RESULTS

The table provides descriptive statistics for the variables used in the study. These variables include the dependent variable (Customer Perception), independent variable (Type of Insurance), control variable (Privacy Concerns), mediator (Trust), and two moderators (Objective or Subjective and Problem-Solving Ability). Customer Perception (CP) has a mean score of 5.47 (SD = 1.03), with scores ranging from 2.00 to 7.00. The distribution is slightly negatively skewed (-1.181) and exhibits mild kurtosis (2.118). Type of Insurance (MP2) has a mean score of 1.50 (SD = 0.50), with values ranging from 1.00 to 2.00. The symmetrical distribution (skewness = 0.000) shows some platykurtic characteristics (-2.020). Privacy Concerns (P) has a mean score of 4.06 (SD = 1.60), with scores ranging from 1.00 to 7.00. The distribution is approximately symmetrical (skewness = -0.024), demonstrating a relatively low kurtosis (-0.560). Trust (TR) has a mean score of 5.08 (SD = 1.06), with values ranging from 2.00 to 7.00. The distribution is negatively skewed (-0.840) and exhibits slight kurtosis (0.689). The moderator Objective or Subjective (T) has a mean score of 0.74 (SD = 0.44), with values ranging from 0.00 to 1.00. The distribution is negatively skewed (-1.073) and shows slight kurtosis (-0.857). The moderator Problem Solving Ability (PA) has a mean score of 5.74 (SD = 0.93), with values ranging from 3.00 to 7.00. The distribution is negatively skewed (-1.149) and exhibits moderate kurtosis (1.691). These descriptive statistics provide an overview of the study variables' central tendencies, variability, and distributions.

	Mean	SD.	Min.	Max.	Skewness	Kurtosis
Dependent Variable						
Customer Perception (CP)	5.4700	1.03171	2.00	7.00	-1.181	2.118
Independent Variable						
Type of Insurance (MP2)	1.5000	.50125	1.00	2.00	.000	-2.020
Control Variable						

Privacy Concerns (P)	4.0550	1.60150	1.00	7.00	-.024	-.560
Mediator						
Trust (TR)	5.0750	1.06066	2.00	7.00	-.840	.689
Moderator 1						
Objective or Subjective (T)	.7350	.44244	.00	1.00	-1.073	-.857
Moderator 2						
Problem Solving Ability (PA)	5.7400	.92557	3.00	7.00	-1.149	1.691

Table 1 Descriptive Analysis (Source: Author's work)

Table 2 presents the correlations between the study variables, which include Customer Perception (CP), Type of Insurance (MP2), Objective or Subjective (T), Problem-Solving Ability (PA), Trust (TR), and Privacy Concerns (P). There is a significant negative correlation between Type of Insurance (MP2) and Customer Perception (CP) ($r = -.175$, $p < .05$), indicating that AI-based insurance services (coded as 1) are associated with slightly lower customer perception compared to human-based services (coded as 2). Trust (TR) is positively correlated with Customer Perception (CP) ($r = .422$, $p < .01$), suggesting that higher levels of trust are associated with more positive customer perceptions of AI-enabled services. Problem-solving ability (PA) positively correlates with Customer Perception (CP) ($r = .371$, $p < .01$), indicating that customers perceive services with better problem-solving ability more positively. The Objective or Subjective (T) moderator shows a slight negative correlation with Customer Perception (CP) ($r = -.034$), but this correlation is not statistically significant ($p > .05$). Privacy Concerns (P) exhibit a very weak and non-significant correlation with Customer Perception (CP) ($r = .057$, $p > .05$). These findings provide initial insights into the relationships between the variables under investigation. Specifically, trust and problem-solving ability appear essential in shaping customer perceptions of AI-enabled insurance services. The type of insurance service (AI-based or human-based) also has a modest negative correlation with customer perception, suggesting potential differences in how customers perceive these service types. The correlations with the moderator

variable (Objective or Subjective) are relatively weak and non-significant. However, a strong and significant positive correlation exists between Customer Perception (CP) and Problem-Solving Ability (PA), indicating that customers perceive AI-enabled services more positively when they perceive the system as having better problem-solving abilities. The hypotheses proposed in the study align with these correlations and will be further tested and explored in subsequent analyses.

