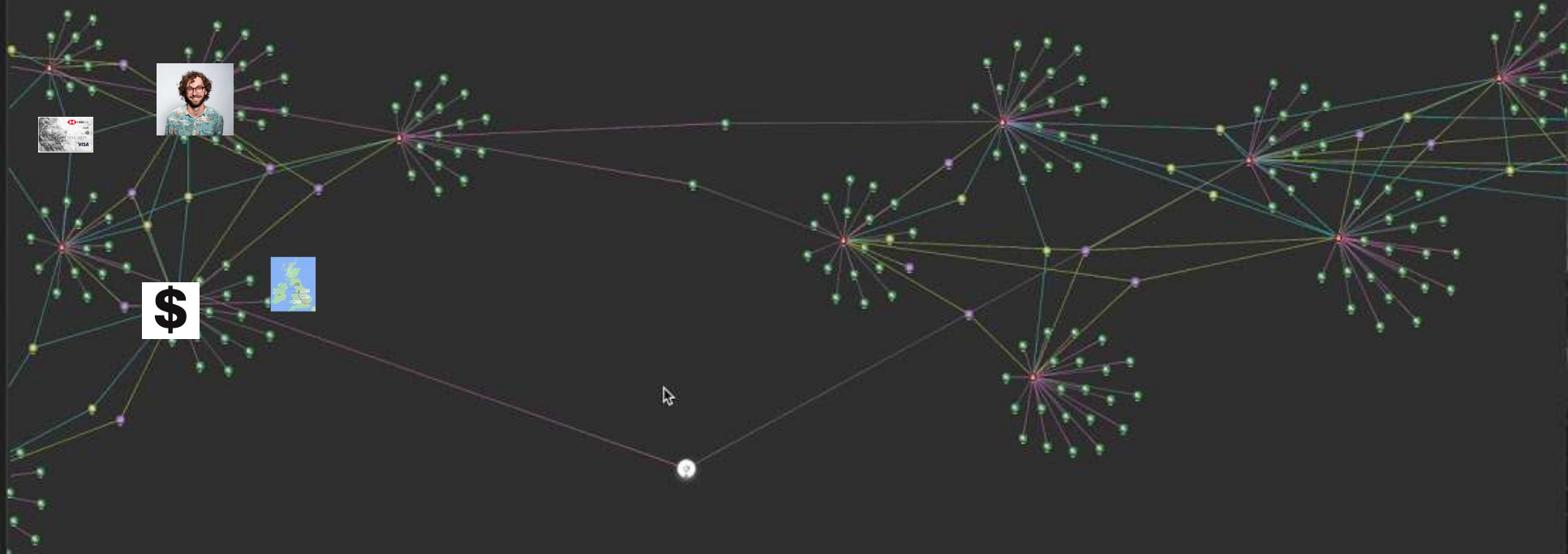
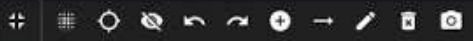
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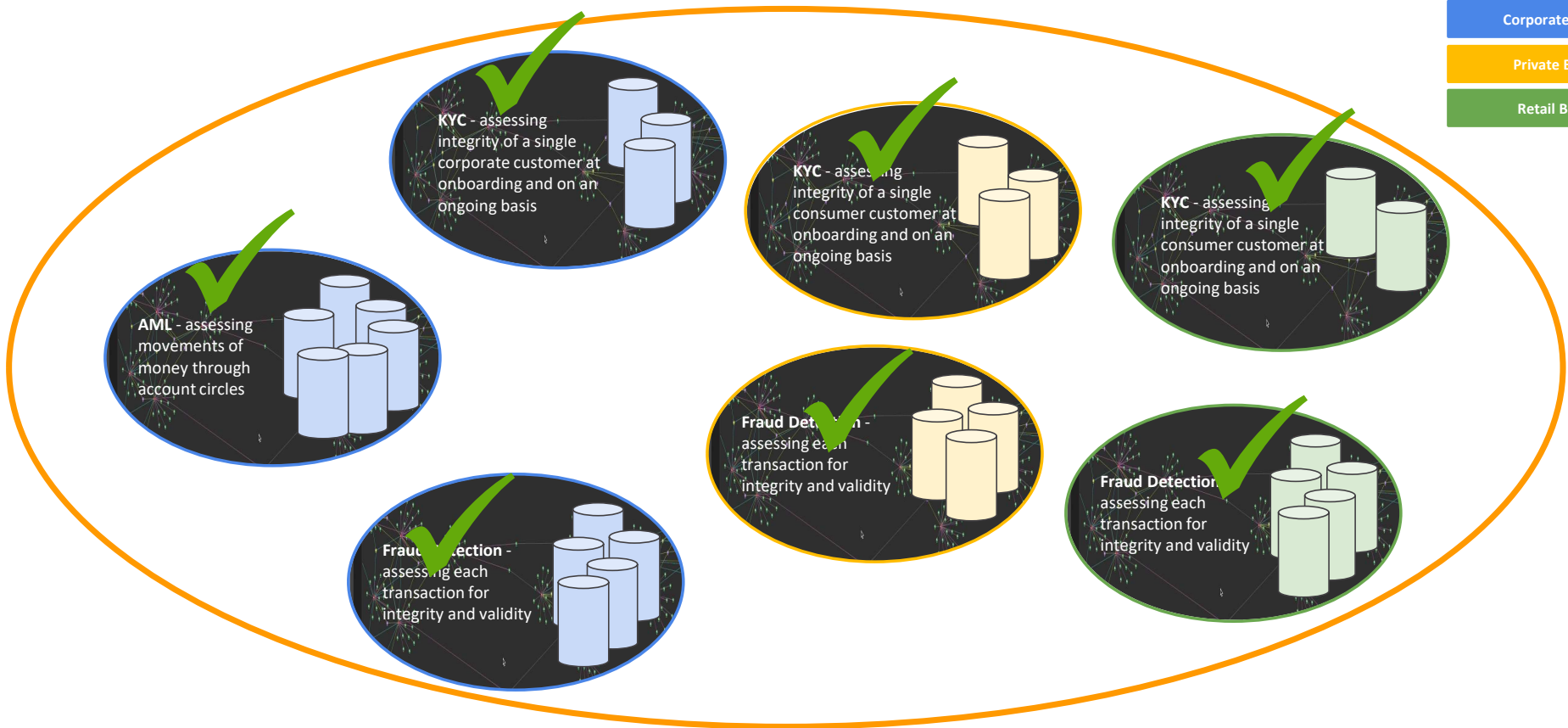
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- Home
- Design Schema
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Corporate Bank
Private Bank
Retail Bank





