



Document Ingestion/Extraction PoC – MLC/GS/SC

December 11, 2020



Executive Summary

- **Endorsements**

- **Cognizant ran the validation dataset 12.10-12.11**
- **Cap Gemini will be running the validation dataset by EOY**
- **Success Criteria was defined as**
 - 70% success rate on intent and extraction of data-
 - 48% success rate for straight through processing
- Cognizant is in its latest round of testing:
 - 65% success rate on intent and extraction of data*
 - 31% success rate for straight through processing*
- Cap Gemini in its last round of testing
 - 57% success rate on intent and extraction of data*

- **Broker Specs**

- **Cap Gemini and Groundspeed will be running the validation dataset the week of 12.14**

- **Open Items**

- **Finalize PoC ScoreCard – 12.14**
- **Begin Validation Data Analysis – 12.14**

Endorsement POC – Scope/Approach/Progress

- Current in scope vendors: Cap Gemini, Cognizant

- **Approach**

- Each vendor was provided 5 transaction types with 350 training/testing email samples per each transaction, encompassing MLC, SC, GS (Media & Entertainment). For the final testing phase an additional 50 samples (per each transaction) will be provided in which we'll use to review and score results. Each vendor did take a different approach, as outlined below.
 - **Cognizant** initially trained the model for intent only, with a portion of samples provided (150 each transaction type) and then ran a sample test using a smaller portion of training samples (50 each). Prioritization was intent (identification of the transaction type).
 - **Cap Gemini** began with full sample provided (350 for each transaction type) testing extraction of data elements with no training (out of the box). Priority was to identify the gaps in intent and data elements to then begin model enhancements/learning.

- **Progress**

- Cognizant
 - Overall intent accuracy for all 4 transactions is currently at 81% which is a % point below our last report out, although there was an increase in the 'Endorsement' transaction intent extraction. In the coming week they will focus on analyzing and fine tuning to improve intent extraction accuracy.
 - Extraction results now reflect all transaction types showing a slight increase in accuracy Vehicle Replace type and providing starting %'s for the remaining 4 transaction types.
- Cap Gemini
 - No change to Cap Gemini's results from previous report out as the POC was paused at week 4 and no additional time will be taken for additional training/testing.

Intent Comparison

	Intent					
	Week 1		As of 11/19/2020		As of 12/8/2020	
	Training Sample Size	Intent %	Training Sample Size	Intent %	Training Sample Size	Intent %
Cognizant						
Vehicle Replace	50	88%	50	92%↑	50	86%↓
Vehicle Add	50	84%	50	86%↑	50	92%↑
Location	50	78%	51	82%↑	51	82%
Quote	50	76%	50	69%↑	50	76%↑
Endorsement	50	42%	45	81%↑	45	69%↓
Cap Gemini						
Vehicle Replace			350	100%		
Vehicle Add			350	100%		
Location	350	66%	350	87%		
Quote	350	29%	350	99%		
Endorsement	350	95%	350	94%		

Extraction Comparison

Cognizant	Extraction					
	Week 1		As of 11/19/2020		As of 12/8/2020	
	Training Sample Size	Capture Accuracy	Training Sample Size	Capture Accuracy	Training Sample Size	Capture Accuracy
Vehicle Replace			50	58%	45	60%↑
Vehicle Add			50	In Progress	46	74%
Location			50	Yet to start	33	58%
Quote			50	Yet to start	49	71%
Endorsement			50	Yet to start	33	64%

Cap Gemini				
Vehicle Add	350	46%	350	40%
Vehicle Replace	350	30%	350	58%↑
Location	350	41%	350	71%↑
Quote	350	42%	350	50%↑
Endorsement	350	46%	350	59%↑

Broker Specs – POC

- Current In Scope Vendors: Cap Gemini and Groundspeed
- **Approach**
 - We share approximately 350 samples with both vendors to use for training purposes. Samples span across the business segments from Middle Large Commercial (MLC) and Global Specialty (GS). This will allow the vendors to get familiar with the wide variety of Broker Spec samples we come across and also train their systems. Once the training portion is complete we will move into a testing phase where we share a new set of 50 samples to judge and review the results. The testing results should help us prove out who can perform this process the best.
- **Progress**
 - Training samples have been sent and both vendors have delivered extraction files back to us.
 - Both vendors have accurate results based off focused audits (by HIG).
 - Multiple feedback sessions with vendors to outline what data is critical.