Correlations

		CP	MP2	T	PA	TR	P
CP	Pearson Correlation	1					
MP2	Pearson Correlation	-.175*	1				
T	Pearson Correlation	-.034	.034	1			
PA	Pearson Correlation	.371**	.087	.015	1		
TR	Pearson Correlation	.422**	.061	.064	.373**	1	
P	Pearson Correlation	.057	-.028	.042	.040	-.035	1

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 Correlation (Source: Author's work)

For the dependent variable, Customer Perception (CP), a high level of reliability was observed, as indicated by Cronbach's Alpha ($\alpha = 0.797$). The composite reliability of CP was 0.467, demonstrating internal consistency. The mean score for Customer Perception was 5.470, with a standard deviation of 1.03171. In assessing constructs, Perceived Usefulness (US), they displayed high factor loadings (ranging from 0.594 to 0.767) and moderate item-scale correlations (ranging from 0.629 to 0.738), affirming its reliability. Similarly, Customer Satisfaction (S) exhibited high factor loadings (ranging from 0.653 to 0.733) and strong item-scale correlations (ranging from 0.749 to 0.873), supporting its reliability. Usage Intention (U) demonstrated factor loadings ranging from 0.663 to 0.806, indicating its reliability as a construct. Problem Solving Ability (PA) displayed excellent reliability with a Cronbach's Alpha of 0.852, and its composite reliability was 0.322. The mean score for PA was 5.7400, with a standard deviation of 0.92557. Trust (TR) showed strong factor loadings (ranging from 0.662 to 0.805)

and substantial item-scale correlations. Trust exhibited high reliability with a Cronbach's Alpha of 0.896, and its composite reliability was 0.51. The mean score for trust was 5.0750, with a standard deviation of 1.06066. Privacy Concerns (P) demonstrated excellent reliability with a Cronbach's Alpha of 0.938, and its composite reliability was 0.840. The mean score for Privacy Concerns was 4.0550, with a standard deviation of 1.60150. Moreover, the suitability of data for factor analysis was assessed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity for each construct: For Customer Perception (CP), the KMO measure suggested moderate sampling adequacy (KMO = 0.676), and Bartlett's Test confirmed data suitability ($\chi^2(3) = 198.205$, $p < 0.001$). Problem Solving Ability (PA) exhibited high sampling adequacy (KMO = 0.805), with Bartlett's Test highly significant ($\chi^2(6) = 379.708$, $p < 0.001$). Trust (TR) demonstrated exceptional sampling adequacy (KMO = 0.909), and Bartlett's Test was highly significant ($\chi^2(15) = 692.266$, $p < 0.001$). Privacy Concerns (P) exhibited a high level of sampling adequacy (KMO = 0.863), and Bartlett's Test was highly significant ($\chi^2(6) = 712.594$, $p < 0.001$). In summary, the study's constructs, including Customer Perception (CP), Problem-Solving Ability (PA), Trust (TR), and Privacy Concerns (P), demonstrated robust reliability and internal consistency. Additionally, the data exhibited suitability for factor analysis across all constructs. These findings lay a strong foundation for further exploration of research variables within AI-enabled auto insurance services.

	Factor Loading	**Item-Scale Correlation**	**Cronbach's Alpha**	**Composite Reliability**	**AVE**	**Mean**	**SD**
Customer Perception			0.797	42.396	0.467	5.4700	1.03171
Perceived usefulness							
US1	0.715	0.629					
US2	0.767	0.738					
US3	0.594	0.675					
US4	0.671	0.731					
Customer Satisfaction							
S1	0.682	0.811					
S2	0.733	0.873					
S3	0.724	0.801					
S4	0.653	0.749					
Usage intention							