Sam Wood's Usual Card Activity

London

Monthly Spend in line with population average

Mid-range Supermarket, Tech, Men's Clothes Stores

Device IDs: #111, #888



Echo Transaction

London

Spend in line with average day to day

Online Tech Store

Device ID: #111



Trousers Transaction

Manchester

Spend in line with average day to day

Online Men's Clothes Store

Device ID: #888



Necklace Transaction

Manchester

Very high end spend

Online Women's Jewellery Store

Device ID: #333



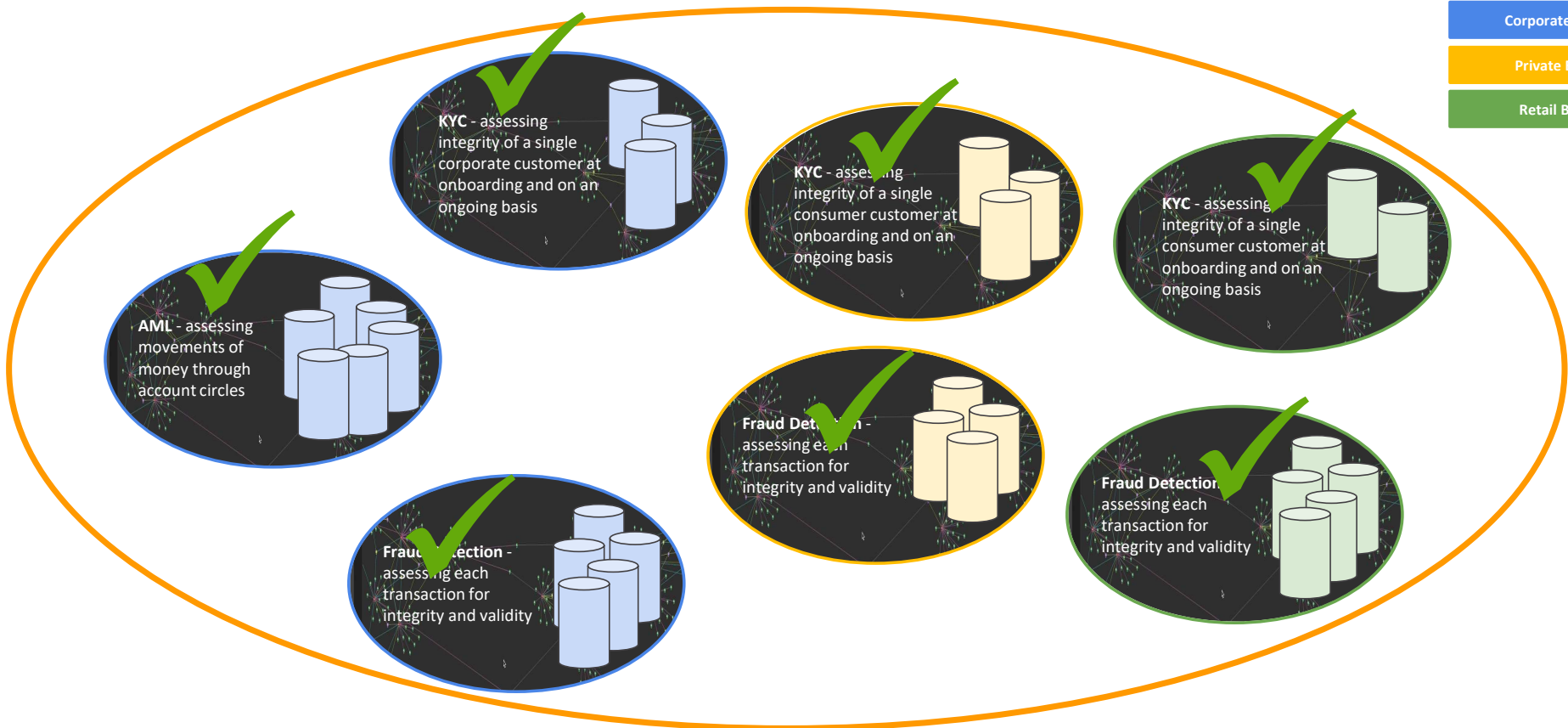
Food Transaction

Manchester

Spend in line with average day to day

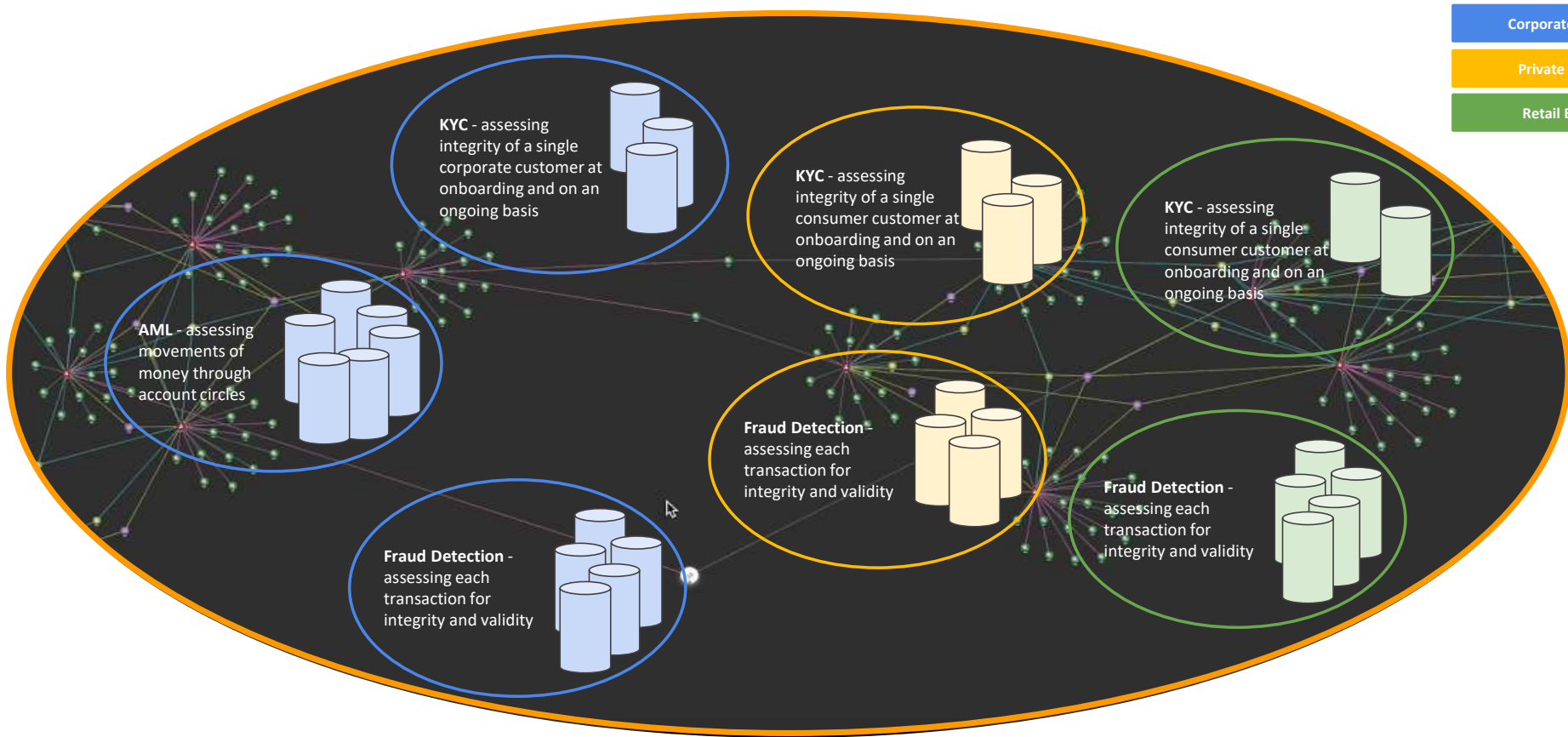
Mid Range Supermarket

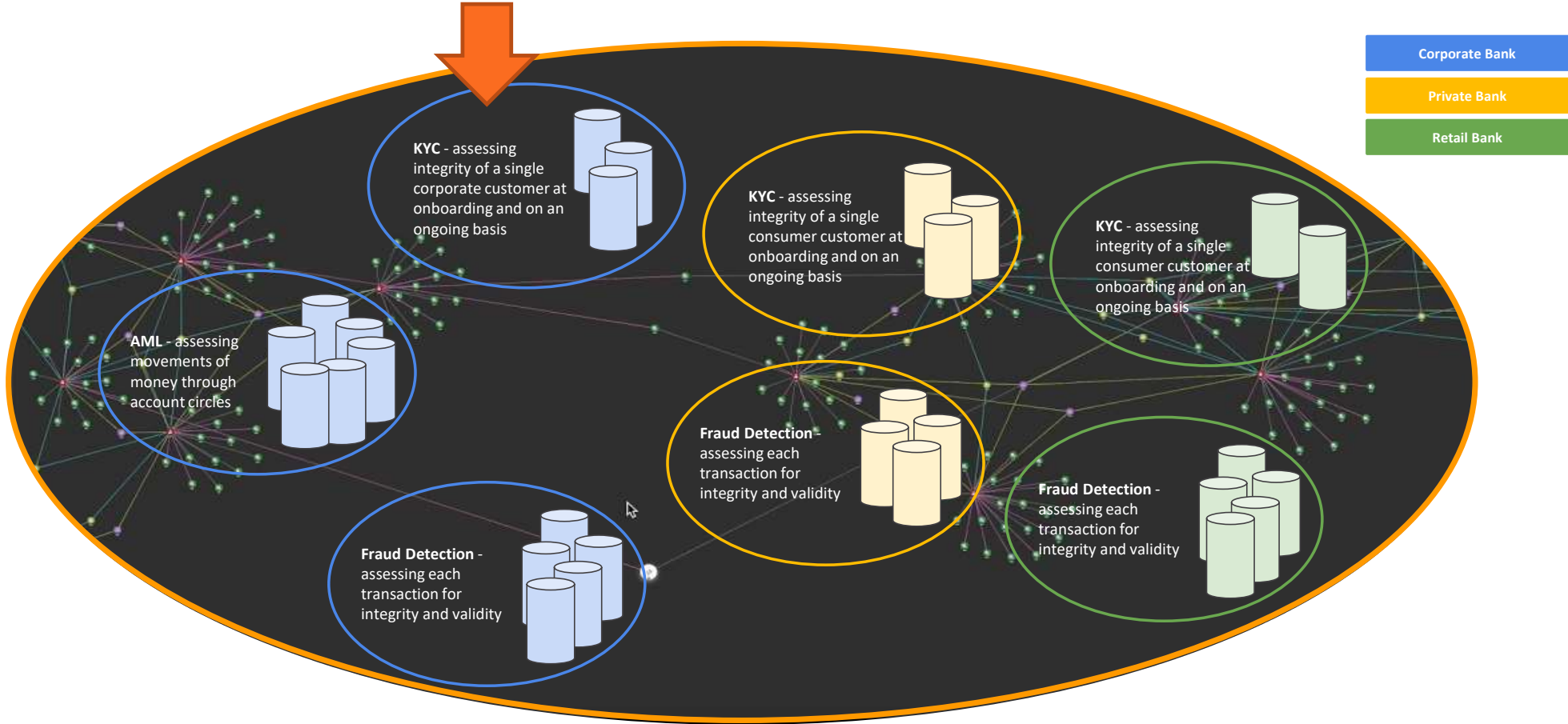
Device ID: #333

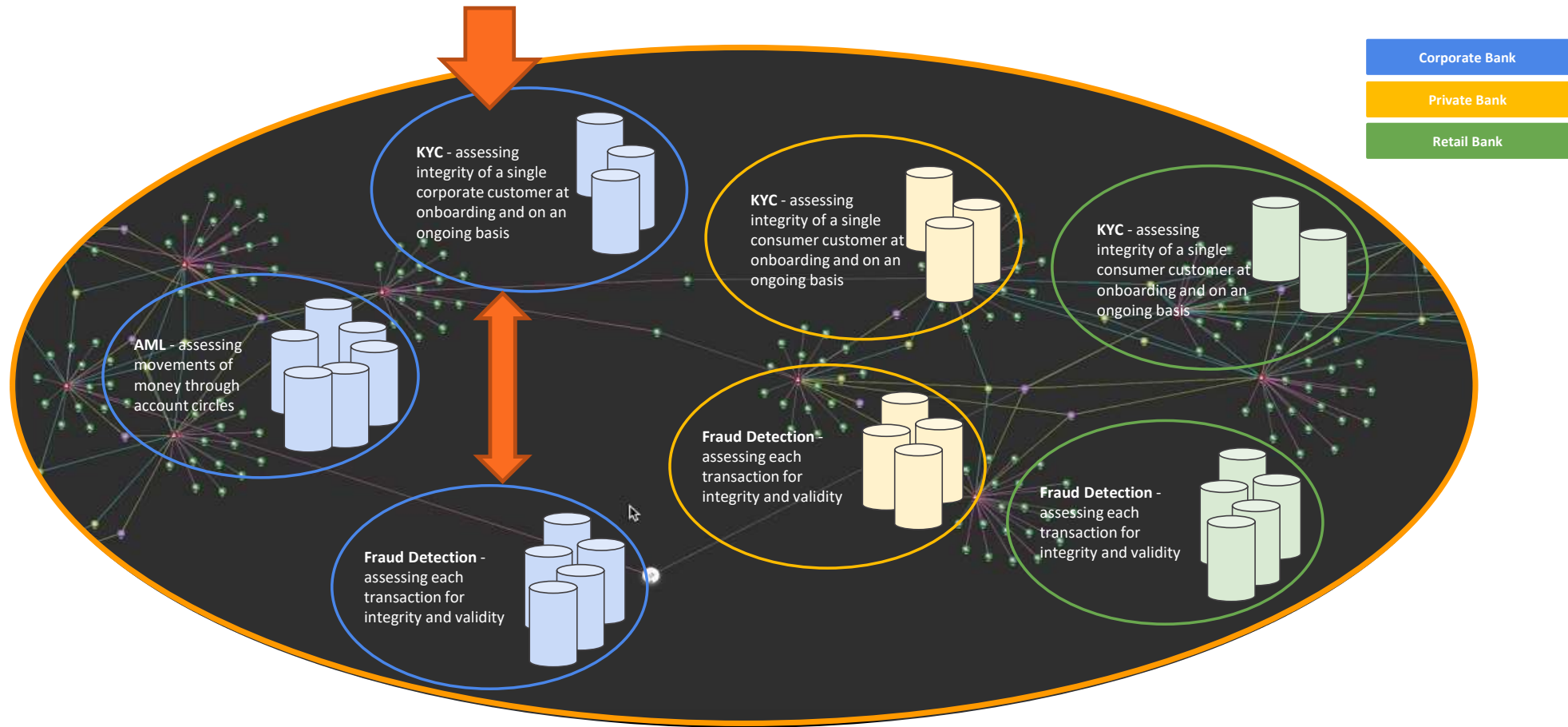


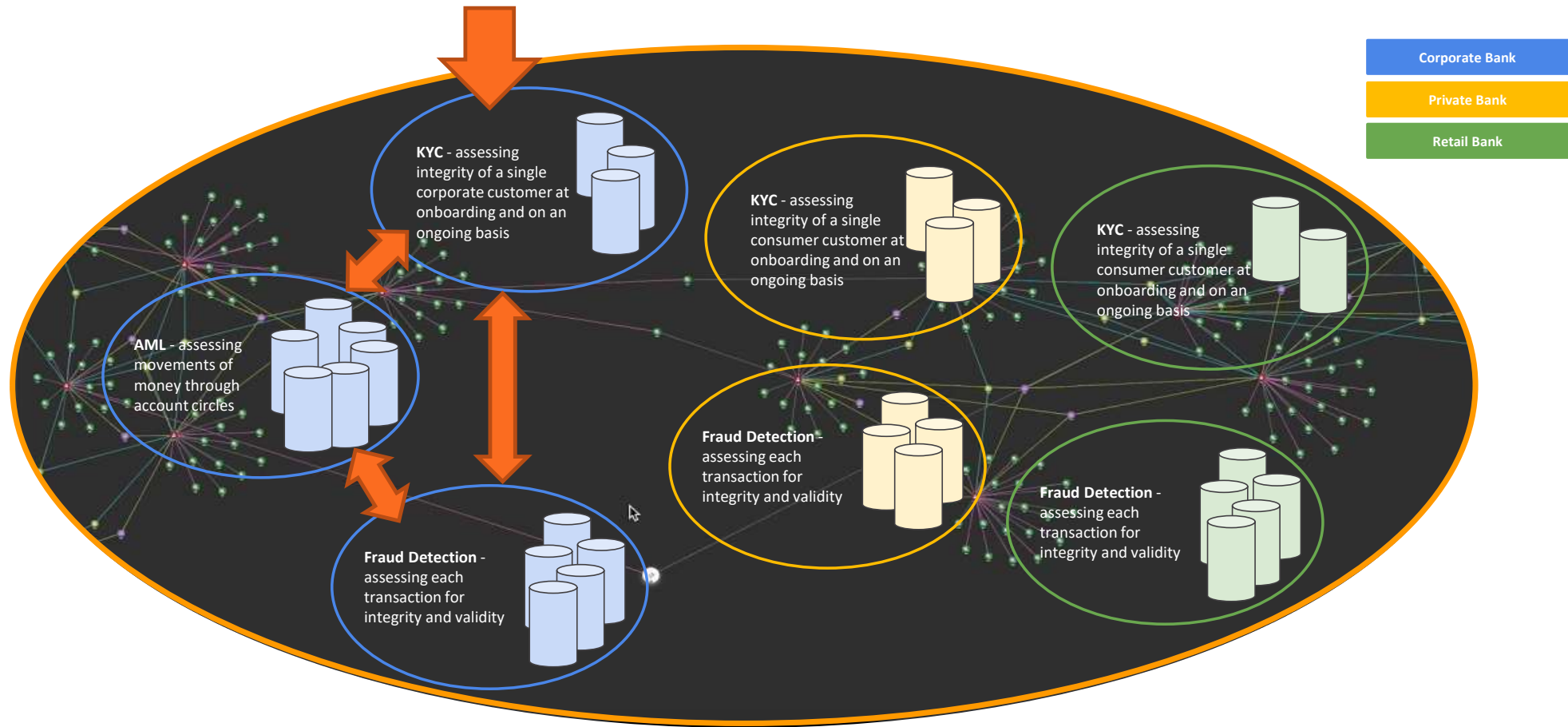
Corporate Bank
Private Bank
Retail Bank

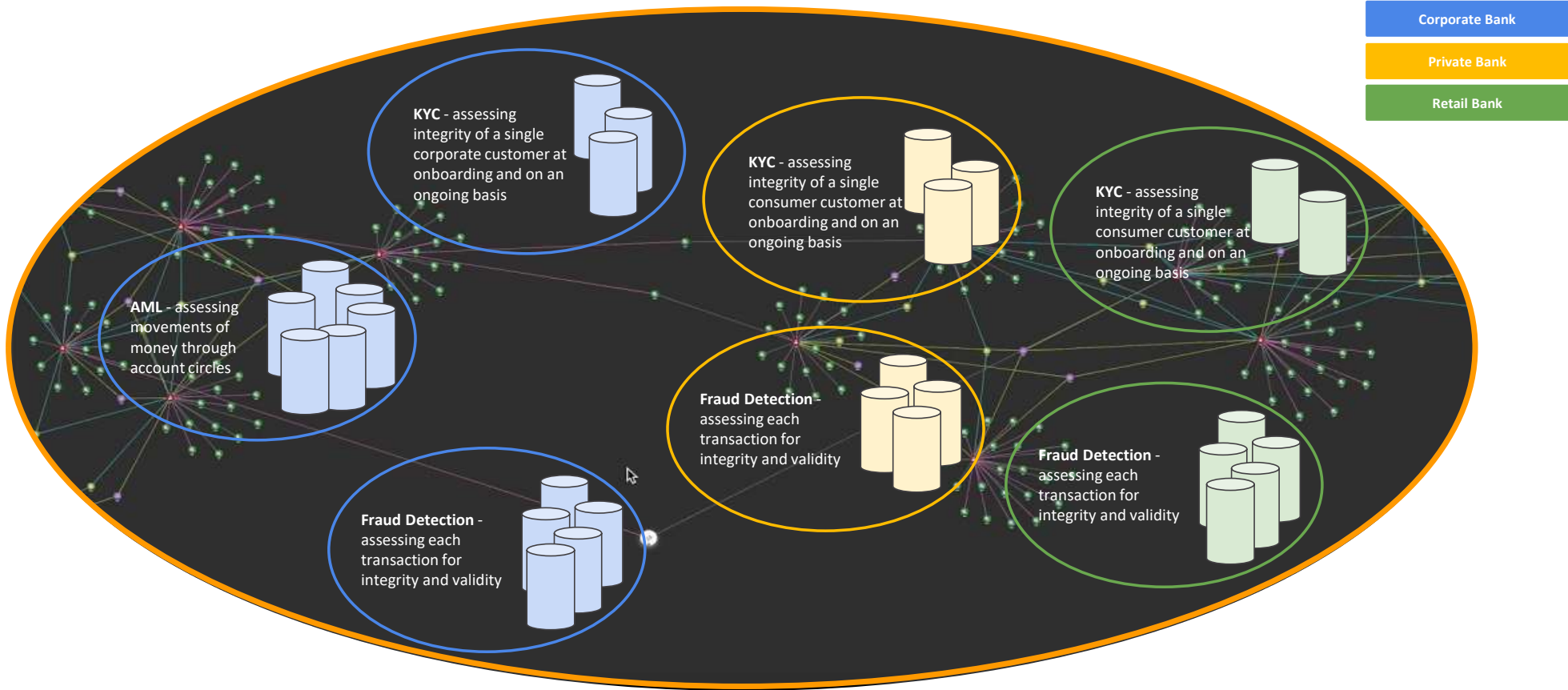
- Corporate Bank
- Private Bank
- Retail Bank



