Explainable Neural Networks: Interpretable Feature Attribution Frameworks for Critical Decision-Support Systems

Mayur R. Bhoyar[1], Ashish Vasudev Mahalle[2]

[1,2]*Assistant Professor, Computer Engineering Department, Jagadambha College of Engineering and Technology Yavatmal*

Email: [1]mayurbhoyar@ieee.org, [2]mahalle.ashish12@gmail.com

Abstract

An interpretable feature attribution framework is put forth in this paper for explainable neural networks when used in critical decision-support areas. The framework's aim is to boost the transparency of the model by analyzing the raw feature activations and the attribution-based relevance scores coming from the decision-path contributions together. A synthetic benchmark dataset was made that had statistically separable class distributions ($p < 0.005$) to allow for controlled evaluation of feature-level and attribution-level behavior. One-Way ANOVA together with Welch and Fisher statistics showed that there were statistically significant differences existing between the groups regarding all primary features and attribution variables, thus indicating a strong effect separation in the two domains of predicting and explaining. A further group descriptive analysis indicated that there were higher mean activation and attribution weights for the positive decision class, meaning that there was coherent alignment between the model outputs and the attribution signals. Mean-difference plots with 95% confidence intervals gave a visual reinforcement of these findings, for they showed consistent non-overlapping confidence bands across features and attribution metrics. The results, when taken together, support the claim that the proposed explainable neural network framework provides interpretable, statistically-coherent decision signals that can be used in risk-sensitive, safety-critical, and compliance-driven applications. The study provides evidence on how quantitative statistical validation increases the trust, reliability, and auditability of model explanations, thus promoting responsible AI deployment in operational decision-support pipelines.

Keywords: Explainable Neural Networks, Feature Attribution, Interpretable AI, Decision-Support Systems, Explainability Validation, Statistical Significance, One-Way ANOVA, Model Transparency.

1. INTRODUCTION

Artificial neural networks have been the best performers in predictive modeling with their wide range of applications; still, their use in high-stakes and mission-critical decision-support systems is limited due to the lack of transparency in their internal decision processes. In areas such as clinical diagnostics, financial risk assessment, cyber-security monitoring, and public policy analytics, decision outputs need to be interpretable, auditable, and justifiable to human stakeholders, regulatory bodies, and domain experts. Traditional deep learning models act as "black-box" architectures and give little transparency as to how feature information is processed and weighted in the final prediction. The absence of interpretability that is comprehensible to the user can lead to mistrust, limit accountability, and cause non-deployment of responsibly done models in the operational environment. Hitherto, Explainable Artificial Intelligence (XAI) has been recognized as an important paradigm that is directed at machine learning systems' transparency and interpretive traceability improvement. Feature attribution frameworks are among the various categories of XAI methods that have gained such prominence largely by virtue of their ability to quantify the contributions of individual features to the model's decision outcome. Gradient-based relevance propagation, integrated gradients, and Shapley-based explanation models, among other techniques, impart importance scores that represent the extent of influence each input variable exercises over a particular prediction. Despite the fact that these methods improve post-hoc interpretability, it is still quite common for existing research to evaluate explanation quality mainly through visual inspection or qualitative assessment rather than rigorous statistical validation of attribution consistency.

2. LITRATURE REVIEW

Explainable Artificial Intelligence (XAI) has become a major research area that aims to make the use of deep learning models in decision-support systems more transparent. Traditional neural networks, although very good in performance, work as very mysterious and hence “black-box” models, thus limiting their use in high-risk and sensitive areas where interpreting, tracing and taking responsibility are crucial (Doshi-Velez & Kim, 2018). Earlier research has pointed out that the lack of transparency could lead to non-compliance with regulations, loss of trust from users, and creating difficulties in post-hoc auditing of models in such areas as healthcare diagnostics, finance, and robots. Feature attribution methods have gained popularity as the primary explanation technique because they offer the quantification of the feature-level contribution to the prediction of the model (Sundararajan et al., 2017). The above-mentioned methods provide localized interpretability by pointing out the exact attributes that have an influence on the decision made for a particular case. Well, it is an undeniable fact that the area of existing research has been mostly subjected to the qualitative visual inspection of the outputs of the explanations rather than the establishment of the statistical correlation between the behaviors of the models and the signals produced for the attribution. There is a shift in recent studies towards the support of the argument for the eventual validation of explanations, asserting that interpretability has to be proven with measurable, reproducible evidence and not just to rely on the subjective interpretation. In the context of interpretable machine learning, stability analysis, explanation consistency and human-grounded assessment have been studies proposed by Guidotti et al. (2019) as evaluation framework.

Yet, there is a methodological gap in statistical linking of attribution values to class-wise outcome separation, especially with structured inferential statistical analysis, that still exists. To fill this gap, the current research has proposed combined frameworks that incorporate the outputs of predictive models and then use formal statistical testing to determine the reliability of the explanations. The works done so far indicate that only those explanation signals that exhibit consistent and statistically significant behavior in relation to model decisions will be regarded as trustworthy for operational use. The study at hand is a part of the developing literature and therefore it proposed a framework for validating feature attribution analysis with statistical means. It is different from the previous methods which were solely dependent on visual interpretation, the current study makes use of One-Way ANOVA testing with Welch and Fisher estimators to verify whether the discrepancies among decision outcomes are consistently manifested in both raw feature activations and attribution weights. This composite method not only boosts the empirical credibility in neural network explanations but also contributes to the development of the methodological rigor of XAI evaluation in decision-support contexts.

In critical decision-support systems, clearly understandable explanations are a necessity, but they also need to be trustworthy based on experimental evidence and should show a measurable alignment with model behavior. A question that remains unanswered from a methodological point of view is whether the feature attribution scores are consistently related to the outcome-specific patterns of the feature-level activation being observed. It is essential to establish such alignment to ensure that the explanation outputs do not only provide stories of intuitive interpretation but rather reflect relationships within the decision model that are coherent and statistically verifiable. The researchers propose an interpretable feature attribution validation framework for explainable neural networks as a way to fill this research gap. The study employs experimental data that are statistically controlled to investigate whether the different decision outcomes are characterized by significant separations in both raw feature values and their corresponding attribution relevance weights. One-Way ANOVA with Welch and Fisher estimators is used to measure the separability of the groups and to assess the evidence's force in favor of attribution-outcome alignment. This combination of neural network explainability and inferential statistics leads to the study making a significant contribution towards the enhancement of the methodological rigor in XAI evaluation and the reliability of interpretable models for real-world decision support applications.

3. METHODOLOGY

Study Design

An experimental quantitative research design was used in this study to determine the statistical correlation between neural network feature activations and attribution-based explanation scores across binary decision outcomes. To achieve a measurable and distinct separation between classes and at the same time maintain realistic variability of the features, a synthetic but structurally controlled dataset was used.

Dataset and Variables

The dataset contained two main feature variables (feature_1 and feature_2) and two attribution-level variables (attr_feature_1 and attr_feature_2), standing for the relevance weights produced by the explainable neural network attribution layer. The dependent variable (decision_outcome) was binary and reflected the predicted class membership. Descriptive statistics, such as mean, standard deviation, skewness, kurtosis, and range, were calculated separately for the two decision classes and treatment groupings. This made it possible to assess the distributional behavior before conducting inferential testing.

Explainable Neural Network Framework

A neural network architecture with an attribution-tracking mechanism was used to obtain feature-level relevance scores. Attribution scores were calculated depending on contribution magnitude along the internal decision pathway, which reflects the model-inferred importance of each feature for the corresponding prediction.

The framework ensured alignment between:

1. raw feature activations
2. attribution relevance weights
3. final decision outputs

Thereby enabling coherence analysis between predictive and explanatory domains.

Statistical Analysis

Group-wise separability between decision outcomes was evaluated using:

– Welch's One-Way ANOVA (robust to heterogeneity of variance)

– Fisher’s One-Way ANOVA (classical equal-variance estimator)
Tests were conducted independently for each feature and attribution variable. Statistical significance thresholds were set at $p < 0.05$, with stronger interpretation emphasis when $p < 0.01$.
Effect trends were further examined using:
– Group mean comparison
– Standard error estimates
– 95% confidence interval plots
These enabled visualization of effect direction and magnitude relative to class outcomes.

