

Insurance Graph + AI Enablement

Infosys Consulting
October 15, 2021

Knowledge Graph application with AI/ML use cases among the insurance industry



Table of Contents



Industry Challenges

How can AI/ML separate insurance companies from their competition?



Case Study

Claims Data using AI/ML



Use Cases

Application for business outcomes



Reimagined Journey

Deeper customer insights as a sentient enterprise



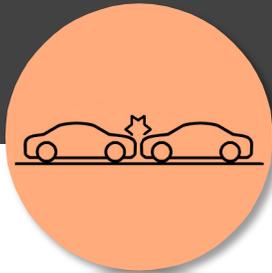
Insurance Industry Claims Challenges

Insurers are grappling with traditional challenges – inefficient processes and legacy technology ecosystem



Customer Servicing

- Heavily dependent on the agent to develop and maintain customer relationship
- Degree of service and customer focus varies between agents
- Carrier contact centers lack the capacity or tools to develop customer relationship



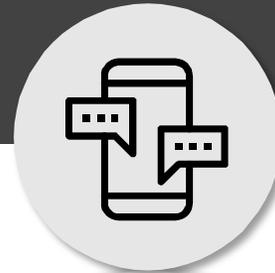
FNOL / Submission

- Agent and Contact center often lack coordination/one face to customer
- When reported and submitted online, information quality often varies and will require follow up by contact center
- FNOL often comes from third party claimant or their carrier



Processing Time

- Processing bottlenecks between disparate technology platforms limits claim settlement times.
- 50%-60% carriers take over 7 days to process claims
- 20% of carriers process claims within 3 days



Status Inquiry

- Agent and Contact center often lack coordination/one face to customer
- Adjuster contact with customer is dependent on workload and often varies
- Policyholder may perceive lack of coordination between carrier and other claims servicing parties: Rental, Body Shop, etc.



Claims Quality Mgmt

- Quality Management is often only executed periodically
- Claims Quality Information is manually captured at audit and results processed and reported manually
- Process management and process improvement is manual



Fraud Detection

- Automated referral often limited to standard business rule scoring during FNOL or initial claim handling
- Fraud detection by adjuster during claim investigation requires manual referral and follow up by SIU

Organizational Graph Maturity



1.

Entry level

One **use case** is enabled by representing data as a graph and using **basic graph analytics**.

2.

Enabling inference

One or more use cases are deployed based on **predicting unobserved relations** from a large graph.

3.

Multiple entities

Going beyond one graph per use case; **connecting multiple graphs** and performing inference over **multiple types of entities**.

4.

Knowledge graphs

Most relevant datasets represented with a **knowledge graph** at **enterprise scale**; different teams exploit and contribute to the knowledge graph.

Insurance Transformation Example



Challenges

Top 5 P&C Insurer migrating claims data to cloud services. Need to accelerate enterprise cloud adoption and position them to take advantage of advanced automation opportunities to improve data access and utilization.

Scope of Work

Identify and deliver a cloud-based graph platform utilizing advanced analytics and data-driven decisions to enable the organization's claims as a service vision.

Our Solution

Delivered data exchange structure and associated knowledge graph to enable fraud detection and claim insights to reduce claim cycle time and improve claim payment accuracy.



AI / ML Use Cases



Shortest Path

- Identifying shortest path from claim notification to resolution
- Use AI/ML to recognize claim outliers and flag for additional handling
- Process optimization



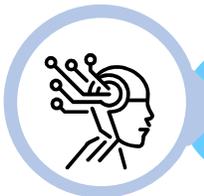
Centrality

- Fraud investigation – using models to detect aspects of fraud rings or other patterns of deception including identity theft, etc.
- Identify patterns sooner in the claim process to avoid leakage



