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Insurance





# Adastra's Key Insurance Clients





# Insurance Offers

Insurance Offers	
Claims Risk Analysis	Leverage Adastra's Azure deployed claims risk analysis solution, to detect potentially fraudulent insurance claims. Trains models from insurance claims history, to automatically identify fraudulent likelihood for new claims. Used to trigger claim investigation. Supports sophisticated querying via graph database, to perform deeper analysis on any claim the model predicted as fraudulent.
ATO Risk Analysis	Leverage Adastra's Azure deployed Account Takeover risk analysis solution, to detect potential account takeover attempts by bad actors. Parses customer and call center data to evaluate the likelihood that interactions are ATO attempts. Warns agents in real-time, to trigger risk remediation actions. Supports ongoing retraining and model improvements, to respond to new attack vectors.
Claims Trend Analysis	Leverage Adastra's Azure deployed claims trend analysis solution, to better identify causation for claims trends, such as seasonal hammock effects. Identifies the causes for claims patterns, to facilitate better mitigation and forecasting efforts. Enables improved workforce planning, for example, to ensure customer service levels are maintained for peaks and costs are reduced for valleys.
Product Funnel View	Evaluate insurance product performance through a funnel view, tracking product progression across application initiated, completed, approved, activated, utilized, and attrition phases. Correlate investments in marketing to product funnel impact. Analyze product performance by different channels (i.e. digital vs agent).
Document Processing and Mining	Improve customer service and reduce manual effort by automating manual analysis of customer documents. Uses AI/ML techniques to scan, score, and translate customer collateral (proof of ownership, identity documents, etc.), to reduce insurance risk and speed onboarding of customers. Supports real-time product onboarding for customers and enables a transition from paper-based processes.
Digital Onboarding	Improve customer service and lower customer onboarding cost by enabling real-time digital onboarding for customers. Takes processes that historically required in person agent interactions and days to complete and switches them to online real-time. Uses automation to execute process steps (security checks, credit checks, document validation, ...) immediately.
PII Data Protection	Ensure sensitive customer / employee data is never stored in plain text, in Azure. From data entry, enables in flight encryption / decryption of data, so PII data never lands in plain text, in any step of the data journey. Adastra framework leverages native Azure tools or Adastra's PII Protector product. Reduces organizational data risk, simplifies data protection, and creates consistency for data protection.
Enrollment Prediction	Leverage Adastra AI / ML models to predict whether customers will enroll and activate new insurance products. Train models from historical customer behaviour across relevant attributes, then predicts whether potential new product customers would enroll. Facilitates targeted marketing based on enrollment scoring.
Predictive Systems Maintenance	Leverage Azure deployed Adastra AI / ML models to predict potential critical system outages. Critical insurance systems require > 99.9% uptime, so ensuring effective system availability and performance via predictive maintenance is a key step to achieve SLA's. Our solution monitors critical bank systems for outage indicators (trained from bank system history), to trigger remediation before outages.
Onboarding Applications	Leverage Adastra Power Platform solutions to deliver easily customized and maintained onboarding applications, for either customer product onboarding or employee application onboarding. Adastra has successfully deployed our onboarding applications to multiple large Insurance organizations, with the flexibility to cover their unique requirements. One onboarding app is being used by 35k staff, for example.
Chatbot Scheduling	Deploy Adastra's chatbot agent for appointment scheduling. Through our chatbot, customers are guided through the appointment booking process. The bot determines the right branch or virtual agent, navigates the agent and customers availability, books the appointment, and sends relevant notifications. Fully integrates with calendar applications like Microsoft Exchange.