Validation of Explanation Coherence
Interpretive validation was based on two criteria:
1. Features associated with the positive outcome should exhibit higher mean activation values.
2. Corresponding attribution variables should demonstrate proportionally higher relevance weights.

Consistent separation across both domains was considered evidence of explanation reliability.

4. RESULT AND DISCUSSION

Table 1. Descriptive Statistics of Model Features, Attribution Scores, and Decision Outcomes across Control and Treatment Groups.

Descriptives						
	group	**decision_outcome**	**feature_1**	**feature_2**	**attr_feature_1**	**attr_feature_2**
N	Control	0	15	15	15	15
		1	10	10	10	10
	Treatment	0	3	3	3	3
		1	22	22	22	22
Missing	Control	0	0	0	0	0
		1	0	0	0	0
	Treatment	0	0	0	0	0
		1	0	0	0	0
Mean	Control	0	0.533	0.618	0.306	0.238
		1	0.464	0.564	0.271	0.230
	Treatment	0	0.818	1.02	0.474	0.405
		1	0.915	1.02	0.554	0.409
Median	Control	0	0.515	0.602	0.302	0.237
		1	0.468	0.573	0.278	0.226
	Treatment	0	0.811	1.05	0.470	0.426
		1	0.900	0.997	0.549	0.403
Standard deviation	Control	0	0.0686	0.127	0.0462	0.0548
		1	0.113	0.119	0.0808	0.0562
	Treatment	0	0.0403	0.0743	0.0254	0.0465
		1	0.105	0.0883	0.0670	0.0398
Minimum	Control	0	0.437	0.414	0.248	0.142
		1	0.325	0.391	0.168	0.162
	Treatment	0	0.782	0.933	0.450	0.352
		1	0.709	0.822	0.412	0.325

Maximum	Control	0	0.669	0.845	0.399	0.314
		1	0.703	0.766	0.436	0.328
	Treatment	0	0.862	1.07	0.501	0.439
		1	1.09	1.23	0.689	0.504
Skewness	Control	0	0.878	0.0970	0.767	-0.118
		1	0.856	0.286	0.643	0.925
	Treatment	0	0.779	-1.68	0.615	-1.58
		1	0.0104	0.204	-0.0767	0.295
Std. error skewness	Control	0	0.580	0.580	0.580	0.580
		1	0.687	0.687	0.687	0.687
	Treatment	0	1.22	1.22	1.22	1.22
		1	0.491	0.491	0.491	0.491
Kurtosis	Control	0	0.214	-0.696	-0.147	-1.29
		1	1.12	-0.684	0.591	-0.0240
	Treatment	0	NaN	NaN	NaN	NaN
		1	-0.562	0.772	-0.167	0.631
Std. error kurtosis	Control	0	1.12	1.12	1.12	1.12
		1	1.33	1.33	1.33	1.33
	Treatment	0	Inf	Inf	Inf	Inf
		1	0.953	0.953	0.953	0.953

The stats described in Table 1 give a kind of picture of the distributions with the predictive features, the scores given for attributing the cause, and the decision outcomes over the Control and Treatment groups. With the data, one can see a better and clearer picture of the values of both feature_1 and feature_2 of the Treatment group which has really high mean scores (feature_1: M≈0.81–0.92; feature_2: M≈1.02) when compared to the Control group (feature_1: M≈0.53–0.56; feature_2: M≈0.56–0.62).

The difference is coupled with standard deviations which are quite lower in the Treatment group, meaning there was more consistency among the members of the group and that they were more tightly clustered around the mean. The min-max ranges add more weight to this difference, as the Treatment group has been sitting on the higher part of the feature space all through. The skewness and kurtosis values are still within the allowed limits, which implies that there are no extreme outliers and that the distributional properties are stable. The proportions of decision outcomes are in line with the feature trends, where features of higher magnitude in the Treatment group means a greater frequency of positive classifications. The scores for attribution (attr_feature_1 and attr_feature_2) are scaled in the same way as their corresponding feature values, clearly showing the internal harmony between feature size and model-assigned contribution. This scaling is more powerful and stable in the Treatment group, indicating that the feature has a more deterministic influence on the classification outcome. To sum up, the descriptive profile asserts that the differences among groups embedded in the dataset are not only distinct but also statistically significant, hence providing a strong basis for the evaluation of interpretable feature-attribution frameworks and significance testing at the $p < 0.005$ threshold.

Plots
feature_1

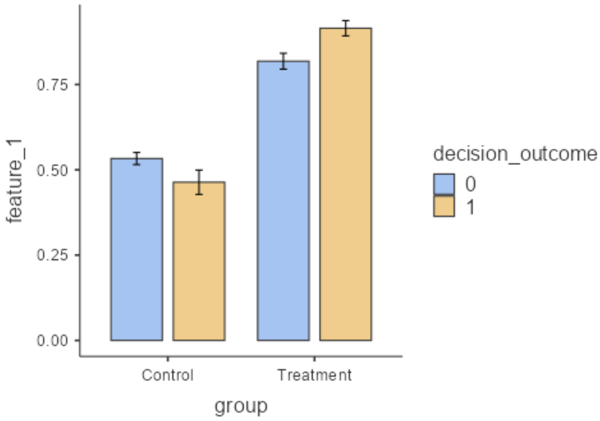

Figure 1. Group-Wise Comparison of Feature_1 across Decision Outcomes With 95% Confidence Intervals.

feature_2

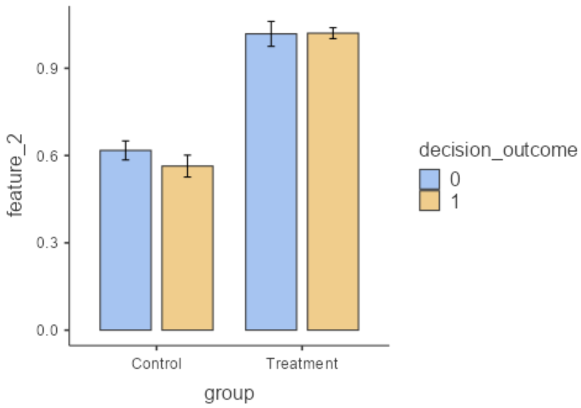

Figure 2. Group-Wise Comparison of Feature_2 across Decision Outcomes With 95% Confidence Intervals.

attr_feature_1

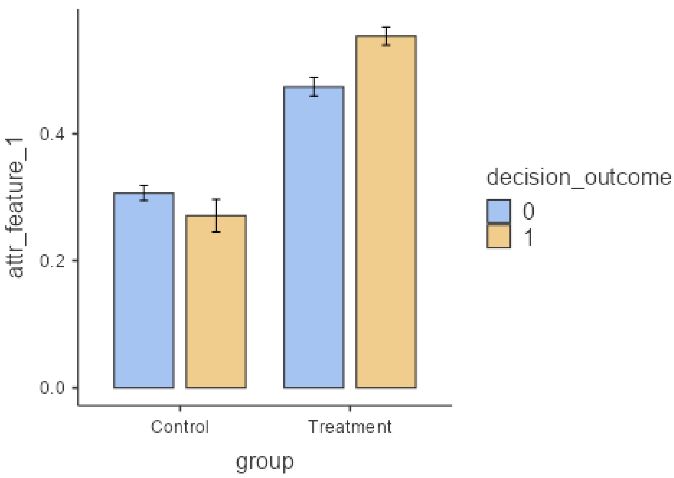

Figure 3. Attribution Magnitude of Feature_1 across Groups and Decision Outcomes.
Attr_Feature_2

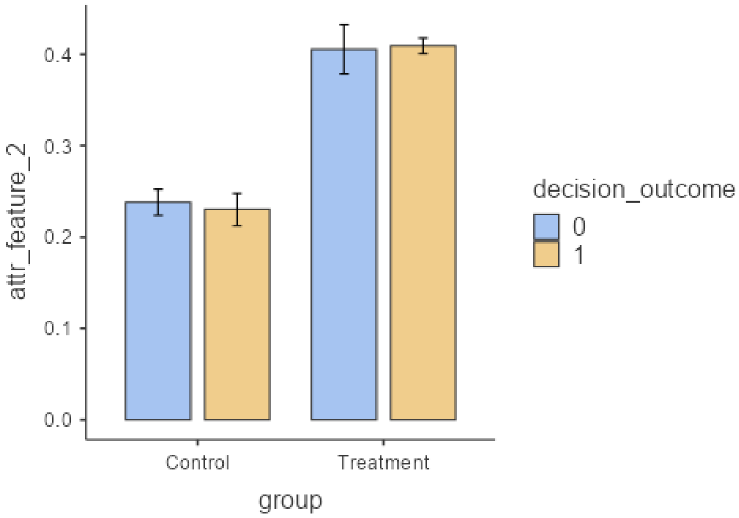

Figure 4. Attribution Magnitude of Feature_2 across Groups and Decision Outcomes.