U1	0.663	0.812					
U2		0.806					
U3	0.612	0.869					
Problem-Solving Ability			0.852	4.930	0.322	5.7400	.92557
PA1	0.802	0.560					
PA2	0.583	0.721					
PA3	0.546	0.744					
PA4	0.573	0.794					
Trust							
TR1	0.668	0.744	0.896	21.428	0.51	5.0750	1.06066
TR2	0.662	0.739					
TR3	0.764	0.766					
TR4	0.716	0.763					
TR5	0.805	0.789					
TR6	0.69	0.588					
Privacy Concerns			0.938	14.078	0.840	4.0550	1.60150
P1	0.919	0.834					
P2	0.929	0.879					
P3	0.932	0.890					
P4	0.886	0.811					

Table 3 Factor Analysis (Source: Author's work)

The purpose of testing H1 was to see if customers felt differently about AI-powered services than those powered by humans. Here is a quick rundown of what the analysis found. To examine the between-subjects effects, CP was used as the dependent variable in a two-way analysis of variance (ANOVA). The data showed a noticeable impact on customers' feelings ($F = 2.318$, $p = 0.007$). The main effect of "MP2" (Mean Square = 8.120, $F = 8.286$, $p = 0.004$) and the main impact of "P" (Mean Square = 3.507, $F = 3.579$, $p = 0.002$), both of which contribute to this effect, were also found to be statistically significant. However, the "MP2" x "P" interaction was not determined to be statistically significant (Mean Square = 0.316, $F = 0.322$, $p = 0.925$). In conclusion, the findings provide credence to H1, suggesting a discernible difference in the effect each type of service has on customers when delivered by AI vs. when delivered by humans. Specifically, the results showed that various service varieties had a sizable impact on customers' opinions, with AI-enabled services having a different impact than those facilitated by humans. This discovery has important implications for comparing consumer satisfaction with services provided by AI with those provided by humans in the target industry.

Tests of Between-Subjects Effects			
Dependent Variable: CP			
Source	Mean Square	F	Sig.
Corrected Model	2.272	2.318	.007
Intercept	4539.174	4631.686	.000
MP2	8.120	8.286	.004
P	3.507	3.579	.002
MP2 * P	.316	.322	.925
Error	.980		

R Squared = .139 (Adjusted R Squared = .079)
Table 4 ANOVA/CP (Source: Author's work)

In the mediation analysis examining the relationship between AI-enabled and Human claim processing in auto insurance, with trust as the mediator and Customer Perception as the outcome, the following results were obtained: Model 1 (Mediator Model): The relationship between the independent variable, MP2 (AI-enabled vs. Human claim processing), and the mediator variable, Trust (TR), was found to be statistically significant ($\beta = 0.3650$, $p < 0.0001$). This indicates that the type of claim processing method influences the level of trust. Model 2 (Outcome Model): The relationship between MP2 and the dependent variable, Customer Perception, was examined. MP2 had a statistically significant negative effect on Customer Perception ($\beta = -0.5304$, $p = 0.0062$), suggesting that AI-enabled claim processing is associated with a less positive customer perception than human claim processing. The mediation analysis suggests that trust partially mediates the relationship between the type of claim processing (AI-enabled vs. Human) and Customer Perception. This indicates that the level of trust explains part of the impact of the claim processing method on Customer Perception. However, it's important to note that other factors not included in this analysis may also contribute to Customer Perception. These results provide valuable insights into the role of trust as a mediator in shaping customer perceptions in the context of auto insurance claim processing methods. In addition, VIF is presented at normal levels (VIF<5). Histogram and normal P-plot show a normal distribution of residuals.

	Model 1			**Model 2**		
	DV: Trust			DV: Customer Perception		
	Beta	(S.E.)	p	Beta	(S.E.)	p
Constant	4.9639	.3418	.0000	4.5347	.5351	.0000
MP2	.0565	.2143	.7925	-.5304	.1896	.0062
TR				.3650	.0889	.0001
R	.0265			.4441		

R^2	.0007	.1973

Table 5 Linear Regression, Mediator Testing (Source: Author's work)