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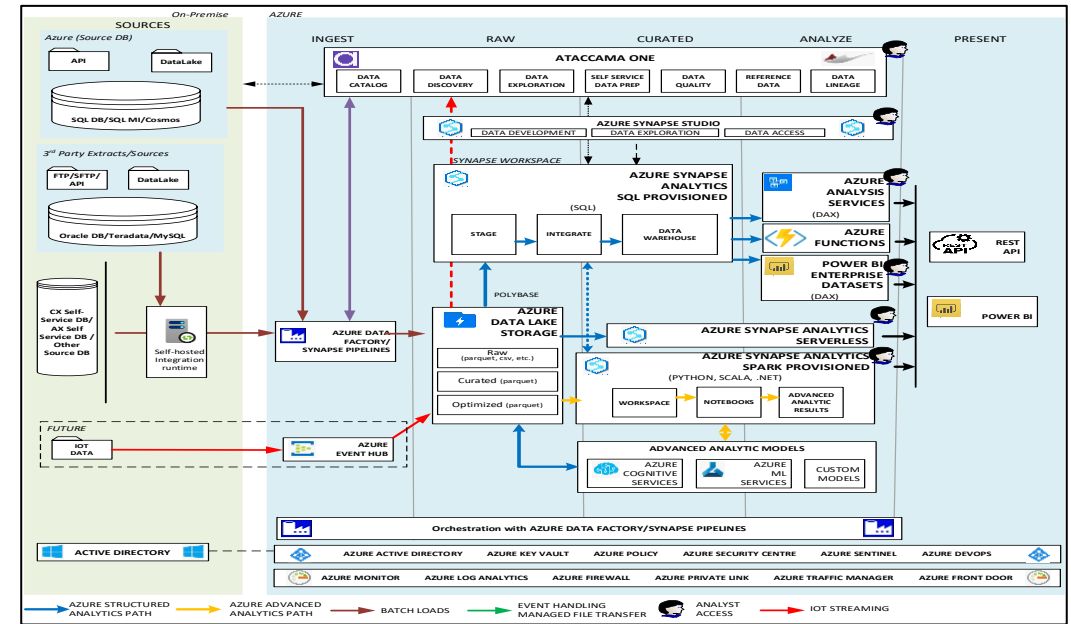
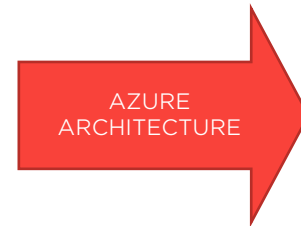
# Insurance Analytics Examples



# Azure Analytics @ Canadian Insurance Company

Through a 12 month roadmap, Adastra designed, implemented, and is developing a new Azure self service / advanced analytic platform. The following platform components are included in the solution:

- Azure Data Lake
- Azure Synapse Analytics
- Azure Machine Learning
- Power BI
- Ataccama One



Through this solution, new self service analytic capabilities have been delivered to client's analysts, and advanced analytics is being applied to realize new insights:

- Fraudulent Claims Detection
- Real-Time Risk Mitigation
- Marketing by Customer Segment
- Product Profitability
- Claims Predication
- Influencing Customer Behavior