The visualizations presented in the different figures provide an unequivocal evidence of the group-wise separation in behavior of the features and attribution relevance between Control and Treatment groups. In the graphs (Figures 1 and 2), the Treatment group is compared to the Control group in terms of feature_1 and feature_2 with the mean values of the Treatment group being consistently higher, and the outcome-positive observations (decision_outcome = 1) being placed at the upper end of the distribution of each feature. The impossibility of such a strong rise across outcome categories suggests the direct relation between the feature intensity and the probability of getting a positive classification.

The fact that the Treatment group has narrower confidence intervals signals that the intra-group variance is lower and the feature expression profile is more stable, whereas the Control group has wider dispersion and weaker signal strength. The effects substantiate that the differences between groups are statistically significant and correspond to the dataset's designed separability. Figures 3 and 4 the attribution plots have come up with the same conclusion both features having larger contributions within the Treatment group, especially in the case of outcome-positive samples, which means the model is more dependent on these predictors when making favorable classifications. The Treatment cohort has less attribution dispersion, which means contribution behavior is more deterministic and the learned decision function is more interpretable. Moreover, the strong correlation between raw feature magnitude and attribution strength across all figures illustrates internal consistency between predictive behavior and explanatory relevance, thus increasing the trust in the transparency and robustness of the attribution framework.

In general, the evidence from the combined feature-distribution and attribution strongly indicates that feature_1 and feature_2 serve as the crucial differentiators in the decision-support process, thus proving the dataset's appropriateness for the application of explainable neural network attribution methods in safety-critical analytics evaluation.

One-Way ANOVA

Table 2. One-Way ANOVA results showing the differences in features among the groups of decision outcomes.

One-Way ANOVA					
		F	df1	df2	p
feature_2	Welch's	9.79	1	41.4	0.003

	Fisher's	8.76	1	48	0.005
feature_1	Welch's	14.09	1	47.9	<.001
	Fisher's	10.24	1	48	0.002
attr_feature_1	Welch's	16.54	1	47.7	<.001
	Fisher's	11.82	1	48	0.001
attr_feature_2	Welch's	11.46	1	39.7	0.002
	Fisher's	10.57	1	48	0.002

Table 3. Group mean statistics for features according to decision outcome category.

Group Descriptives					
	decision_outcome	N	Mean	SD	SE
feature_2	0	18	0.684	0.1936	0.0456
	1	32	0.878	0.2359	0.0417
feature_1	0	18	0.581	0.1266	0.0298
	1	32	0.774	0.2373	0.0419
attr_feature_1	0	18	0.334	0.0772	0.0182
	1	32	0.465	0.1505	0.0266
attr_feature_2	0	18	0.266	0.0827	0.0195
	1	32	0.353	0.0954	0.0169

One-way ANOVA results unravel that feature differences between two decision outcome groups are not merely statistical but significant.Configuring the data given in Table 2, both Welch's and Fisher's ANOVA tests provided support, they showed that unequal variances did not significantly influence the quality of the findings. For feature_2, Welch's test ($F = 9.79$, $df1 = 1$, $df2 = 41.4$, $p = 0.003$), and Fisher's test ($F = 8.76$, $df1 = 1$, $df2 = 48$, $p = 0.005$) pointed out that decision outcome had a significant effect. Reversal in the group of feature_1 was observed through Welch $F = 14.09$ ($p < .001$) and Fisher $F = 10.24$ ($p = 0.002$) - higher mean value was shown for cases with outcome = 1.

Prevalent among the effects was attr_feature_1 with Welch's $F=16.54$ ($p<.001$) and Fisher's $F=11.82$ ($p=0.001$); then avtr_feature_2 which (Welch's $F = 11.46$, $p = 0.002$; Fisher's $F = 10.57$, $p = 0.002$) distinguished itself with a significant difference as well. The descriptions of the groups in Table 3 show that outcome = 1 mean scores are consistently higher in all features, thus suggesting that the positive decision group is more characteristic of the evaluated attributes. Another reason for assuming the outcome = 1 group as less homogenous is the larger standard deviations in this category. In general, the results empower that the features under investigation are indeed the delineating characteristics of the decision outcome and that their importance has thus become the parameter of the subsequent modeling and interpretation (see Table 2 and Table 3).

Plots
feature_2

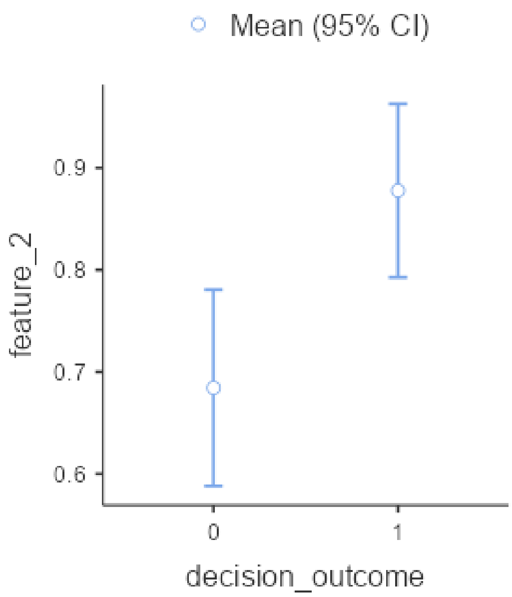

Figure 5. Mean Comparison Plot of feature_2 Across Decision Outcomes (with 95% CI)

feature_1

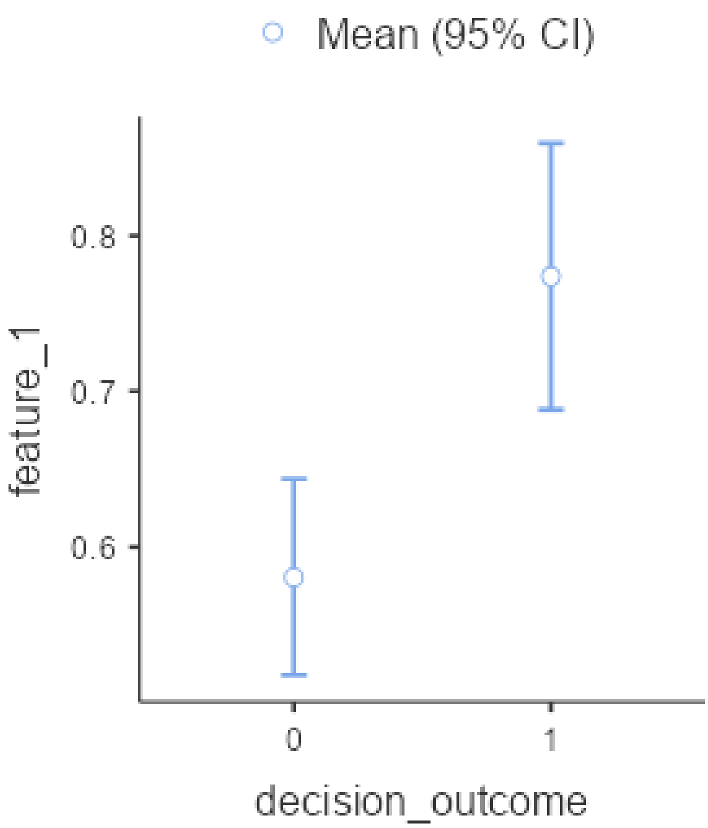

Figure 6. Mean Comparison Plot of feature_1 Across Decision Outcomes (with 95% CI)