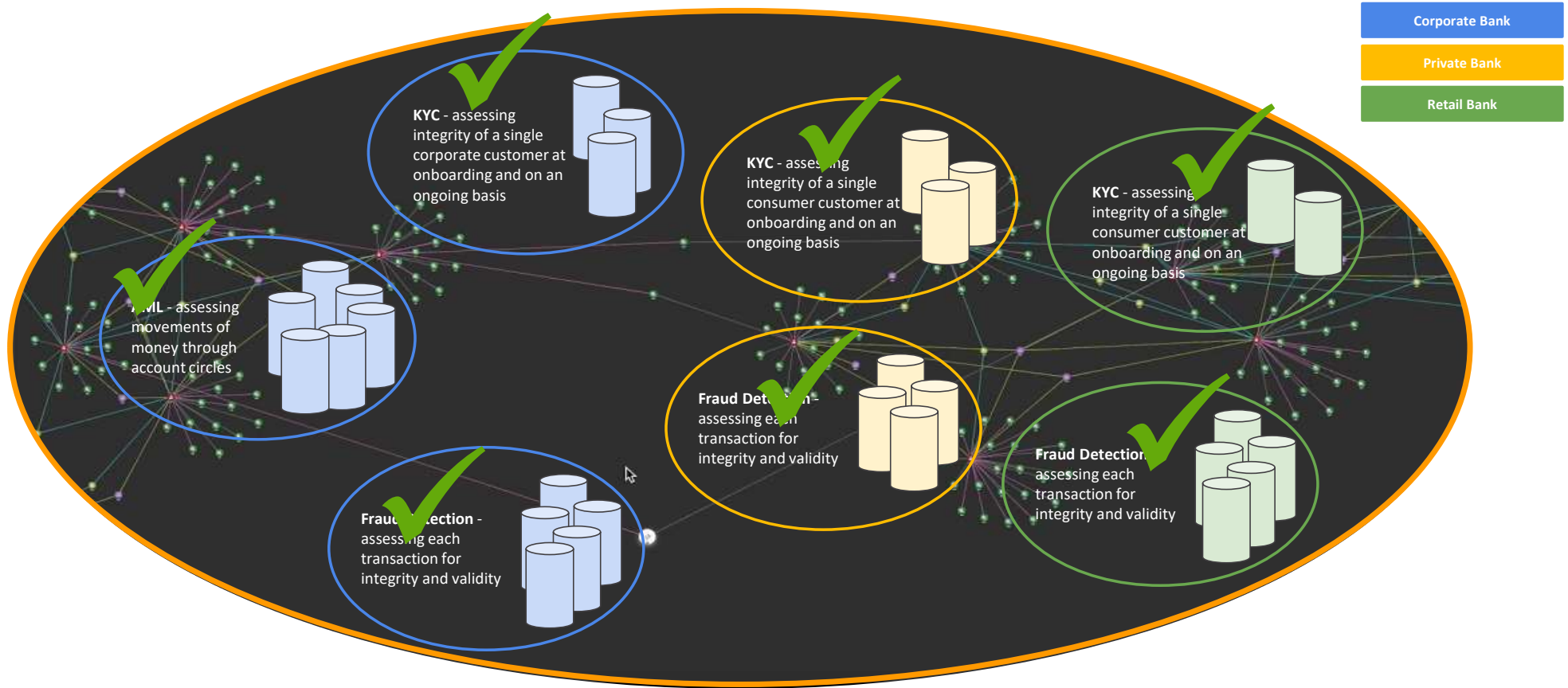




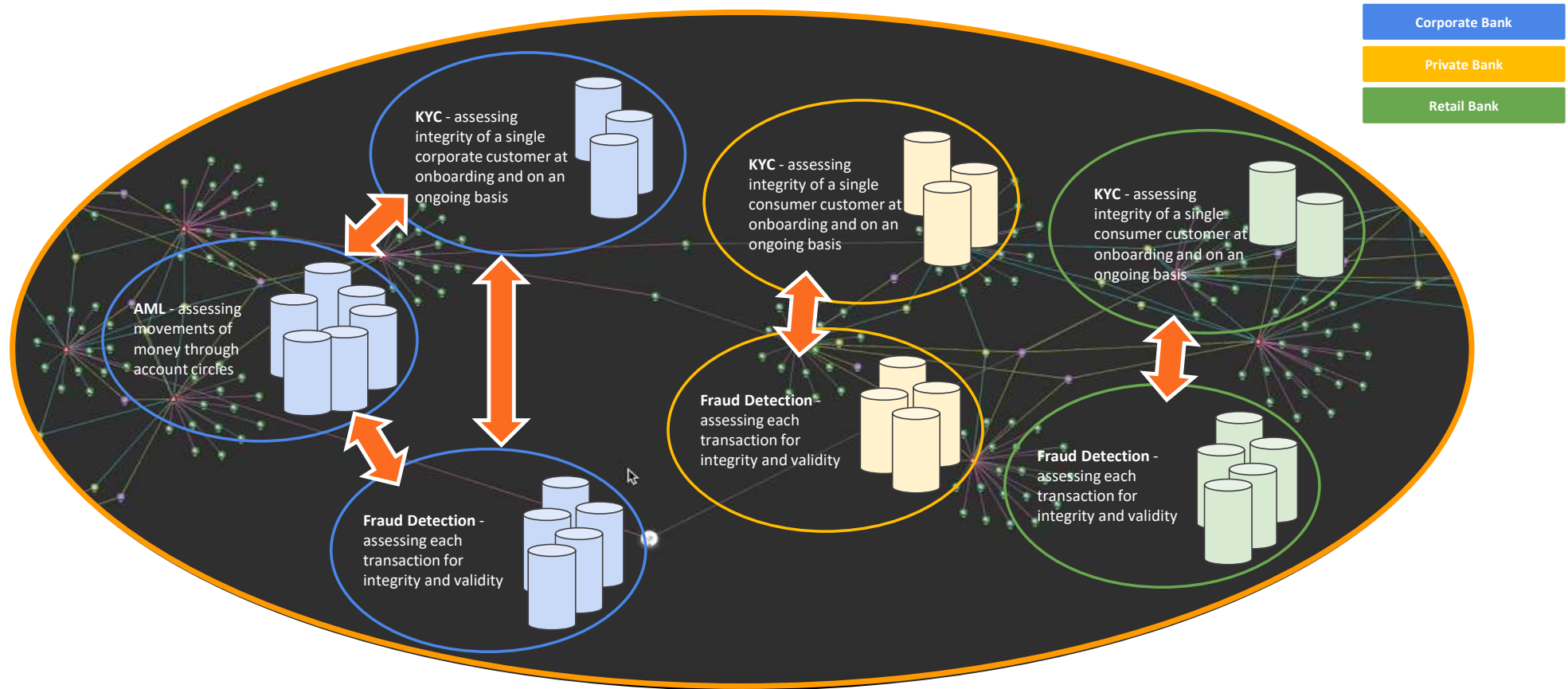




1. Graph finds more crime, more accurately, using the same data



1. Graph finds more crime, more accurately, using the same data
2. Graph finds more crime still, by compounding your data





Sam Owen's Usual Card Activity

Geography: London

Typical Monthly Spend: in line with population average

Typical Merchants: Mid-range Supermarket, Tech, Men's Clothes Stores

Regular Device IDs: #111, #888



Echo Transaction

IP Address: London

Transaction amount: in line with average day to day

Merchant: Online Tech Store

Device ID: #111



Necklace Transaction

IP Address: Manchester

Transaction amount: Very high end daily spend

Merchant: Online Women's Jewellery Store

Device ID: #333



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Regular Device IDs: #111, #888



Echo Transaction

IP Address: London

Transaction amount: in line with average day to day

Merchant: Online Tech Store

Device ID: #111



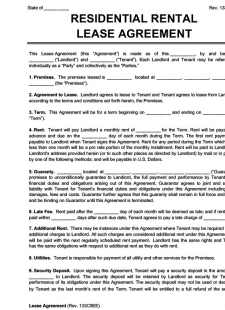
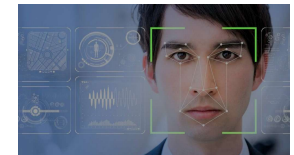
Necklace Transaction

IP Address: Manchester

Transaction amount: Very high end daily spend

Merchant: Online Women's Jewellery Store

Device ID: #333





Sam Owen's Usual Card Activity

Geography: London

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Typical Merchants: Mid-range Supermarket, Tech, Men's Clothes Stores

Regular Device IDs: #111, #888



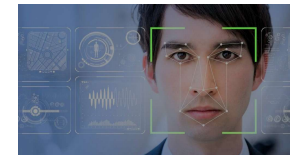
Echo Transaction

IP Address: London

Transaction amount: in line with average day to day

Merchant: Online Tech Store

Device ID: #111



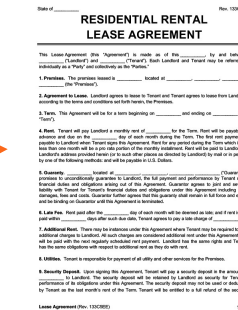
Necklace Transaction

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Transaction amount: Very high end daily spend

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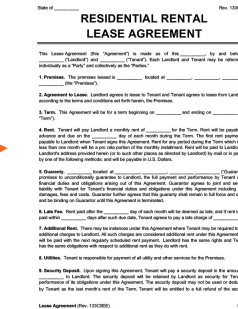
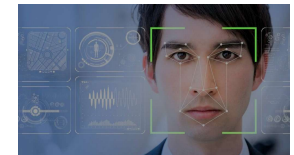
Necklace Transaction

IP Address: Manchester

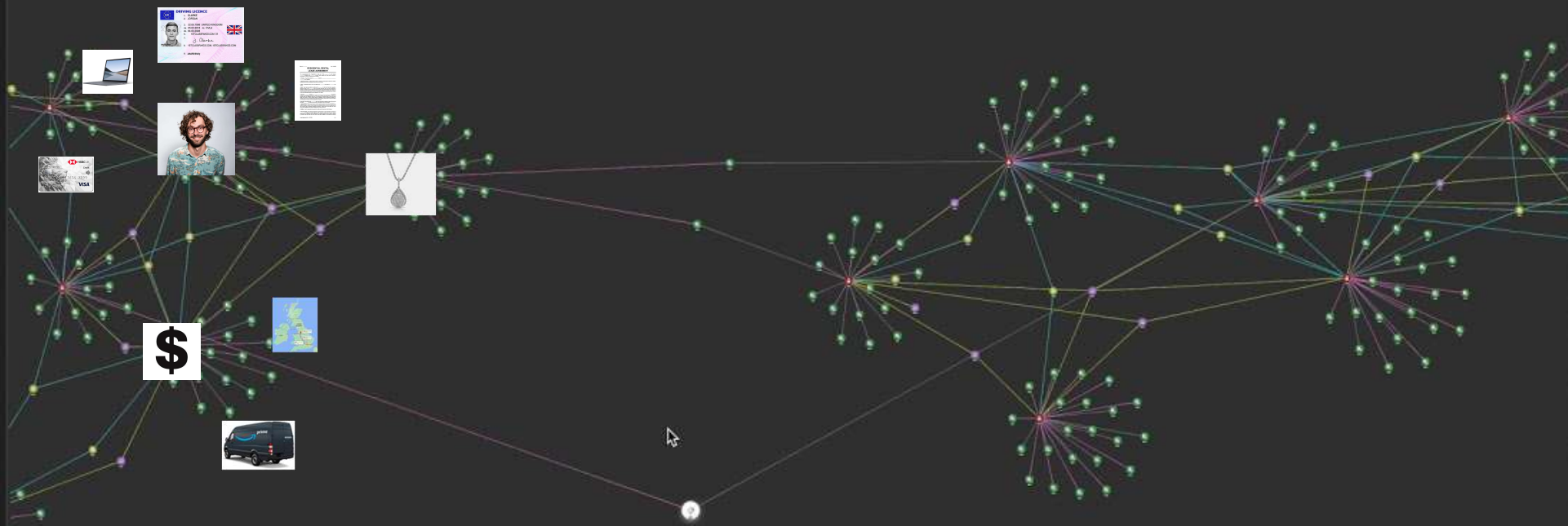
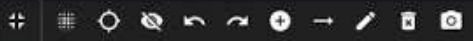
Transaction amount: Very high end daily spend

