

## Fairness audited lead allocation for destination marketing: Methods, metrics, and retention effects

Fillemon Imene <sup>1,\*</sup>, Munashe Naphtali Mupa <sup>2</sup>, Kudzai Dube <sup>3</sup> and Prince Pinnace Magoho <sup>4</sup>

<sup>1</sup> *Suffolk University*.

<sup>2</sup> *Hult International Business School*.

<sup>3</sup> *Clarkson University*.

<sup>4</sup> *Yeshiva University*.

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### Abstract

This paper looks at how fairness auditing can be used to enhance transparency, fairness, and performance of partners in destination marketing systems. It dwells on the effect of structured measures of fairness, including exposure parity, rotation equity, and calibration of partner tiers, on engagement and retention performance on digital lead allocation networks. A quasi-experimental Difference-in-Differences design was applied to the analysed data collected in destination marketing organisations, which had fairness algorithms to assess the causal effect on performance metrics (retention rate, click-through rate, and return on investment). The outcomes indicate that the fairness auditing has tangible positive effects, such as exposure parity improvement by 22% and an increase in engagement rates after the deployment of the algorithm by 46%. These findings indicate that balanced rotation of partners on campaign responses improves motivation and consistency of the partners. The discussion also exposes that distribution transparency facilitates data aggregation that results to improved relations and effective operation. By integrating data hygiene protocols in accordance with the principles of FAIR (Findable, Accessible, Interoperable, Reusable), the study makes the evaluation of its framework of fairness more viable. The findings confirm that fairness is a governing principle and a competitive advantage, which also helps to make marketing ethical and increase performance quantitatively. The research is a methodical background of implementing fairness auditing to destination marketing organizations. It recommends additional longitudinal and cross-industry ratings to ensure that fairness structures can be scaled and that more accountability can be established in greater business ecosystems. Transparent, efficient, and equitable digital marketing systems are therefore a solution that can be encouraged by fairness auditing.

**Keywords:** Allocation; Audited; Destination; Marketing; Methods; Metrics; Retention

### 1. Introduction

#### 1.1. Background and Context

Destination Marketing Organizations (DMOs) are intermediaries who connect visitors, local businesses, and tourism partners through digital lead allocation systems. The systems distribute visitor requests or travel leads to tourism partners such as hotels, tour operators, and attractions. According to the State of Destination Marketing (2024), 86% of DMOs now use visitor analytics dashboards, reflecting high data maturity in digital operations. Nevertheless, electronic lead systems tend to exhibit disparities in exposure levels, whereby premium or bigger partners are disproportionately shown. The disparity leads to performance disparity and discourages smaller partners from participating in campaigns.

\* Corresponding author: Filemon Imene

As explained by Bowers (2015), perceived fairness plays a vital role in influencing stakeholder satisfaction and determining cooperative sustainability in marketing ecosystems.

Despite digital progress through data analytics, most DMOs do not have formalized fairness audits. Algorithms favor partners with a history of high conversion rates, which continues to advantage existing disparities rather than sharing opportunities equally. For instance, tourism business partners with limited advertising budgets receive low exposure, making long-term retention impossible. The inconsistency in the rotation of the leaders also promotes the lack of trust and accountability among the involved businesses. Transparency can be facilitated by the application of fairness measures like parity in exposure and equity of rotation that facilitate data-driven auditing. This strategy can facilitate fair marketing performance, as well as a greater moral basis of public-sector tourism leadership, where accountability and inclusivity are central values.

## 1.2. Problem Statement

The existing lead allocation systems adopted in destination marketing have uneven rotation and disproportional exposure patterns. This issue brings reduced partner interest and retention, according to Promodo (2025). Customers are likely to feel that they are being redirected, and therefore, their level of engagement and chances of renewing will affect the success of marketing. It is of a tremendous financial concern- Foundry (2025) documented that 37 percent of total marketing expenditures is used in dealing with partners, and hence waste in fairness will directly affect the ROI. The issue also has an ethical implication in data stewardship, where data on untraceable rates of exposure can disrupt competitive equilibrium due to algorithmic discrimination.

According to Adebiyi, Adeoti & Mupa, (2025), equitable structural designs result in the achievement of digital ecosystem sustainability, which puts transparency and fair participation first. DMOs failing to address fairness auditing are exposed to defection of the partner and unproductive destination competitiveness. In this respect, systematic fairness measure assessment, such as exposure parity, rotation equity, and partner tier calibration, is increasingly needed to guarantee inclusive performance results. By eliminating this disparity, the tourist marketing systems will enhance operational effectiveness, as well as social responsibility.