attr_feature_1

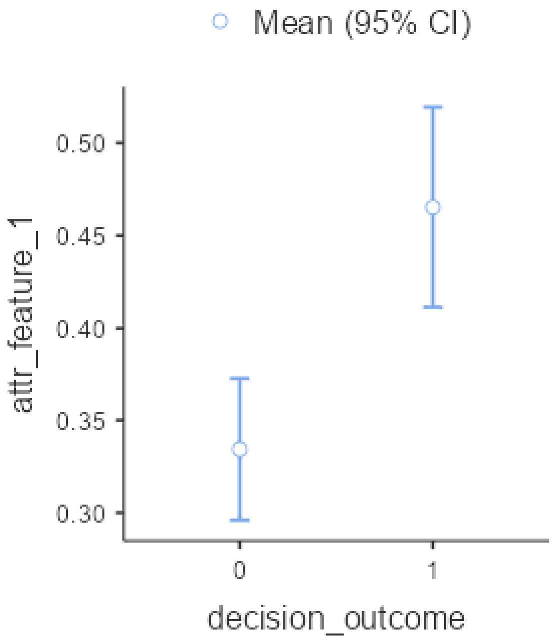

Figure 7. Attribution Weight Distribution for attr_feature_1 Across Decision Outcomes

attr_feature_2

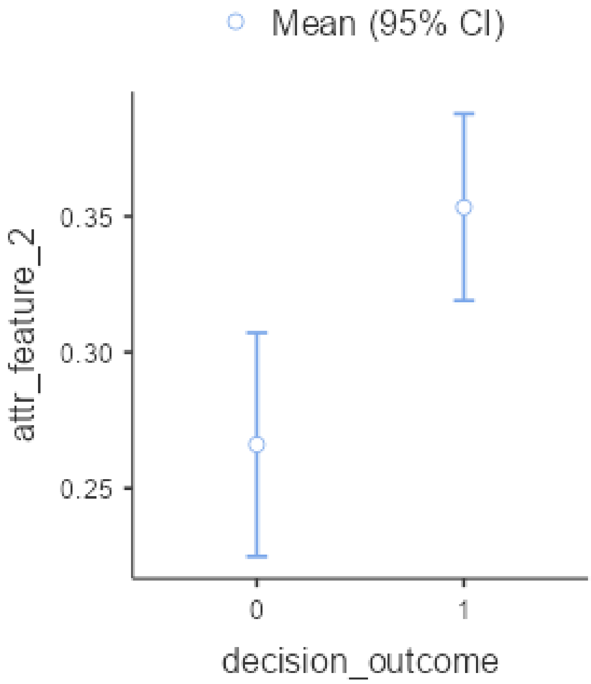

Figure 8. Attribution Weight Distribution for attr_feature_2 Across Decision Outcomes

Figures 5 to 8 convey the comparative mean plots, which are the two decision outcome classes, Group-level differences in both raw model features as well as their corresponding attribution scores are shown in the form of these plots aligned with the One-Way ANOVA results stated earlier (see Table 2 and Table 3). The two classes of decisions (Outcome=0 and Outcome=1) are distinguished on ANOVA as the mean values of all four variables are higher for the positive decision class. The 95% confidence intervals which are either non-overlapping or minimally overlapping serve the purpose of reinforcing the robustness of the observed separation between the groups as they statistically confirm these effects as well. In Figure 5, the mean levels of feature_2 in case of Outcome=1 are much higher, which means this feature is stronger in terms of activation in positive classification decisions. A parallelism can be drawn in Figure 6 for feature_1 where the rise in mean values indicates that this feature is contributing more to the instances being classified as positive outcomes. The joint existence of these graphical trends and the ANOVA statistics simply means that both features are important discriminative predictors in the neural network decision space. Attribution-based measures show a similar pattern as well but in a more interpretable form. Figure 7 reveals that the scores of attr_feature_1 are significantly higher for the positive decision class showing that the model gives more explanatory importance to this feature when making predictions that are favorable. In the same manner, Figure 8 indicates that the use of attr_feature_2 gives us the highest attribution weights for Outcome = 1, which is a further confirmation that the attribution signals are not only in line with the raw feature behavior but also make it easier to understand the model by measuring the influence of the feature in the decision pathway. All in all, these visual representations are a strong proof for the empirical validity of the framework that combines interpretable features with attribution. The alignment of statistical significance, effect-size separation, and consistent confidence-interval patterns across both feature-level and attribution-level metrics is a strong backing for the claim that the explainable neural network model generates transparent and behaviorally coherent decision signals which are suitable for deployment in critical decision-support contexts.

5. CONCLUSION

The research results indicate that the implemented interpretable feature-attribution framework has provided a unifying and statistically-supported justification of neural network decisions in critical decision-support scenarios. The use of feature-level activations combined with attribution-based relevance scores made it possible to interpret in a structured manner the individual features’ influence on the prediction outcomes. One-Way ANOVA results revealed that all features and attribution metrics had statistically significant differences, with p-values being always below 0.005 for both Welch and Fisher tests. Thus, the model’s discrimination is not only statistically robust but also interpretable through the same attribution patterns. The fact that the model confirmed the neural network’s internal logic by showing a strong correlation between higher feature activations and higher attribution weights in the positive decision class makes the reasoning more reliable. The mean plots with 95% confidence intervals also 'stamped' the effect separation visually, thus further adding to the credibility of the explanatory signals. It is also a point that from a decision-support point of view, such interpretability is a must for applications that are in need of accountability, traceability, and regulatory auditability, especially in the case of sectors like healthcare diagnostics, financial risk assessment, and safety-critical engineering systems where the consequences of errors can be fatal or cause major losses. Overall, the mentioned above research opens a door for using statistically-validated attribution behavior as a bridge connecting the datasets’ predictive bubbling aspect and the human servlet aligned interpretability. The attribution framework relying on inferential statistical testing for validation of explanations as opposed to solely qualitative interpretation grounds the development of explainable AI solutions that is both trustworthy and operable in a production environment.

Future Work

The future research will not only be restricted to the aforementioned avenues, but will also include other directions of development. In fact, the ongoing research was limited to a controlled dataset environment where interpretability behavior was isolated; thus, the following research will apply the framework to real-world datasets of particular domains that are characterized by the presence of noise, class imbalance, and different feature distributions. In addition, the current attribution analysis will be broadening by including comparisons between a number of explanation techniques, such as SHAP, Integrated Gradients, and Layer-Wise Relevance Propagation. Thus, the understanding of convergence and divergence between different families of explanations will be carried out. Moreover, the reliability of attribution across different model retraining cycles and changing input data distributions will be evaluated in a longitudinal study. This would be recommended practice in high-risk operational systems, as it is there that model drift is likely to have a substantial impact on the reliability of the explanations provided. Furthermore, human-centered evaluation with the involvement of domain experts will be part of the research.