Cap Gemini

- Quality/accuracy shared on select attributes but not all.

Groundspeed

- Quality/accuracy metrics TBD

Broker Specs - Schedule

	MLC Training Samples	Global Specialty Training Samples	Training Readout	Test Samples	Test Results from Vendor	Meeting Cadence
Cap Gemini	Shared on 10/26	Shared on 11/3	11/20	12/16	12/16 – 12/18	Weekly
Groundspeed	Shared on 10/26	Shared on 11/6*	11/23 MLC 12/7 GS	12/16	12/16 – 12/18	Weekly

*GS Domestic samples only - EU security risk

HIG Review	Time Allocation	Dates
Validate Results	1-2 weeks	TBD
Review timing/accuracy metrics	1 week	TBD

Broker Specs – Training Results (TBD)

Document Type						
PDF	Excel	Other	Extraction %		Extraction Accuracy %	
47%	21%	32%	Cap Gemini Capture	Groundspeed	Cap Gemini Precision	Groundspeed
DATA ATTRIBUTE			183 samples			
Account Information						
Agency			99.8%		100%	
Insured			91.3%		100%	
Policy Info						
Effective Date			-		-	
Lines of Business			-		-	
Quote need by date			-		-	
Limits/Deductibles						
WC			-		-	
GL			-		-	
Auto			-		-	
Property			-		-	
Rating Exposures						
WC - payroll			95.3%		59.3%	
GL - sales/area/payroll			100%		11%	
Auto - vehicle schedule			95.8%		95.7%	
Property - SOV			67%		66.7%	

Broker Specs – Success Factors (TBD)

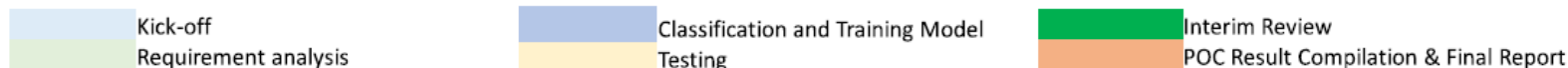
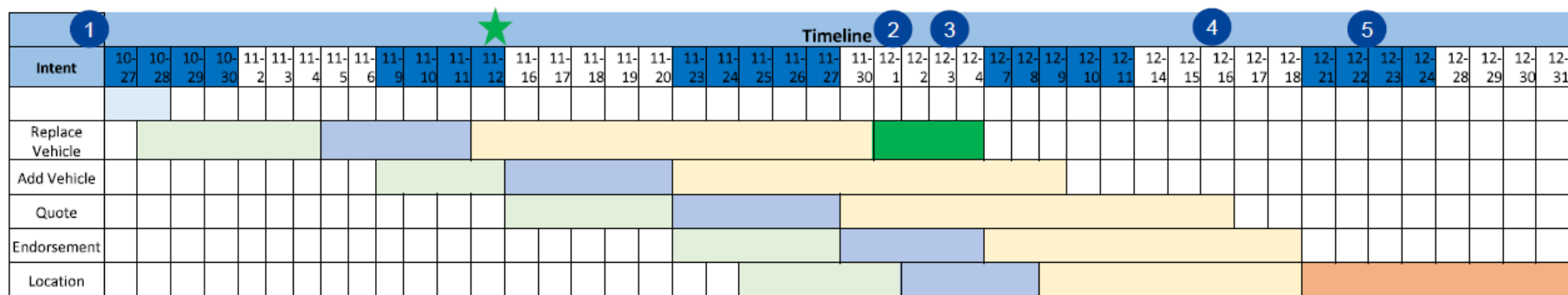
	Cap Gemini	Groundspeed
Turnaround Time		
Overall Accuracy		
Quality Data - IT dependent		

Appendix



APPENDIX – Cognizant Schedule

Execution: Start Date: 10/27/2020 - End Date: 12/31/2020



- 1 • Receive samples and check access
• Kick off POC
- 2 • Requirement freeze all intents
- 3 • Interim demo to Hartford
- 4 • Training and Testing of all intents
- 5 • POC Result Compilation & Final Report

Activities completed till 11/12:

- Labelling: 150 samples labelled manually for each intents.
- Test run : 50 samples each for all 5 intents
- Outcomes are trending positive for intent classification.

Activities planned for Next Week:

- Output analysis and fine tuning of data extraction on 'Replace Vehicle'.
- Data extraction model for 'Add Vehicle'.
- Fine tuning for intent extraction.

APPENDIX – CapGemini Schedule