Merchant: Online Women's Jewellery Store

Device ID: #333

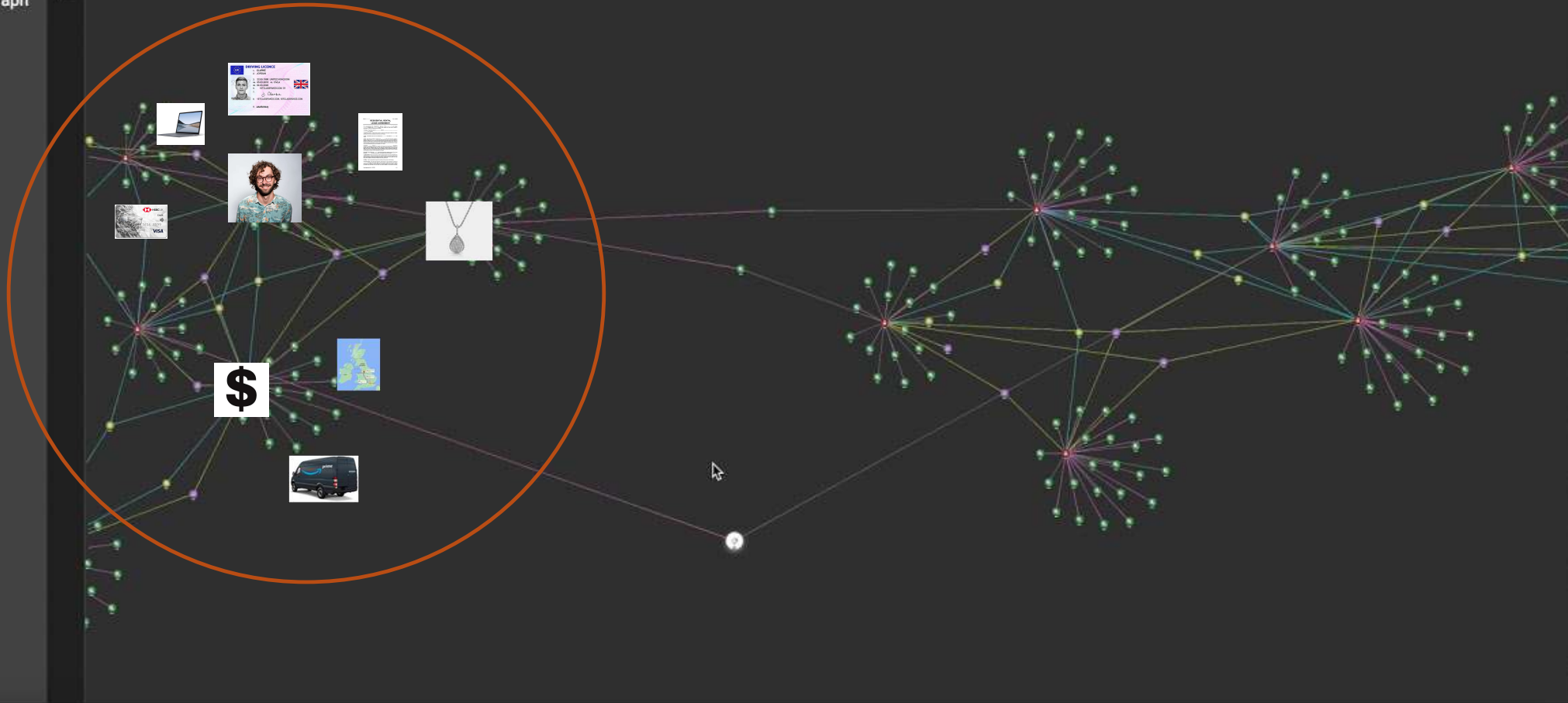


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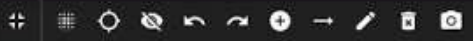


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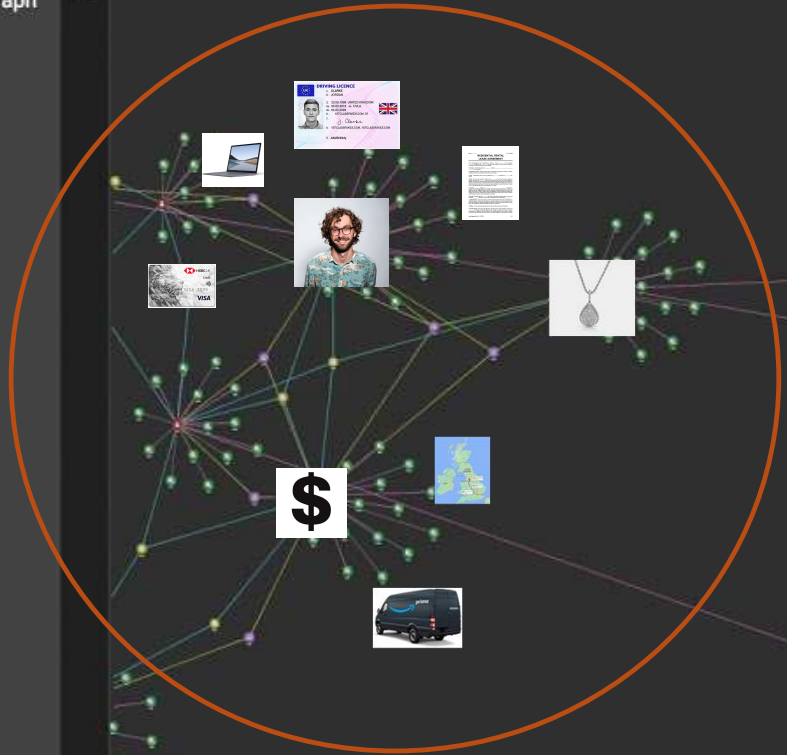
Customer 360



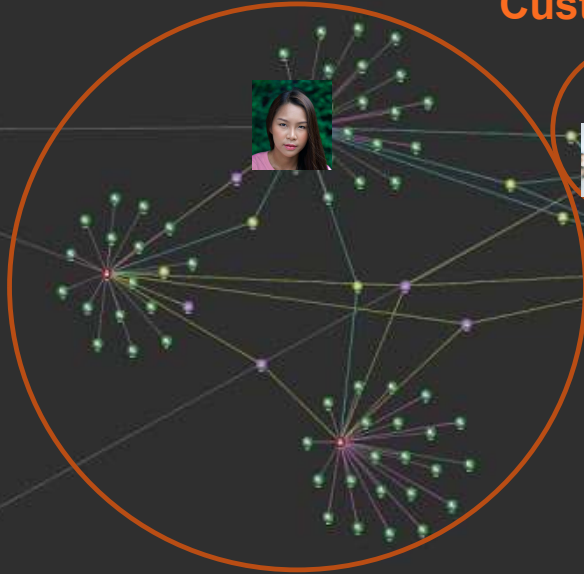
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Customer 360