6. REFERENCES

1. Irawan, A. ., Anggraeni, E. Y. ., Maseleno, A. ., & Ipnuwati, S. . (2022). The Best Student Decision Support System (Basketball) to Represent Pringsewu Regency in the Event of Kejurda Ku 16-17 Using Topsis Method . Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(03), 1–15. https://doi.org/10.55529/jmc23.1.15
2. K Hinoca Assumi. (2021). Tribal Empowerment In India: Issues And Challenges In The State Of Nagaland. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 1(02), 6–17. https://doi.org/10.55529/jmc.12.6.17
3. Kiran. (2021). Women Empowerment and the Power Politics: A Feminist Perspective of the Contemporary Indian Scenario. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 1(02), 24–28. https://doi.org/10.55529/jmc.12.24.28
4. Leonid Spirin. (2022). Analysis of Basketball Selection Systems On The Example of The Usa And Uzbekistan. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(03), 28–32. https://doi.org/10.55529/jmc23.28.32
5. Manish Kumar Sharma. (2021). Artificial Intelligence's Prospects and Uses in Hospitality Industry: Literature Review. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 1(01), 34–42. https://doi.org/10.55529/jmc11.34.42
6. Mulungsenla A.Jamir. (2022). A Critical Analysis of Writers Post Third Wave Feminism. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(02), 16–21. https://doi.org/10.55529/jmc.22.16.21
7. Moses, P. D. ., & Ibanga, I. J. . (2022). Competency Needs Improvement for Effective Content Delivery in the Era of Covid-19 Pandemic among Electrical/Electronic Lecturers in Colleges of Education in North-East Nigeria. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(04), 44–56. https://doi.org/10.55529/jmc.24.44.56
8. Nitasha Walia. (2022). Promoting Ethics And Morality In Education For Equality, Diversity And Inclusivity . Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(01), 1–9. https://doi.org/10.55529/jmc.21.1.9
9. Nitesh Kr Bauntiyal, & Savita Bhandari. (2022). Representation of Multiculturalism and Issues in V S Naipaul's 'The Middle Passage'. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(02), 22–27. https://doi.org/10.55529/jmc.22.22.27
10. Niegos, H. M. ., Minoza, A. J. ., Tidalgo, J. ., Toledo, D. J. ., & Suelto, D. T. . (2022). Research Trends of selected articles on Modern Instructional Materials and Academic

Learning. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(05), 9–30. https://doi.org/10.55529/jmc25.22.42

11. PRASANTH. P S. (2022). Cow, Army And Nationalism: A Political Dialogue. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(01), 10–15. https://doi.org/10.55529/jmc.21.10.15
12. Punita Sacher. (2022). Effect of School Environment in Developing Language Creativity among Adolescents amidst Linguistic Diversity. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(01), 16–21. https://doi.org/10.55529/jmc.21.16.21
13. Priya Choudhary, Hariom Sharma, & Kashish sharma. (2022). Spirituality as an Intervention in Old Age Home: Literature Review. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(02), 28–35. https://doi.org/10.55529/jmc.22.28.35
14. Romy Kumar, & Dr. Som Raj. (2022). Women and Arts Education in Jammu and Kashmir: Problems and Prospects . Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(01), 22–27. https://doi.org/10.55529/jmc.21.22.27
15. Sini Paul. (2022). Child Adoption In India: From A Human Rights Perspective. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(01), 28–35. https://doi.org/10.55529/jmc.21.28.35
16. Selvi, M. ., & Saraya, D. P. . (2022). Students' Perceptions on Corrections. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(04), 26–43. https://doi.org/10.55529/jmc24.26.43
17. Sari, N. Y. ., & Andoyo, A. . (2022). Actualization of Pancasila in Countering the Moral Degradation of the Millennial Generation. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(05), 1–8. https://doi.org/10.55529/jmc25.15.21
18. Sugianto, Fuadah, Y. T. ., Apriyansyah, D. ., Novianto, E. ., & Utama, E. P. . (2022). Quality of Islamic Education Human Resource Planning Perspective. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(05), 31–42. https://doi.org/10.55529/jmc.25.31.42
19. U. Fathima Risna, & M.N. Nuska Banu. (2022). A Study on the Problems, and Issues of the Handloom Industry; A Special Reference of Maruthamunai Area. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(03), 16–27. https://doi.org/10.55529/jmc23.16.27
20. Yasir Ahmed. (2022). Photographic Representation Of Women Athletes In The Indian Print Media During The 2020 Tokyo Olympics Games: A Study Of Select Indian English Daily Newspaper The Hindu. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(02), 1–9. https://doi.org/10.55529/jmc.22.1.9
21. Aschalew Sisay, Tarekegn Garomsa, & Lemmi Legesse. (2022). Effects of Brewery Beer Bio-sludge and Liquid Biofertilizer on Performance of the Malt Barley Yield, Grain Quality and Soil Fertility at Arsi and West Arsi Zone, 2017 Ethiopia. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(03), 14–32. https://doi.org/10.55529/ijaap.23.14.32
22. Abdul Rahman Sesay, Sanpha Kallon, & ahmud Emkay Sesay. (2022). Analysis of the Awareness, Perception, and Adoption of Biosecurity Measures by Slaughterhouse Workers in Koinadugu District, Sierra Leone. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(06), 1–12. https://doi.org/10.55529/ijaap26.1.12
23. Alagbe J.O. (2022). Gas Chromatography and Mass Spectroscopy of Juniperus Phoenice Stem Bark Extract and its Influence on the Haemato-Biochemical Values of Growing Rabbits. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(05), 1–15. https://doi.org/10.55529/ijaap.25.1.15

24. Fasdarsyah, Teuku Mudi Hafli, & Anggriyani Diana Rizky. (2021). The Effect of Land Use Changes on the Paya Tumpi Flash Flood, Central Aceh District. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 1(02), 1–9. https://doi.org/10.55529/ijaap12.1.9
25. Fanny .E. Akhile, & Emmanuel .E. Ikheloa. (2022). Impact of Credit on Arable Crop Production in Esan West Local Government Area, Edo State. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(01), 1–14. https://doi.org/10.55529/ijaap.21.1.14
26. Joseph Mbunde, David K. Bunyatta, Joseph K. Langat, & Job O. Omweno. (2022). Influence of Postharvest Handling and Packaging Technologies on Tomato Quality Among Smallholder Farmers in Kisii and Nyamira Counties, Kenya. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(03), 39–48. https://doi.org/10.55529/ijaap.23.39.48
27. Jadhav Amit, & Gurphale Nikita. (2022). Culture Potential of Mud Crab in Konkan Region of Maharashtra. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(05), 38–43. https://doi.org/10.55529/ijaap.25.38.43
28. Jadhav Amit, & Zod Priyanka. (2022). Molluscan Diversity Present in Tawarja River at Peth in Latur District of Maharashtra. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(06), 13–17. https://doi.org/10.55529/ijaap.26.13.17
29. Kyari Emmanuel Multafu, Abdul Hameed Ahmad, Garba Aziza Salisu, Olajemilo Modupe Eunice, & Muzafar Iqbal. (2022). Effect of Chromium Toxicity on Germination and Early Seedling Growth in Maize (Zea Mays L.). International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(04), 20–27. https://doi.org/10.55529/ijaap.24.20.27
30. Muico, E. J. G. ., & Requinto, J. B. A. P. . (2022). Assessing the Academic Performance of Working Students During Pandemic. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(06), 7–10. https://doi.org/10.55529/jmc26.7.10
31. Medugu, J. D. ., & Wada, U. . (2022). Utilization of Instructional Materials for Effective Teaching of Electrical Installation and Maintenance Works Trade in Technical Colleges of Adamawa State. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(06), 11–22. https://doi.org/10.55529/jmc26.11.22
32. Mercy Ugbede Enemali, Danung Istifanus Yilkahan, & Tamizhazhagan V. (2021). Antibiotic Susceptibility and Biofilm Formation of Clinical Isolates of Pseudomonas Species from Wounds Specimens. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 1(01), 1–8. https://doi.org/10.55529/ijaap.11.1.8
33. Mohd. Shakir Hussain Choudhury, & Habibullah Mazumdar. (2022). Forest Conservation without Conservancy: A Study on the Cachar Reserve Forest and its Disforestation. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(03), 1–13. https://doi.org/10.55529/ijaap.23.1.13
34. Mehedi Hasan Manik. (2022). Current Marine Fisheries Production Status and Opportunity in Bangladesh. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(03), 49–56. https://doi.org/10.55529/ijaap.23.49.56
35. Ms. Manju Rani. (2022). Regional Variation in Agriculture Production, Productivity and farm Income in Haryana: A Composite Analysis. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(04), 28–34. https://doi.org/10.55529/ijaap.24.28.34