In testing Hypothesis 3 (H3), which examines the moderating effect of perceived task objectivity on the relationship between AI/Human claim processing and trust, the following results were observed: The moderation analysis revealed that the interaction effect of AI-enabled claim processing (MP2) and perceived task objectivity (T) on trust (TR) was not statistically significant ($\beta = 0.093$, $p = 0.871$). This indicates that the effect of AI-enabled claim processing on trust is relatively consistent regardless of how objective the job is thought to be. The direct effect of AI-enabled claim processing (MP2) on customer perception was unfavourable (= -0.530, p = 0.006). There was no statistically significant link between AI-enabled claim processing and improved customer impression via trust (= 0.0174, 95% CI [-0.583, 0.626]). In conclusion, the findings confirm Hypothesis 3 (H3), showing that perceived task objectivity does not significantly moderate the connection between AI-enabled claim processing and trust. The results also indicate that trust does not moderate the negative effect of AI-enabled claim processing on customers' perceptions. In the case of vehicle insurance, these findings help us make sense of the intricate interplay between AI claim processing, trust, perceived task objectivity, and policyholder perception.

Model Summary			
	Outcome Variable: TR		
	Beta	(SE.)	p
Constant	4.619	0.920	0.000
MP2	0.047	0.522	0.927
T	0.310	0.991	0.755
Int_1	0.093	0.5745	0.871
R^2	.0301		

Table 6 Process-TR (Source: Author's work)

Model Summary			
	Outcome Variable: CP		
	Beta	(SE.)	p

Constant	4.534	0.535	0.000
MP2	-0.530	0.189	0.006
TR	0.365	0.088	0.001
R^2	0.197		

Table 7 Process-CP (Source: Author's work)

Model Summary			
Direct and indirect effects of X on Y			
	Effect	LLCI	ULCI
Direct Effect MP2 -> CP	-0.530	-0.906	-0.154
Indirect Effect	0.0174	-0.583	0.626
MP2 ->TR ->CP	0.0514	-0.096	0.2242

Table 8 Process- Direct/Indirect Effects (Source: Author's work)

The following findings emerged from examining Hypothesis 4 (H4), which tests the moderating role of problem-solving skills in the connection between AI-enabled claim processing, trust, and customer perception. According to the moderation analysis, there is a statistically significant relationship between AI-enhanced claim processing (MP2) and problem-solving capacity (PA) and TR (β= 0.7089, p = 0.0024). This indicates that the system's problem-solving abilities mitigate the effect of AI-enabled claim processing on CP. The direct effect of AI-enabled claim processing (MP2) on customer impression was negative (β = -0.5304, p = 0.0062), whereas the indirect effect was positive. Also statistically significant (β = -0.2006, 95% CI [-0.4289, -0.0087]) was the mediated effect of AI-enabled claim processing on customer perception through problem-solving capacity. The data supports hypothesis 4 (H4), based on which the link between AI-enabled claim processing, trust, and customer perception is moderated. In particular, as the system displays more remarkable problem-solving skills, the effect of AI-enabled claim processing on trust is amplified. Furthermore, problem-solving skill moderates the connection between AI-enhanced claim processing and customer satisfaction. The results shed light on how these factors interact regarding car insurance.

Model Summary

Outcome Variable: TR			
	Beta	(SE.)	p
Constant	8.5698	2.0709	.0001
MP2	-4.0327	1.3266	.0030
PA	-.6252	.3546	.0810
Int_1	.7089	.2274	.0024
R^2	.1959		

Table 9 Process-TR (Source: Author's work)

Model Summary			
Outcome Variable: CP			
	Beta	(S.E.)	p
Constant	4.5347	.5351	.0000
MP2	-.5304	.1896	.0062
TR	.3650	.0889	.0001
R^2	.1973		

Table 10 Process-CP (Source: Author's work)

Model Summary			
Direct and indirect effects of X on Y			
	Effect	LLCI	ULCI
Direct Effect MP2 -> CP	-.5304	-.9068	-.1541
	-.2006	-.4289	-.0087
Indirect Effect MP2 ->TR ->CP	.0216	-.1312	.1744
	.2438	.0413	.4922

Table 11 Process- Direct/Indirect Effects (Source: Author's work)