Customer 360



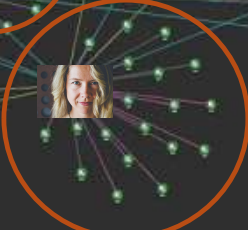
Customer 360

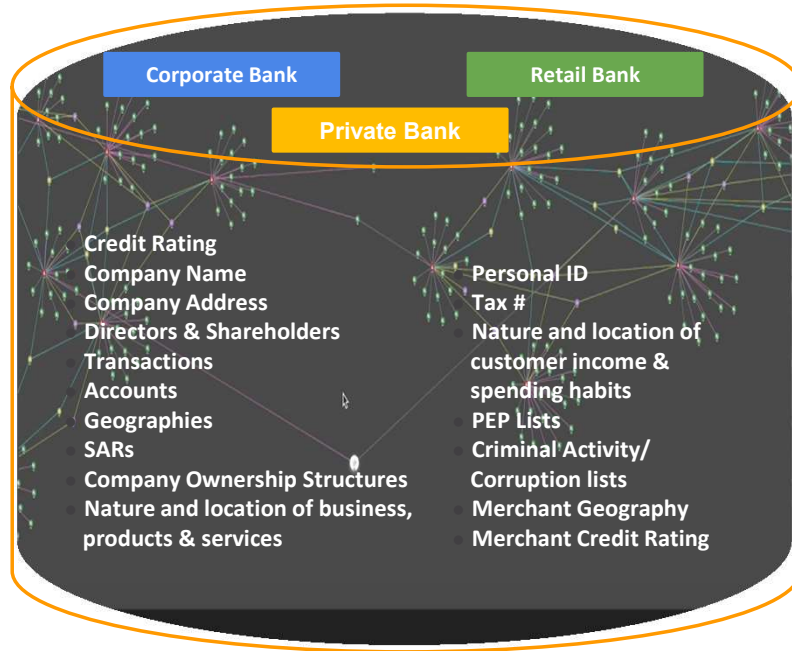


Customer 360



Customer 360





Example Customer 360 Use Cases

Upsell/ Cross-Sell

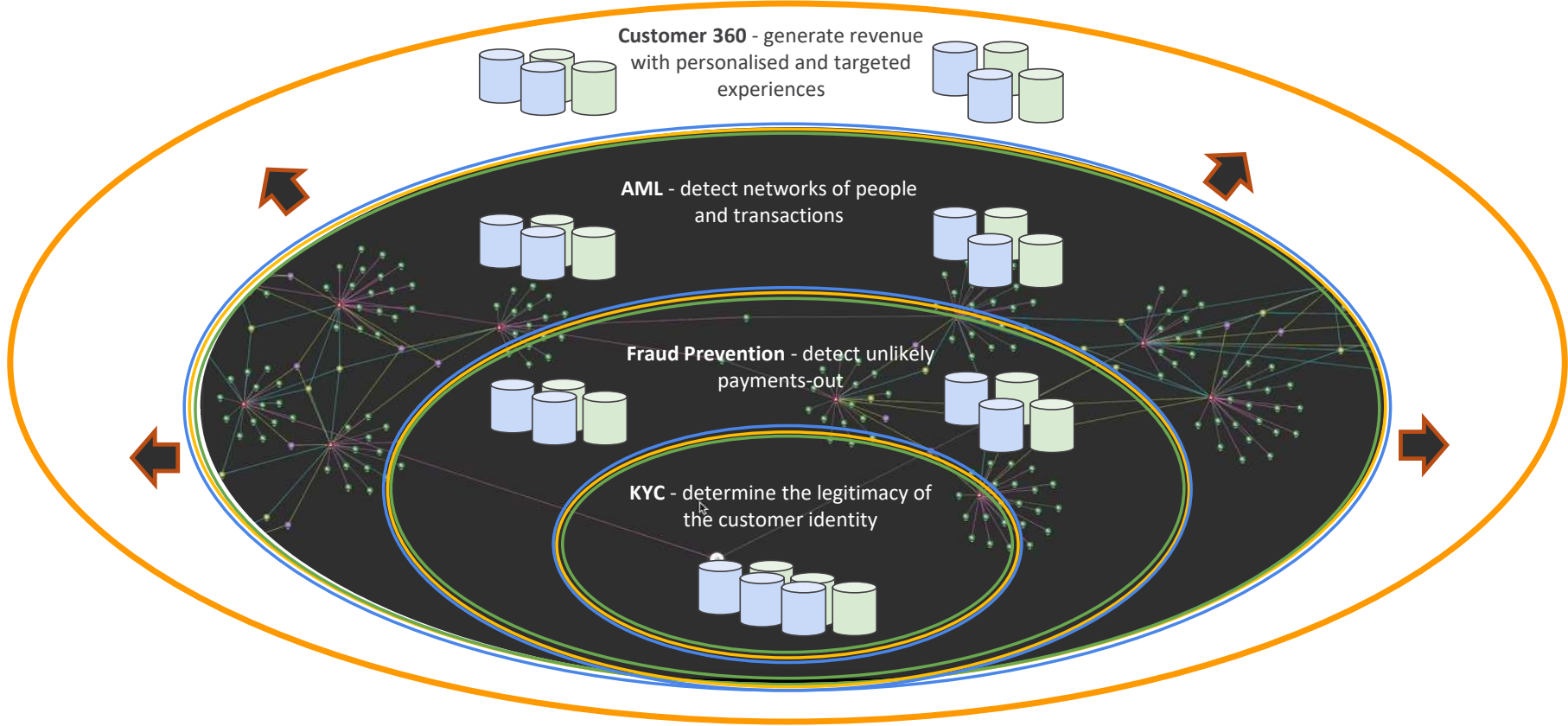
Customer Experience

Customer Segmentation

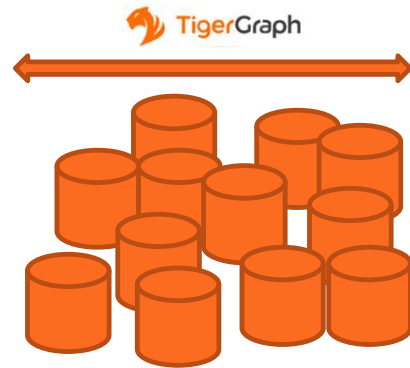
Content Personalisation

Support Personalisation

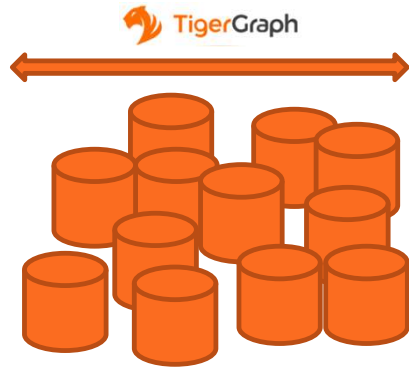
Adoption Personalisation



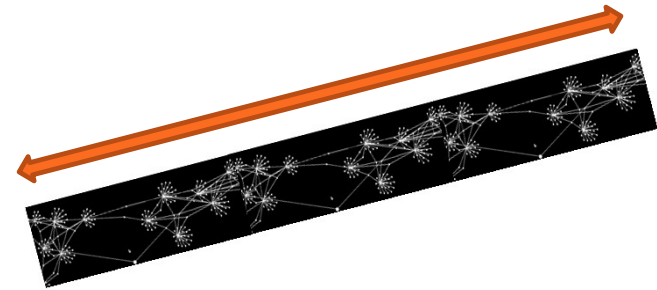
VOLUME



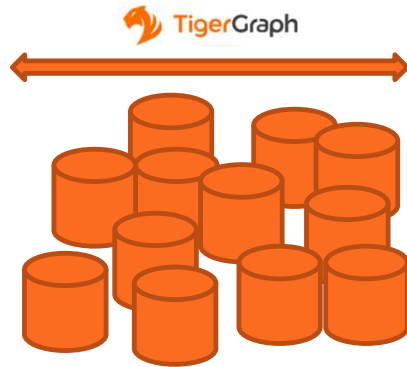
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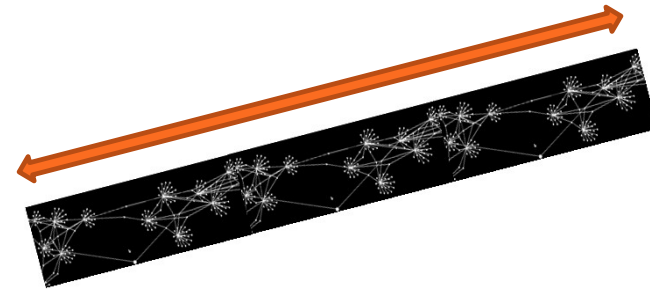
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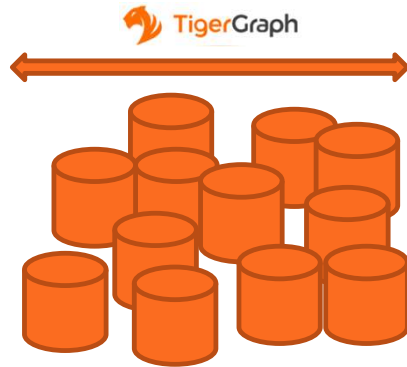
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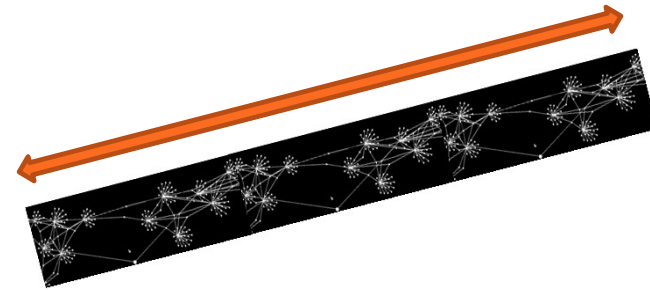
COMPLEXITY

If this... then...
But if this... then...
But exclude...
And include...
And output this...
But if this....
Then output this...

VOLUME



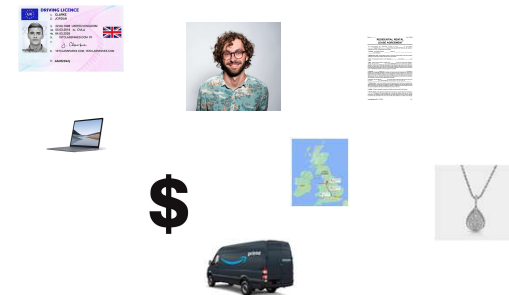
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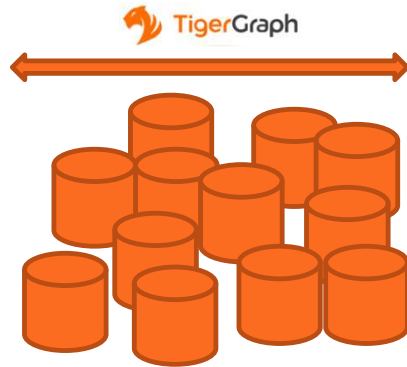
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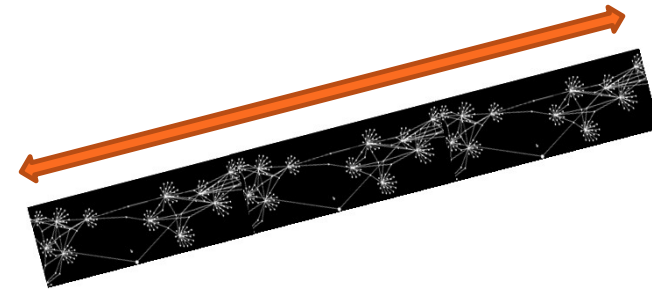
NEW DATA TYPES



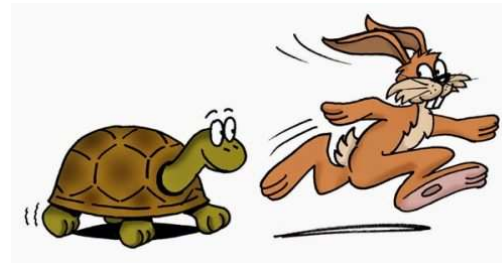
VOLUME



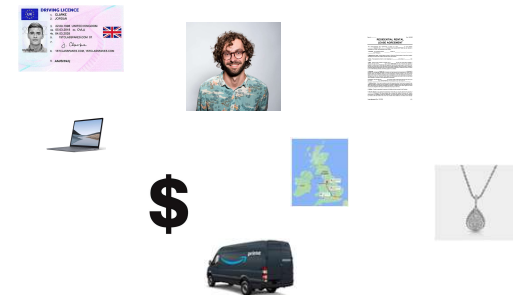
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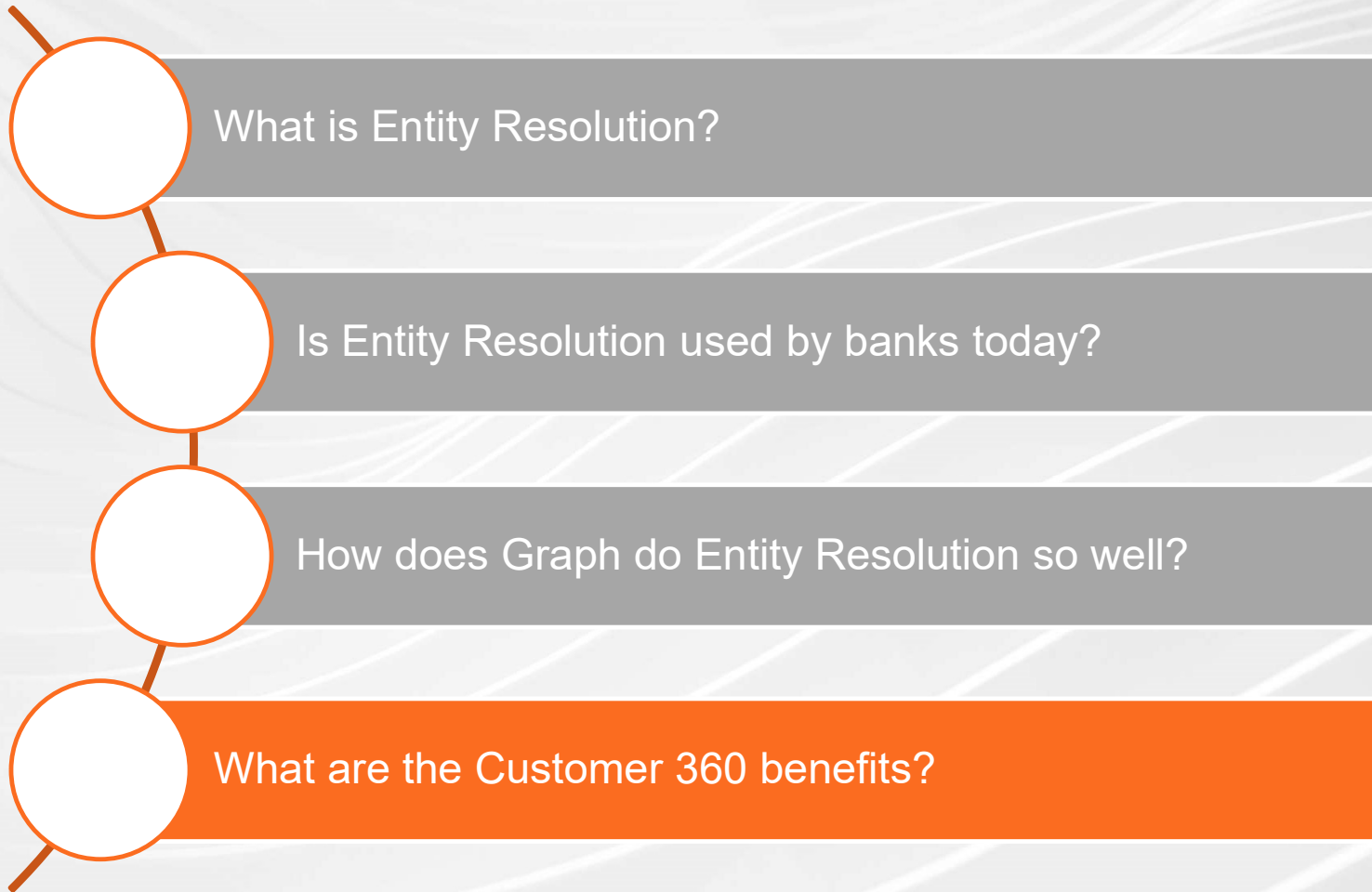
COMPLEXITY