Next Best Action

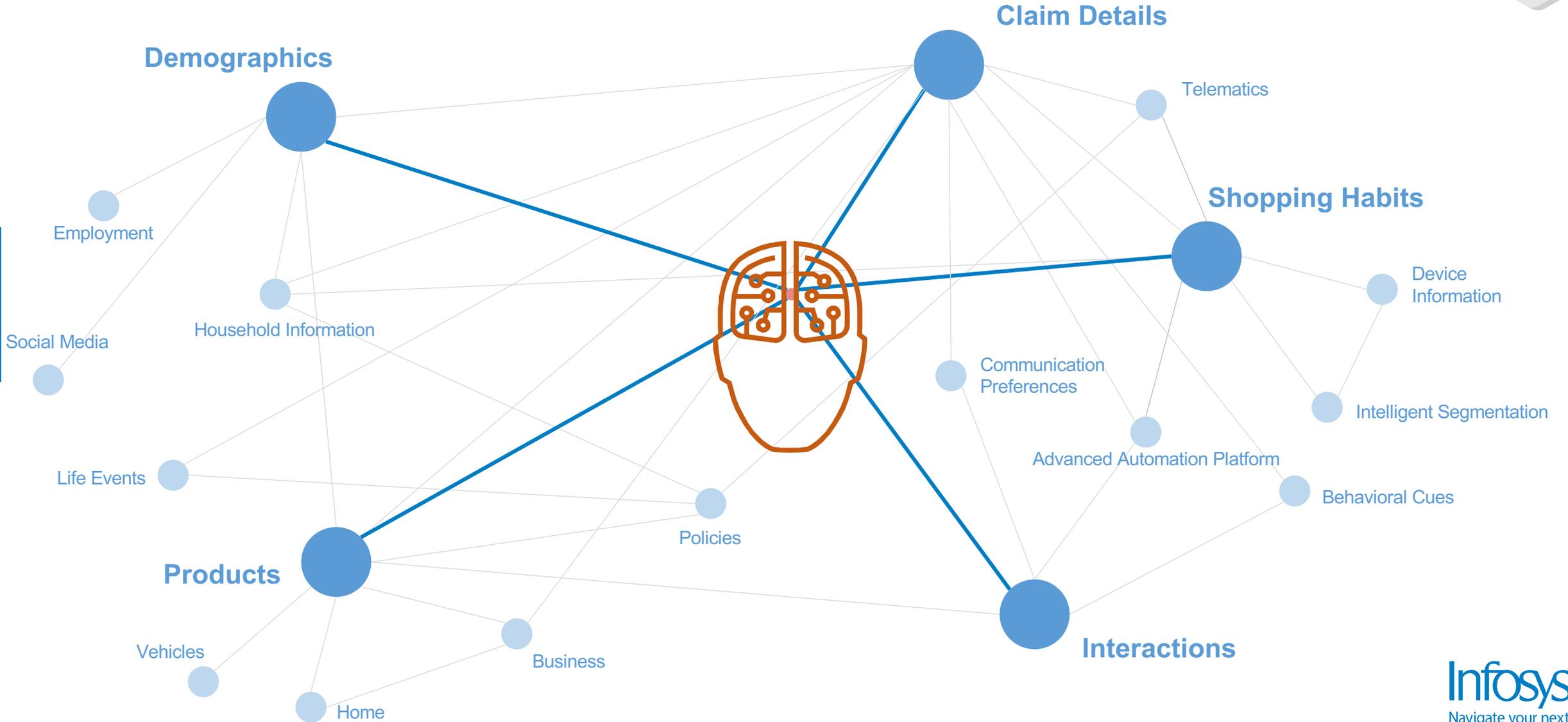
- Customer relationship management/campaigns, notification of life events
- Customer interactions and engagement
- Claim handling best practices and straight through processing



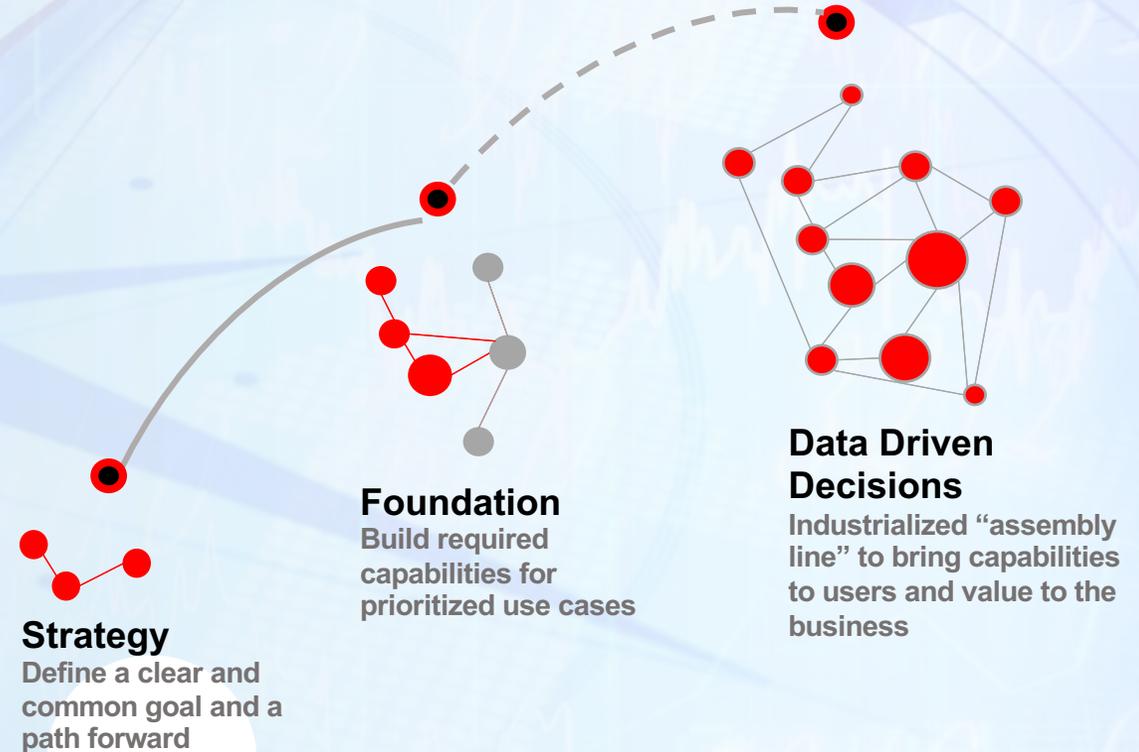
Compliance

- Fair claim settlement practices
- Reserve reporting

Reimagining Insurance Consumer Experience Across the Customer Journey – with Infosys Digital Brain



Additional Use Cases



THANK YOU! QUESTIONS?

Email : tyler.jensen@Infosys.com

Website: www.Infosys.com