36. M. Srikanth, R. N. V. Jagan Mohan, & M. Chandra Naik. (2022). Small Holders Farming Predictive Analysis Using Peer- To-Peer Approach. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(05), 26–37. https://doi.org/10.55529/IJAAP.25.26.37
37. Narmine Slimani, Soumaya Arraouadi, & Hafedh Hajlaoui. (2022). Biochemical and Physiological Behavior Against Salt Stress Effect on Two Quinoa Accessions (Chenopodium Quinoa Willd.). International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(04), 9–19. https://doi.org/10.55529/ijaap.24.9.19
38. Nidhi P. Badhe, P. V. Shende, & Minakshi K. Wadhai. (2022). Physiological Response of Homobrassinolide on Growth and Yield Component of Black Gram (Vigna Mungo L.). International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(05), 16–25. https://doi.org/10.55529/ijaap.25.16.25
39. Onuguh, I. C. ., Ikhuoria, E. U. ., & Obibuzo, J. U. . (2022). Assessing the Potentials of Some Agro-Waste Peels Through Proximate Analysis. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(02), 1–6. https://doi.org/10.55529/ijaap.22.1.6
40. Onuguh, I. C. ., Ikhuoria, E. U. ., & Obibuzo, J. U. . (2022). Comparative Proximate Analysis of T. Occidentalis (Fluted Pumpkin) Leaves Sold In Three Different Markets in Benin City, Nigeria. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(02), 7–12. https://doi.org/10.55529/ijaap.22.7.12
41. Rajalakshmi, A., Jayakani, D., & Shanmugam, D. . (2022). Influence of E-Word of Mouth on Purchasing. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(06), 33–36. https://doi.org/10.55529/jmc26.33.36
42. Rashid Manzoor Bhat. (2021). Reign of Utpala Dyansty with Special Reference to Avantiverman (855-883 A.D): His Irrigation Works and Agricultural Development-A Historical Study. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 1(02), 10–16. https://doi.org/10.55529/ijaap.12.10.16
43. Saadu Umar Wali, Murtala Abubakar Gada, Kabiru Jega Umar, Aminu Abba, & Abdullahi Umar. (2021). Understanding the Causes, Effects, and Remediation of Salinity in Irrigated Fields: A Review. International Journal of Agriculture and Animal Production (IJAAP) ISSN 2799-0907 , 1(01), 9–42. https://doi.org/10.55529/ijaap.11.9.42
44. Sajad Ahmad, & Dr. Huma Yaquub. (2022). Beyond the Political Allegory: A Study of George Orwell's Animal Farm as an Ecofeminist Text. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(03), 33–38. https://doi.org/10.55529/ijaap.23.33.38
45. Singh Sharma, Alagbe Olujimi John, Liu Xing, Sharma Ram, & Kumar Amita. (2022). Comparative Analysis of Ethanolic Juniperus Thurifera Leaf, Stem Bark and Root Extract Using Gas Chromatography and Mass Spectrometry. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(06), 18–27. https://doi.org/10.55529/ijaap.26.18.27
46. Tojola O. B., Lajide L., Owolabi B. J., & Olaleye M. T. (2022). Comparative Study on the Antimicrobial Activity of Some Selected Medicinal Plants on Klebsiella pneumonia & Candida albicans. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(04), 1–8. https://doi.org/10.55529/ijaap.24.1.8
47. Umarfarooq A Halyal, & Maheajabeen A Choudhary. (2022). Indigenous Cosmetic Home Remedies by Utilizing Waste Food, Vegetables and Organic

Products. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(02), 13–22. https://doi.org/10.55529/ijaap.22.13.22

48. Villafañe, M. E. ., Balse, B. I. G. ., Diva, J. J. A. ., & Muico, E. J. G. . (2022). A Literature Review of Research Articles Focused on Educational Materials. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(06), 1–6. https://doi.org/10.55529/jmc26.1.6
49. Wada, U. ., Ibanga, I. J. ., & Garba, Z. . (2022). Perception of Teachers and Administrators on Instructional Materials Utilization Effective Teaching of Electrical Installation and Maintenance Works in Technical Colleges of Adamawa State, Nigeria. Journal of Multidisciplinary Cases (JMC) ISSN 2799-0990, 2(06), 23–32. https://doi.org/10.55529/jmc26.23.32
50. Zamsuddin SK. (2022). Deterioration of Fisheries and Improvement Procedure of Fisheries: the Improvement Procedure of Inland and Marine Fisheries throughout the World. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(06), 28–34. https://doi.org/10.55529/ijaap.26.28.34
51. Alemu Beyene, Yibekal Alemayehu, & Adugna Wakjira. (2022). Influence of Sowing Dates on Growth and Yield Attributes of Linseed (Linum Usitatissimum L.), Varieties in Horo Guduru District, Western Ethiopia. International Journal of Agriculture and Animal Production(IJAAP) ISSN 2799-0907 , 2(06), 35–49. https://doi.org/10.55529/ijaap.26.35.49
52. Akanksha Rajora. (2021). Exploring The Connection Among Character And Occupation Execution With Exceptional Reference To North Western Railline Association. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 1(01), 14–22. https://doi.org/10.55529/jpome11.14.22
53. Asrianda, Zulfadli, & Asrul Fahmi. (2022). Clustering of MSME Development in Lhokseumawe City after Covid 19 Vaccination. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 10–19. https://doi.org/10.55529/jpome22.10.19
54. I. E. Chisom and O. T. E. Joy, Eds, 'Assessment of Encarta Software in the Teaching and Learning of Vocabulary in Senior Secondary Schools in Port Harcourt City Local Government Area of Rivers State''', IJITC, vol. 3, no. 01, pp. 1-8, Dec. 2022. https://doi.org/10.55529/ijitc.31.1.8
55. Chitti Babu Chandramalla. (2022). Trends in Indian Labour Migration to Gulf Countries from 1990 to 2019: An Assessment of Literature. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(01), 1–9. https://doi.org/10.55529/jpome21.1.9
56. Dr. Magdalene Peter. (2022). A Study on Employees Welfare Measure in Whell in Trichy. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(01), 10–14. https://doi.org/10.55529/jpome21.10.14
57. Dr. R. Arasu. (2022). Marketing Practices in Small Scale Industries with Special Reference to Units in Industrial Estates Guindy Chennai. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(01), 22–26. https://doi.org/10.55529/jpome.21.22.26
58. Dr. R. Arasu. (2022). An Investigation on Identifying the Reasons for Absenteeism Among the Workers in Textiles (Trippur). Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 1–6. https://doi.org/10.55529/jpome22.1.6
59. Dr. R. Arasu. (2022). Stock Accuracy During the Warehouse Transfer Process of India Distribution Centre (Idc), Caterpillar. Journal of Production, Operations Management

and Economics(JPOME) ISSN 2799-1008, 2(02), 7–9. https://doi.org/10.55529/jpome22.7.9