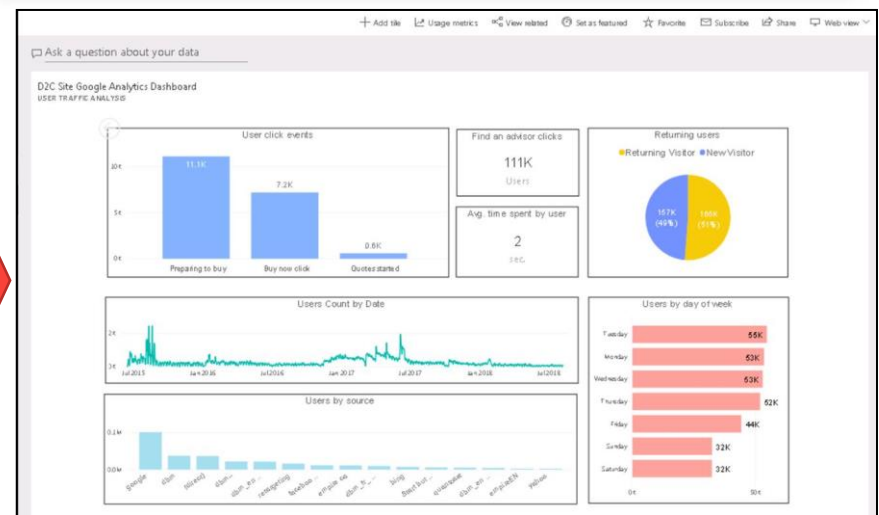
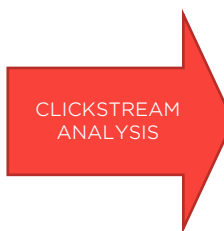
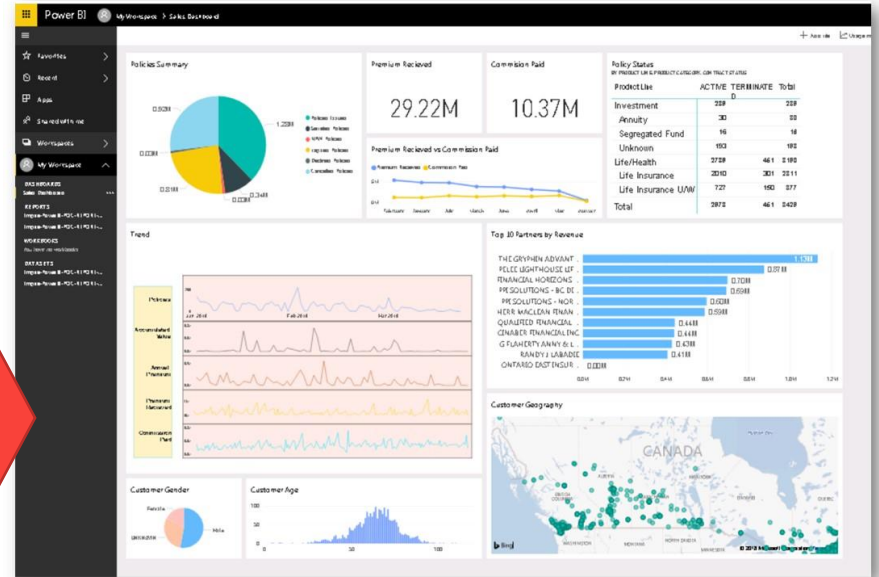
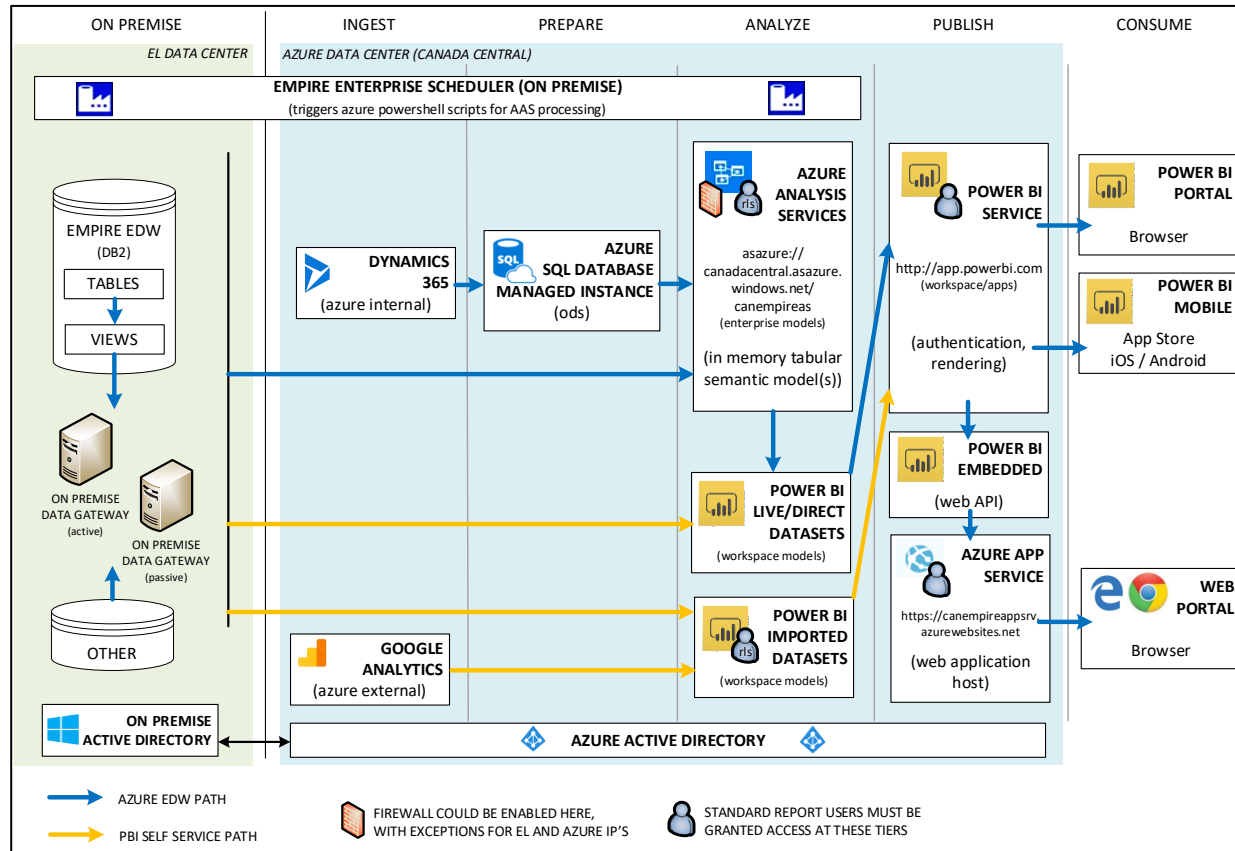