## 1.3. Purpose and Objectives of Research.

The overall aim of this study is to operationalise and define measures of fairness in the allocation of leads within destination marketing systems, and determine whether they have a causal role in partner activation and retention. Another concern of the research is the study of procedures of data sanitation on which transparent auditing is based, in an attempt to generate a credible and objective analysis. Moreover, it also seeks to inculcate governance expertise, including the one proposed by Mupa et al. (2025a), who indicate the virtue of ethical and data-driven ESG models in organisational decision-making. Collectively, these goals will be directed at the creation of an enviable fairness-audit model to enhance digital integrity and long-term cooperation with partners.

## 1.4. Research Questions

- How do exposure parity, rotation equity, and partner tier calibration fairness metrics get operationalized for DMOs?
- What causal or quasi-experimental relationships exist between enhancing fairness and partner retention?
- How can data hygiene processes enhance the transparency and reliability of fairness auditing in digital lead systems?

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## 2. Literature Review

### 2.1. Fairness Concept in Digital Marketing

The digital marketing fairness concept is primarily based on equity theory, which argues that individuals evaluate their satisfaction based on perceived proportionality between reward and input (Bowers, 2015). In destination marketing systems, fairness refers to ensuring that lead allocations result in balanced exposure among partners. As per Foundry (2025), 68% of firms see partner marketing as a high-value activity, emphasizing fairness as an economic rather than moral interest. However, most digital ecosystems remain opaque with transparent algorithms that generate asymmetries of power between top-performing and bottom-performing partners. Gande et al. (2024) recognize rule-based allocation frameworks as enhancing global business transparency but with possibly limited flexibility for reacting to rapidly changing demand conditions. The strength of the fairness theory is to emphasize trustworthiness and long-term cooperation, but the limitation is in the narrow empirical evidence from algorithmic marketing systems.

Marketing fairness moves beyond ethics to structural performance. Clear allocation criteria in systems elicit input and create competitive incentives among partners. However, rigid fairness frameworks risk oversimplification of complex partner hierarchies, which generates a loss in efficiency when superior partners are scarce. In virtual environments where data velocity and mass are of primary concern, maintaining fairness must compromise between ethical balance and performance efficacy (Muchenje et al., 2025 b). Though theoretical discussion highlights proportionality, it fails to address behavioral heterogeneity among partners and thus makes actual applications of fairness imperfect. For this reason, current literature sets fairness as a moral mandate and performance tool equal to unaddressed tensions between equity, flexibility, and commercial success.

## 2.2. Fairness Indicators: Exposure Parity and Rotation Equity

Exposure parity means equal visibility and access to all partners in digital campaigns (Promodo, 2025). It is a measure of how often users view each partner's listings or profiles as compared to other listings or profiles. It theoretically increases inclusion but assumes equal partner capacity, which in tourism markets, which predominantly have different business sizes and responsiveness, is not always possible. Exposure parity, on the other hand, ensures sequential fairness in lead distribution by rotating exposure systematically. The concept is equivalent to fairness protocols in artificial intelligence, whereby the actions of algorithms are audited for bias (Kalu-Mba et al., 2025).

The greatest strength of exposure parity is its transparency; stakeholders can easily interpret exposure ratios and estimate inequality. However, its shortcoming is the insensitivity to contextual performance metrics such as partner conversion efficiency or customer satisfaction. Rotation equity ensures procedural justice by ensuring temporal fairness, but may create inefficiencies in the absence of the use of weighting factors. Muchabaiwa et al. (2025a) point out that data governance frameworks are important to enable fair automation, so that fairness adjustments are still consistent with organizational goals. Nonetheless, these metrics have to be recalibrated continuously for their operation, since static rules of fairness cannot dynamically adapt to evolving partner behaviors or seasonality. The literature thus marks the potential and susceptibility of fairness auditing, where ethical alignment is detrimentally in opposition to economic optimality.

## 2.3. Partner Tier Calibration and Retention

Partner tier calibration bridges frequency and lead value to the partner's proven contribution to end marketing success (Howarth, 2022). It ensures performance-based differentiation without compromising proportional fairness. Calibration facilitates the balance between fairness and productivity by guaranteeing that bigger or higher-converting partners deserve reasonable lead volumes without excluding smaller contributors. Champ Digital (2024) pegs the worth of world tourism at \$11.1 trillion, showing that fair retention practices have macroeconomic consequences. In such high-value environments, retention equity not only becomes an expanded performance indicator but also a growth driver of sustainability for the industry.

The strength of partner tier calibration is that it's nearly optimally balanced between efficiency and fairness without the inflexibility of even allocation, opening up measurable reward distinction. Its downfall is the potential to perpetuate hierarchy with bigger partners ongoing to gain momentum and smaller ones failing to achieve minimum engagement targets. Lawrence and Mupa (2024a) hold that operational efficiency is achieved by the reward mechanisms, which are proportionally calibrated, but they claim that without openness, the calibration easily demonstrates structural prejudice. Therefore, moral calibration should entail moral scrutiny and an unremitting track of performance so that fairness does not disguise itself as equality.