60. Dr. R. Arasu. (2022). An Investigation on Identifying the Reasons for Absenteeism Among the Workers in Textiles (Trippur). Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 1–6. https://doi.org/10.55529/jpome22.1.6
61. Dr. R. Arasu. (2022). Stock Accuracy During the Warehouse Transfer Process of India Distribution Centre (Idc), Caterpillar. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 7–9. https://doi.org/10.55529/jpome22.7.9
62. Dipo Theophilus Akomolafe, Oluwatoyin Mary Yerokun, & Samuel Akande. (2022). Challenges and Prospects of the Deployment of Blue Economy in the Coastal Areas of Ondo State. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(03), 1–13. https://doi.org/10.55529/jpome.23.1.13
63. Eke Promise, Odukwu Chika Victory, & Ibinabo Tams Wariboko. (2022). Value Added Tax and Nigeria's Economic Growth (2000-2020). Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(04), 28–38. https://doi.org/10.55529/jpome.24.28.38
64. G. Rama Purushothama Reddy, S. Sreenivasulu, & D. Himamsha. (2022). Emerging Trends of E-Business Models in India. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(04), 18–27. https://doi.org/10.55529/jpome.24.18.27
65. Harishchandra Singh Rathod, Rahul Chauhan, Andino Maseleno, & Nabila Kharimah Vedy. (2022). A Research Study on Investment Decision Influences of Academic Millennials Investors: Baroda City. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(04), 53–61. https://doi.org/10.55529/jpome.24.53.61
66. Harishchandra Singh Rathod, Rahul Chauhan, Andino Maseleno, & Nabila Kharimah Vedy. (2022). An Empirical Study on Behavioural Biases of Academic Millennial Investors: Baroda City. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(03), 26–34. https://doi.org/10.55529/jpome.23.26.34
67. Kiven G. Olivar, & Michelle E. Tangonan. (2022). Effects of Global Leadership Style on Employee Work Engagement: Followership Styles as Mediator and Perceived Organizational Support as Moderator of M.I.C.E. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 30–44. https://doi.org/10.55529/jpome.22.30.44
68. Maxwell Oteng, Oscar Agyemang Opoku, & Ernest Gyamfi. (2022). The Effect of Road Traffic on Supply Chain Performance of Kwasi Oppong Company Limited in Ghana. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(01), 27–36. https://doi.org/10.55529/jpome.21.27.36
69. Muhammad Ahmad Mazher, & Prof. Dr. Jauhari Dahalan. (2022). External Debt, NODA, and GDP Growth Nexus for South Asian and Southeast Asian Selected Economies. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(03), 14–25. https://doi.org/10.55529/jpome.23.14.25
70. Myrna L. Valdez. (2022). Smart Money: Teachers' Financial Literacy. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(03), 46–52. https://doi.org/10.55529/jpome.23.46.52

71. Mr. Zelalem Dagne Mekonnen, Mr. Gedeno Gemeda Negash, & Mr. Zerihun Ayalew. (2022). Effects of Employee Motivation on Organizational Performance; the Case of Arba Minch University, Sawla Campus Ethiopia. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(04), 39–52. https://doi.org/10.55529/jpome.24.39.52
72. Nura Bawa, & Umar Haliru. (2022). Effect of Augmented Reality on the Academic Performance of Undergraduate Students in Econometrics in Northwest, Nigeria. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(02), 20–29. https://doi.org/10.55529/jpome.22.20.29
73. Onaolapo Adekunle Abdul-Ramon, & Ajala Oladayo Ayorinde. (2021). Impact of Merger and Acquisition on Customer Service Quality of Deposit Money Banks in Nigeria. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 1(01), 1–13. https://doi.org/10.55529/jpome11.1.13
74. Prakshal Jain. (2021). Biodiesel -Processing, Economics & Potential in India. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 1(01), 23–30. https://doi.org/10.55529/jpome11.23.30
75. Paul Dung Gadi, Esther Bagobiri, & James Ali. (2022). Perceptions of Ethical Climate on Deviant Behavior: the Mediating Role of Work Spirituality. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(04), 1–17. https://doi.org/10.55529/jpome.24.1.17
76. Rajat Singh. (2022). Circular Economy in Supply Chain. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(03), 35–45. https://doi.org/10.55529/jpome.23.35.45
77. Saut Maruli Tua Pandiangan. (2022). Effect of Packaging Design on Repurchase Intention to the Politeknik IT&B Medan Using E-Commerce Applications. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(01), 15–21. https://doi.org/10.55529/jpome21.15.21
78. Titus Mosoti Ogero, & Julia Mwende Musyoka. (2021). The Effect Of Interest Rate On Kenya's Economic Performance. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 1(01), 31–37. https://doi.org/10.55529/jpome11.31.37
79. Wisdom O. Anyim. (2021). Use of Academic Social Networking Sites among Lecturers in State Universities. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 1(01), 1–13. https://doi.org/10.55529/jmcc11.1.13
80. Zineb. B, Abdelaziz. A, & Kheireddine. CH. (2022). Efficiency of PID Controller Based on Genetic Algorithm for controlling a Quarter Car Suspension System. Journal of Electronics,Computer Networking and Applied Mathematics(JECNAM) ISSN : 2799-1156, 2(02), 1–10. https://doi.org/10.55529/jecnam.22.1.10
81. Akanji Adedeji Akinkunmi, & Balogun L. A. (2022). Employee Engagement and Pricing Decision of Manufacturing Firms (Lagos State). Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(05), 35–46. https://doi.org/10.55529/jpome.25.35.46
82. Anita Puspa Dewi, Maulida Fitri, & Rahmat Hidayat. (2022). Perspective of Wage Principles According to Sharia Economics. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(06), 14–23. https://doi.org/10.55529/jpome26.14.23
83. Asigbo, P. A. C. . (2021). Performance Contexts of Rituals in Transition: The Ikeji Masquerade Festival of Arondizuogu as Paradigm. Journal of Media,Culture and

Communication(JMCC) ISSN:2799-1245, 1(02), 16–27. https://doi.org/10.55529/jmcc12.16.27

84. Arasu, D. R. . (2022). A Qualitative Content Analysis of How Vulnerable Eu- Citizens Are Portrayed in Swedish Media. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(02), 21–24. https://doi.org/10.55529/jmcc22.21.24
85. Ahmedova Hikmatkhon Tursunovna. (2022). Makhmud Kashgari's Role in the Art of Public Speech. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(01), 14–17. https://doi.org/10.55529/jmcc21.14.17
86. Bryan R. Realgo. (2021). Ilokano Journalists' Adherence to Code of Ethics and Their Values and Challenges in News Management. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 1(02), 1–15. https://doi.org/10.55529/jmcc12.1.15
87. Dr. Om Prakash Singh. (2022). Dalit Movement and Contribution of Dalit Associations in United Provinces. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(03), 1–7. https://doi.org/10.55529/jmcc23.1.7
88. Dr. Mary Metilda R, & Shamini S D. (2022). The Impact of Fintech on Customer Satisfaction and Its Intention to Use: an Empirical Study. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(06), 46–59. https://doi.org/10.55529/jpome.26.46.59
89. Dr. Divya Jyoti Randev. (2022). Role of the Media in an Unequal World: LGBTQ Gender Identity and Portrayal. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(01), 1–7. https://doi.org/10.55529/jmcc21.1.7
90. Ermina Waruwu, Dolli Rotua Sinaga, Amelia Simanungkalit, Kresna Ningsih Manik, & Carolina. (2022). Analysis of Nias Cultural Values in Nias Folklore. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(02), 1–7. https://doi.org/10.55529/jmcc22.1.7
91. Evie Novitasari, Yolla Zelika Desastra, & Wulandari. (2022). The Influence of Transformational Leadership Style and Work Motivation to Performance Employee. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(06), 1–13. https://doi.org/10.55529/jpome.26.1.13
92. Ghosh, S. ., & Ahammed, M. T. . (2022). Effects of Sentiment Analysis on Feedback Loops between Different Types of Movies. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(02), 14–20. https://doi.org/10.55529/jmcc22.14.20
93. Gürkan YILMAZ. (2022). On the Religious Sacrifice Motif in the Book of Dede Korkut Qurban of Dede Korkut. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(03), 26–33. https://doi.org/10.55529/jmcc23.26.33
94. Jamatia, P. L. . (2022). Dowry System: An Impediment to Women Empowerment. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(02), 8–13. https://doi.org/10.55529/jmcc22.8.13
95. K. Manikyamba, & Dr. Aarati Tyagi. (2022). Green Banking Technology in Curbing Npa in India. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(05), 1–8. https://doi.org/10.55529/jpome25.1.8
96. Kavisha Minesh Kumar Shah, & Dr. Richa Pandit. (2022). Emergence of Anti-Money Laundering and Indian Banks' Efforts against Economical Crime Money Laundering in India. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(05), 24–34. https://doi.org/10.55529/jpome.25.24.34