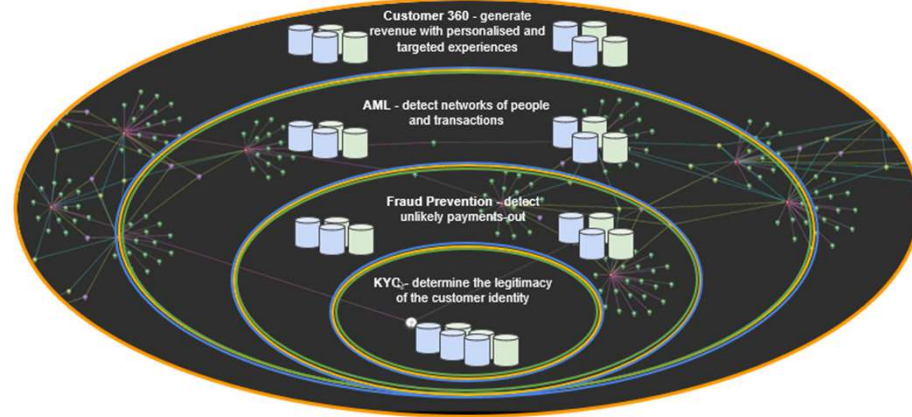


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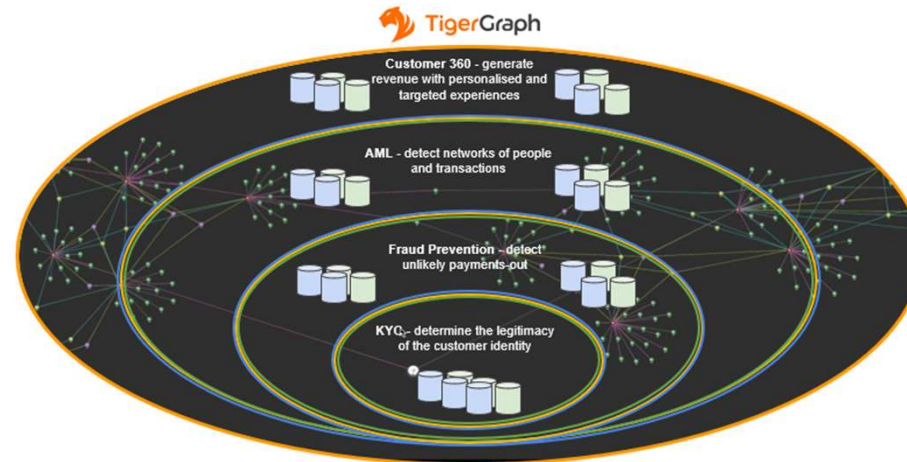




Value Chain Banking

(Consumer-to-HNW, Cons/HNW-to-SMB)

- Capitalise on captive market
- increase revenue
- Target bundles / develop new propositions



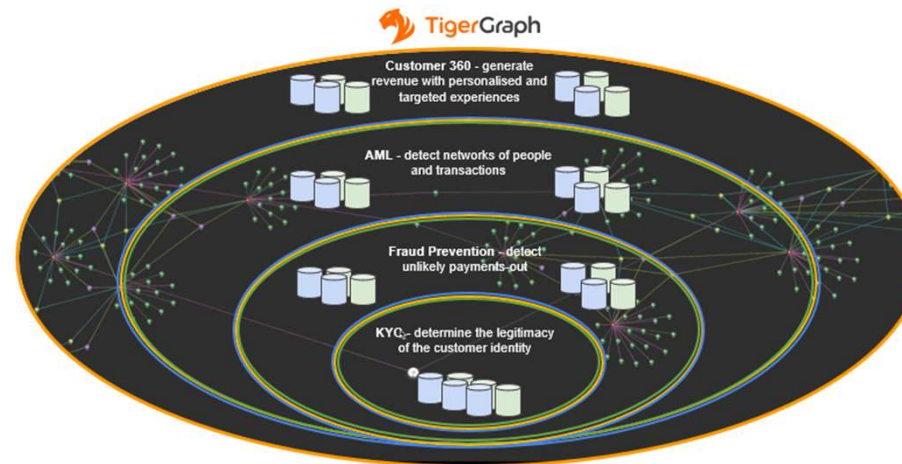
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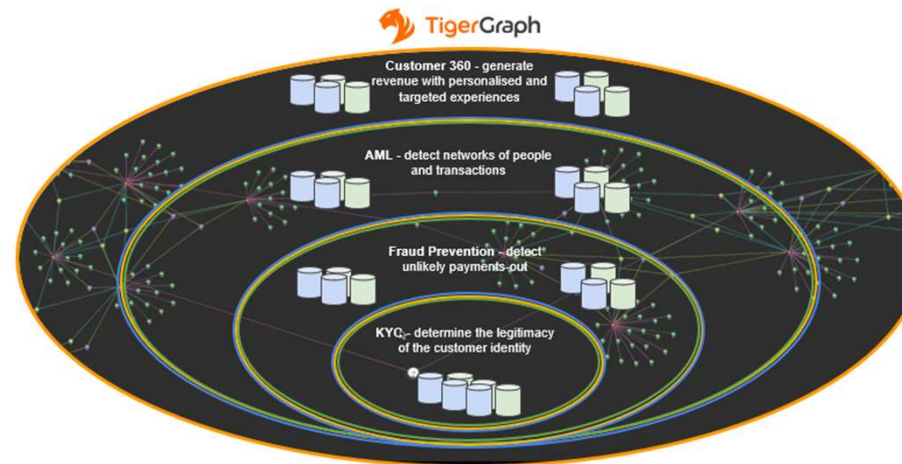
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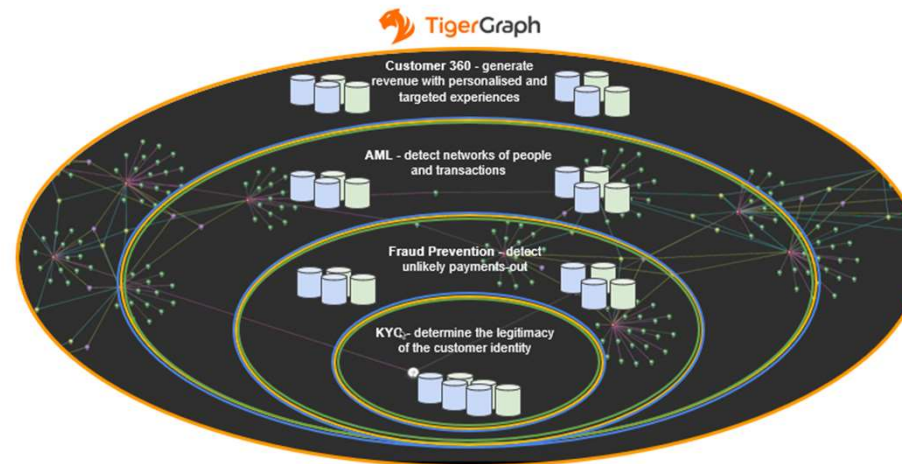
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B2B2C Business Banking

- Usage-based pricing - enabling new propositions and higher margins
- Better customer service