Adastra facilitated critical platform decisions through decision matrix insights.

Options -	Option 1- Databricks+Synapse	Option 2- Databricks	Option 3- Just Enough Security(Synapse)	Option 4- Synapse
<b>Data Storage</b>	Standardized Zone - DataLake(deltalake) Integration - Synapse Sql Pool(tables) Consumer - Synapse Sql Pool(tables)	Standardized Zone - DataLake(deltalake) Integration - DataLake(deltalake) Consumer - DataLake(deltalake)	Standardized Zone - DataLake(Files) Integration - Synapse Sql Pool(tables) Consumer - Synapse Sql Pool(tables)	Standardized Zone - Synapse Sql Pool(tables) Integration - Synapse Sql Pool(tables) Consumer - Synapse Sql Pool(tables)
<b>Standardized Zone</b>	PII Field Tokenized using databricks	PII Field Tokenized using databricks	Restricted access on Files	PII Field Tokenized using Synapse
<b>Integration Zone</b>	PII Field Tokenized using Synapse	Reuse of PII tokenized field from Stanadarized layer	Using Object & Column Level Security	Reuse of PII tokenized field from Stanadarized layer
<b>Consumer Zone</b>	Reuse of PII tokenized field from Integration layer	Reuse of PII tokenized field from Integration layer	Using Object & Column Level Security	Reuse of PII tokenized field from Integration layer
<b>Tokenization At Multiple Steps</b>	Yes	No	Not required	No
<b>Use of Same Tokenization Key Across</b>	No	Yes	Not required	Yes
<b>Performance Consumer Zone</b>	High	Medium	High	High
<b>Support Streaming</b>	Yes	Yes	Yes	No
<b>Reference Data Standardaization</b>	In Standardized Zone	In Standardized Zone	In Integration Zone	In Integration Zone
<b>Same Tokenized Value Across</b>	No	Yes	Not required	Yes
<b>Require Spark Expertise</b>	Yes	Yes	No	No
<b>Covered by SQL Expert Only</b>	No	No	Yes	Yes
<b>Azure Pricing</b>	High	High	Medium	Medium
<b>Implementation Effort</b>	High	High	Low	Low
<b>Solution maintainability</b>	High	High	Less as compared to option 1 & 2	Less as compared to option 1 & 2

# LA Azure Analytics @ Canadian Life Insurance Company

Through a 6 month roadmap, Adastra designed, implemented, and developed a new Azure analytic platform. Sales, policy, and clickstream data was integrated in the platform, to enable net new policy analysis (types, premiums, commissions, accumulated value, customer types, broker performance, geo distribution, trends, ...) and digital channel analysis (usage counts, visitor types, quotes started, buy now clicks, ...). New customer facing reports were also delivered thru the Empire Life customer portal.





# Azure Analytics Assessment Proposal



**Evaluate current analytics state and propose a modern analytics cloud architecture and roadmap.**



- Perform analytics current state discovery and determine future analytics goals
- Define future state Azure service architecture
- Define future state Azure network architecture
- Estimate Azure run cost for future state architecture
- Identify technical governance approach for security, dlp, bc/dr, recovery, monitoring, and devops
- Define roadmap to achieve future state analytic goals aligned to business priorities
- Define plan / resources / cost to achieve future state
- Pilot Solution

Adastra will provide one senior Azure analytics architect for 5 weeks (25 days) to execute the assessment / small pilot.  
Assessment Cost: estimated \$35k USD



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