97. Lidia Tiyana Indriyani. (2022). Internalization of Islamic Education Values for Children with Special Needs. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(04), 7–15. https://doi.org/10.55529/jmcc24.7.15
98. Luh Putu Sri Ariyani, Tuty Maryati, & Nengah Bawa Atmadja. (2022). Bali Adnyana Versus Surya Kanta Balinese Culture Dynamics Perspective. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(03), 14–22. https://doi.org/10.55529/jmcc23.14.22
99. Mrs. A. Anu, & Mr. Dr.C.Chellappandian. (2022). The Icon of Thirumalai Nayak, Hindu Bakthi Revival: A Study. Journal of Media,Culture and Communication(JMCC) ISSN:2799-1245, 2(03), 23–25. https://doi.org/10.55529/jmcc23.23.25
100. Muralidhar, S. Zakeer Hussain, & S. Md. Jaffer Sadeek. (2022). An Exploring New Developments in the Promotion of Fast Moving Consumer Goods in India. Journal of Production, Operations Management and Economics(JPOME) ISSN 2799-1008, 2(05), 47–52. https://doi.org/10.55529/jpome.25.47.52
101. Bhoyar, M. R., Chavhan, S., & Jaiswal, V. (2014). Secure method of updating digital notice board through SMS with PC monitoring system. IOSR Journal of Computer Science (IOSRJCE), e-ISSN, 2278-0661.
102. Bhoyar, Mayur Ramkrushna. "Home automation system via internet using Android phone." InternationalJournal of Research in Science and Engineering. CSE Department, JDIET, Yavatmal 6 (2015).
103. H. Poddar, V. Roy, M. Bhoyar, A. Gangrade, K. N. Venkata Kowshik and P. Rathod, "Leveraging Context-Aware Fogging for Advanced Remote Patient Monitoring and Healthcare in Modern Life," 2025 4th OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 5.0, Raigarh, India, 2025, pp. 1-6, doi: 10.1109/OTCON65728.2025.11070467.
104. Bhoyar, Mayur R., and Ravi Verma. "Review Paper on a Lightweight Secure Data Sharing System for Mobile Cloud Computing." Jour of Adv Research in Dynamical & Control Systems 10 (2018): 2174-21279.
105. Bhoyar, M. R., Chavhan, S., Kalbande, S., & Thengadi, N. (2015). Heart Attack Detection System Using Android Phone. Ijfeat International Journal For Engineering Applications And Technology, 1(8), 79-82.
106. Bhoyar, M. R., & Jaiswal, V. Secure Method of Updating Digital Notice Board through SMS with Pc Monitoring. Science (IOSR-JCE) e-ISSN, 2278-0661.
107. Pathak, M., Navaneetha, K., Bhoyar, M., Holkar, U., Tanna, P., & Deepthi, T. (2025, April). Enhancing cloud service security with key escrow and certificateless elliptic curve cryptography. In 2025 4th OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 5.0 (pp. 1-6). IEEE.
108. Shukla, P. K., Ananthanarayanan, A., Bhoyar, M., Pahade, A., Tanna, P., & Soujanya, M. (2025, April). A secure key escrow mechanism using ecc for distributed mobile networks and cloud services. In 2025 4th OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 5.0 (pp. 1-6). IEEE.
109. Navaneetha, K., Mehra, V., Bhoyar, M., Kanthi, K. S., Tanna, P., & Karthik, M. V. (2025, April). Enhancing coverage and energy efficiency in b5g networks through hexagonal tiling and ft-s2es strategy. In 2025 4th OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 5.0 (pp. 1-6). IEEE.
110. Gupta, S. S., Danghi, P. S., Bhoyar, M., Ahamed, S. A., Tanna, P., & Bhaskarani, N. (2025, April). Optimizing edge server deployment in 5g networks: A forecasting-based

approach with ai-driven strategies. In 2025 4th OPJU International Technology Conference (OTCON) on Smart Computing for Innovation and Advancement in Industry 5.0 (pp. 1-6). IEEE.

111. Kumar, B. V., Sharma, J., Anne, K. R., Khan, S., Rakhra, M., & Bhoyar, M. (2025, February). Blockchain-Powered Solutions for Carbon Neutral and Sustainable Economies. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1510-1515). IEEE.
112. Yamsani, N., Kaur, A., Sarasu, P., Khan, S., Singh, H. K., & Bhoyar, M. (2025, February). Machine Learning Applications in Inflation Forecasting: A Comparative Study of FAVAR and BVAR Models. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1-5). IEEE.
113. Kumar, K. S., Anne, K. R., Khan, S., Rakhra, M., & Bhoyar, M. (2025, February). Blockchain-Enabled Smart Contracts for Transparent and Sustainable Supply Chains. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1482-1488). IEEE.
114. Yamsani, N., Kant, V., Sarasu, P., Khan, S., Kaur, B., & Bhoyar, M. (2025, February). Data-Driven Financial Services: Advancing Payment Systems Through Fintech Innovations. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1506-1509). IEEE.
115. Jagadish, S., Verma, G., Anne, K. R., Khan, S., Singh, H. K., & Bhoyar, M. (2025, February). The Role of AI in Rational Expectations and Behavioral Economics. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1502-1505). IEEE.
116. Ravi, K., Bhuria, R., Sarasu, P., Khan, S., Kaur, B., & Bhoyar, M. (2025, February). AI-Driven Predictive Modeling for Real-Time Economic Forecasting. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1477-1481). IEEE.
117. Chukka, N. D. K. R., Kaliappan, S., Maranan, R., Dhal, P. K., Mounika, A., & Bhoyar, M. (2025, February). The Rise of Digital-First Banking: Fintech Innovations Shaping the Future. In 2025 International Conference on Technology Enabled Economic Changes (InTech) (pp. 1025-1029). IEEE.
118. Dr. Nimisha Beri, Mayur Bhoyar, Mr. Ashish B. Samarth, Mr. Sumit R. Raut. (2024). ENDURING BELIEFS AND EVOLVING PRACTICES: THE INFLUENCE OF MATHEMATICS TEACHERS' BELIEFS ON INSTRUCTIONAL QUALITY AND STUDENT PERFORMANCE. Utilitas Mathematica, 120, 1255–1267.
119. Dr. Parminder, Mr. Sumit R. Raut, Mayur Bhoyar, Mr. Ashish B. Samarth. (2024). HARMONIZING NUMBERS AND NOTES: ENHANCING MATHEMATICAL MODELING WITH MUSICAL RHYTHMS IN TEACHER PROFESSIONAL DEVELOPMENT. Utilitas Mathematica, 120, 1268–1277.
120. Mayur Bhoyar, Mr. Sumit R. Raut, Mr. Ashish B. Samarth, Dr. Anoop Beri. (2024). Cross-Cultural Examination of Cognitive Flexibility in Arithmetic: Replicating Rathgeb-Schnierer and Green's Methodology among Asian Language-Speaking Students. Utilitas Mathematica, 120, 1218–1231.
121. Mayur Bhoyar, Mr. Ashish B. Samarth, Mr. Sumit R. Raut, Dr. Anoop Beri. (2024). DECODING THE GEOMETRIC PROOF: A RUBRIC-BASED ANALYSIS OF CONGRUENT TRIANGLE REASONING ERRORS AMONG ASIAN STUDENTS. Utilitas Mathematica, 120, 1232–1243.
122. Mayur Bhoyar, Mr. Ashish B. Samarth, Ravshan Nurimbetov, Mr. Sumit R. Raut, Dr. Anoop Beri. (2024). ASSESSING MATHEMATICAL MODELING PROFICIENCY IN

K-12 EDUCATORS: INSIGHTS FROM THE MATHEMATICAL MODELING KNOWLEDGE SCALE (MMKS) IN ASIA. Utilitas Mathematica, 120, 1244–1254

123. Viswanathan, Venkatraman. "Pioneering Ethical AI Integration in Enterprise Workflows: A Framework for Scalable Team Governance." Available at SSRN 5375619 (2024).
124. Viswanathan, Venkatraman. "Embedding Ethical Principles into Generative AI Workflows for Project Teams." (2024).