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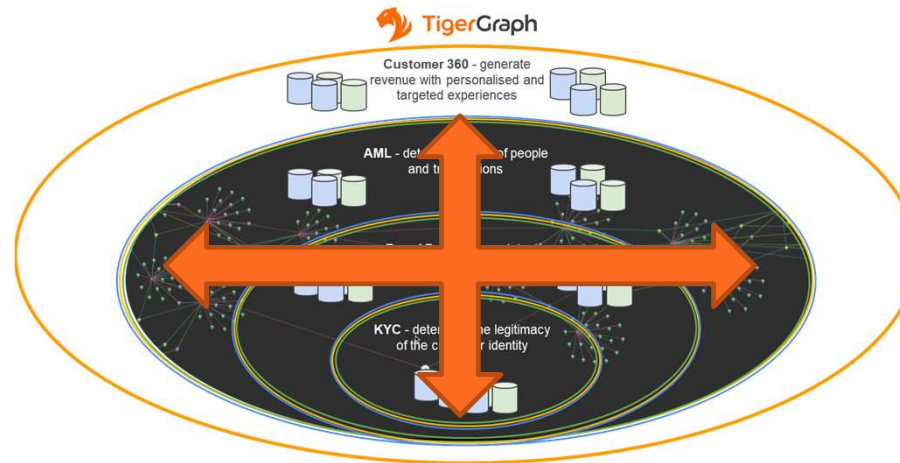
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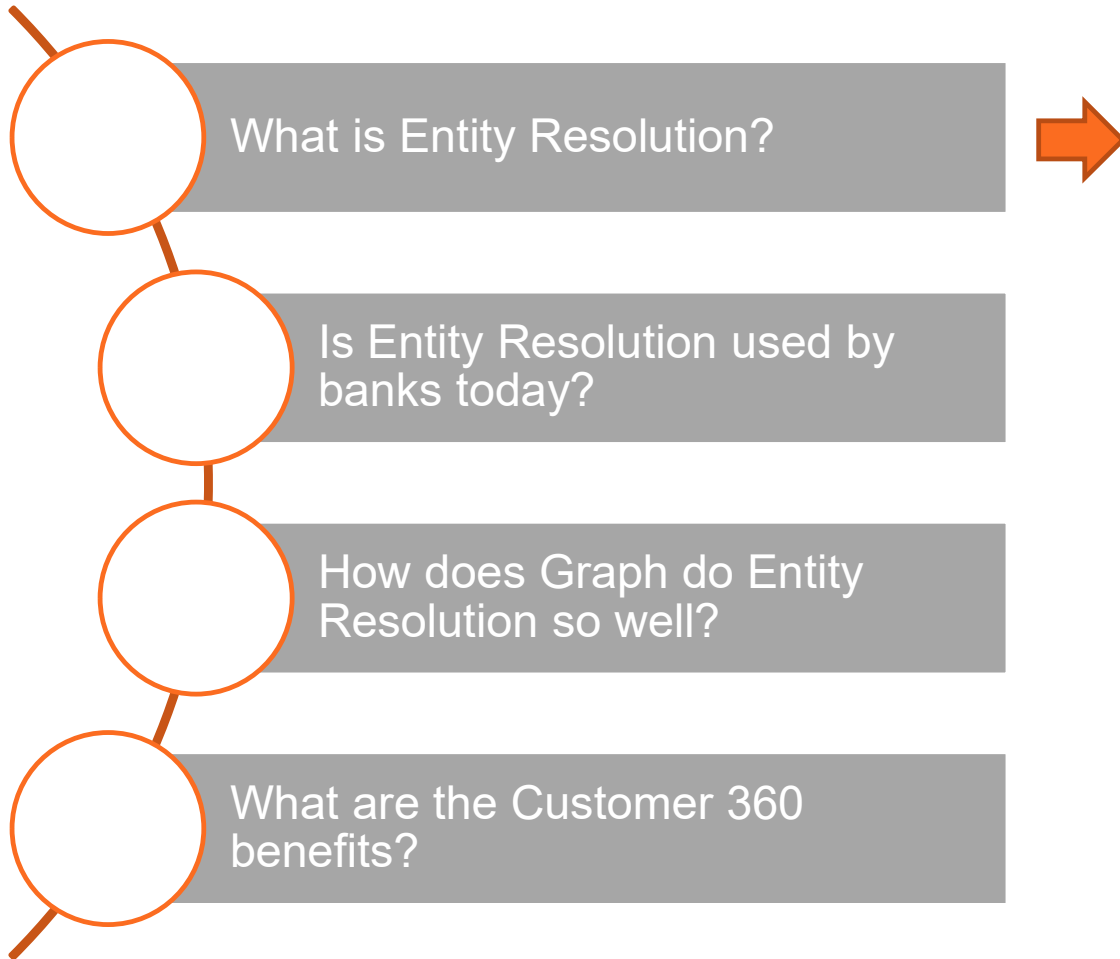
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What is Entity Resolution?



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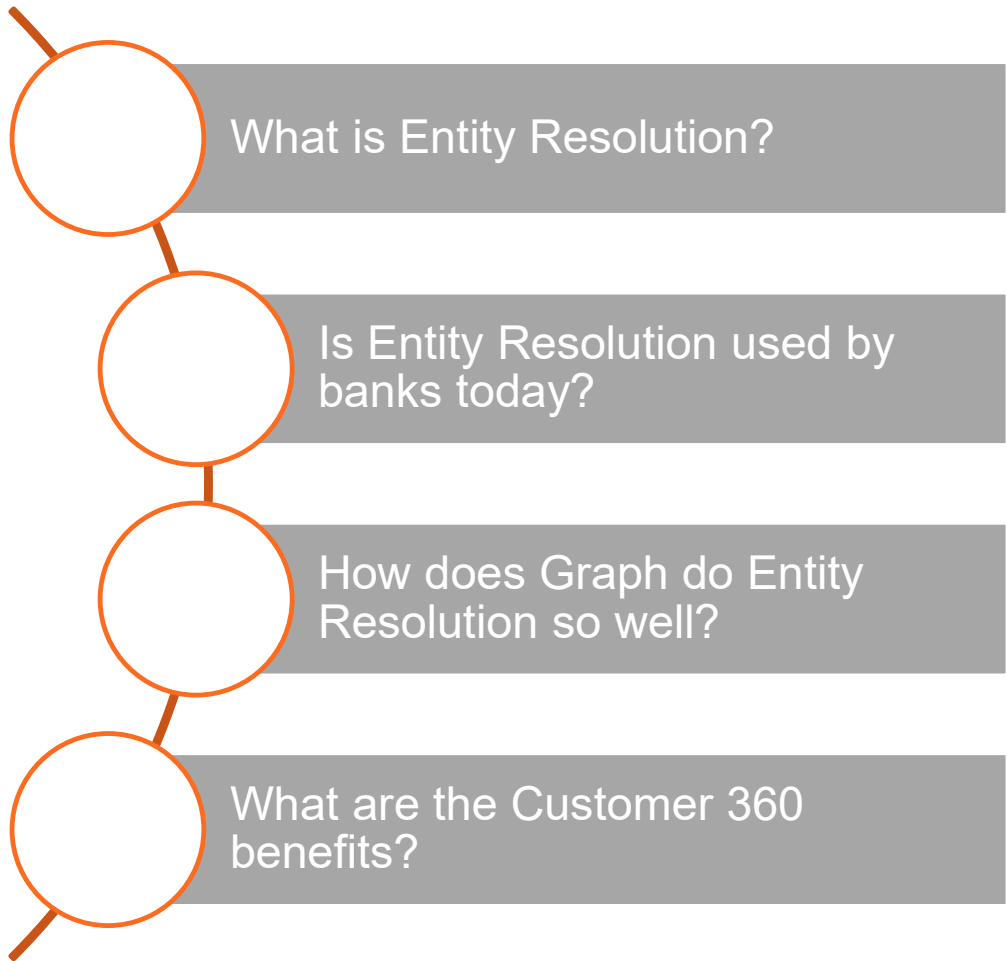
Is Entity Resolution used by banks today?



Entity Resolution is very important to financial crime detection, but is particularly difficult where data is stored in **different tables**

How does Graph do Entity Resolution so well?

What are the Customer 360 benefits?



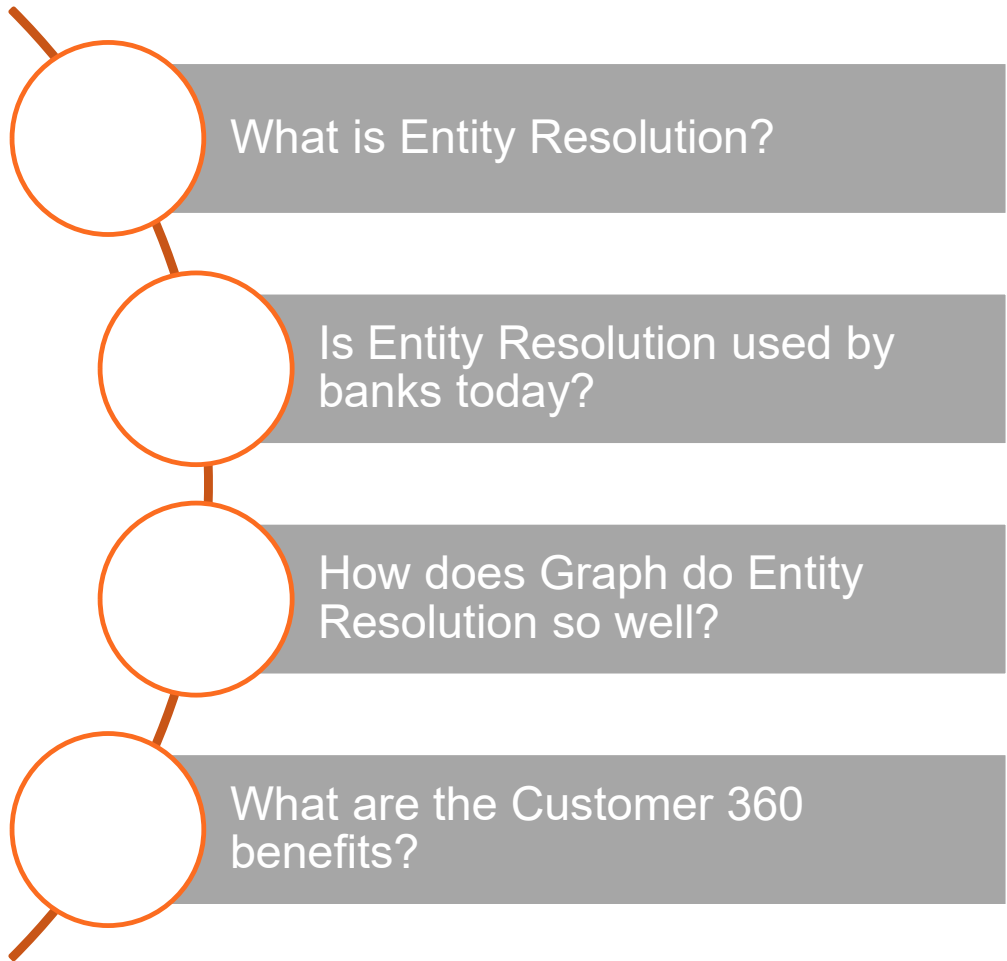
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Graph by definition **connects all data** together, meaning you can tie together customer data into a holistic, consistent **360** view

What are the Customer 360 benefits?

Customer 360 data not only makes more crime detectable, more **accurately**, but also supports key **revenue generation** use cases as a **free by-product benefit**

Thank you!



www.linkedin.com/in/charliebeveridge/