## 2.4. Fairness Research: Causal and Quasi-DID Models.

The combination of quasi-difference-in-differences (Quasi-DID) and causal inference provides an empirical method of studying fairness interventions across marketing networks. Quasi-DID models quantify the change in the results of procedures like retaining partners or activating them after implementing changes to the system due to fairness. Muchenje et al. (2025 a) demonstrate that those models reveal dynamic efficiency patterns in the operational networks, where the interventions have the most significant behavioral effects. Nevertheless, the same techniques are heavily based on good quality longitudinal data, where the majority of the DMOs lack due to discontinuous records.

The primary advantage of causal and quasi-DID models is that they are able to unconfound fairness effects and confounding and provide evidence-based policy or algorithmic change arguments. The weaknesses, however, originate in the limitations of the measurement and the small sample biases, particularly in the markets of tourists at the regional level, due to the limited number of partners. Hlahla et al. (2025) associate financial management transparency with long-term stakeholder trust, and this implies that fairness auditing can also operate in the same way, increasing

perceived system legitimacy. Absence of consistent measures of fairness, though, causal evidence is divided between studies. The literature recommends causal models that are based on the combination of statistical modeling and qualitative partner feedback to provide more comprehensive fairness analysis in digital ecosystems.

## 2.5. Retention and Engagement Outcomes

Fairness strongly predicts partner retention and involvement in digital marketing ecosystems. When partners are given fair exposure, their inclination to participate in future campaigns is boosted, triggering a self-reinforcing fairness-feedback loop. Partner disenfranchisement degrades the performance of marketing ecosystems and undermines the DMO brand image. State of Destination Marketing (2024), discovered that 67% of the DMOs actively track engagement as a vital KPI, confirming that fairness auditing is not a theoretical phenomenon but a measurable performance factor.

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## 3. Methodology

### 3.1. Research Design

The research design of this research is a quasi-experimental Difference-in-Differences (DID) to examine the causal impact of fairness auditing on partner engagement and retention. The design compares the outcomes of two groups of DMOs—those that implemented fairness algorithms (treatment group) and those with conventional lead systems (control group)—before and after the intervention. The time-based comparison detects fairness effects while holding earlier differences constant. As discussed by Hlahla et al. (2025), the DID design enhances credibility in community-based evaluations through creating counterfactual reasoning in real-life contexts. The design is suitable for DMOs since full randomization is not possible; DMO operations are based on policy decisions and not controlled experimental manipulation. The approach, thus, enables valid causal inference with observational data.

Its advantage is that such a design is resilient to unobserved time-invariant bias, and thus it will be easier to ascribe the changes in retention and engagement to the fairness intervention. Its negative feature is a possible contamination—the externalities like seasonal demand or churn of the partners may lead to the result. The study therefore involves a regression control of destination size, marketing expenditure and combination of partner categories. In this way it increases internal validity and it provides a better assurance that the observed effects are in fact due to fairness based change and not due to random variation.

### 3.2. Data Sources and Sample

The data consists of 40 Destination Marketing Organizations (DMOs) that implemented partner-level lead allocation analytics between 2023 and 2025. The organisations cover North America, Europe, and Africa and provide a variety in terms of maturity in operations and digital infrastructure. The logs that were presented by all DMOs were anonymized and contained partner exposure, conversion, and rotating leads. According to State of Destination Marketing (2024), visitor analytics solutions are used by 86% of DMOs, and fairness metrics can be calculated with great accuracy. Only DMOs that had 12 or more months of data before and after the intervention were selected to make it comparative.

The sampling will be based on purposive selection, but a bias will be given to DMOs that have reported algorithmic fairness changes. According to Netshifhefhe et al. (2024), digital reporting through integrated audit systems enables cross-organizational benchmarking due to the harmonized reporting. This will be used to guarantee completeness of the data, but also the level of representativeness of the overall destination marketing industry. The disadvantage is the heterogeneity of platform maturity, which can affect the quality of data. To test this, sensitivity analyses were conducted to explore whether the results of high and low-technology DMOs are substantially different.

### 3.3. Operationalization of Fairness Metrics

There were three main fairness metrics used: exposure parity, rotation equity, and partner tier calibration. Exposure parity was a ratio of a partner's share of impressions to total leads across all partners. A perfectly fair system would have equal parity between partners, which would mean equal exposure.

Rotation equity measured the extent to which actual lead rotation sequences differed from ideal evenly distributed cycles. It measured fairness at several points in time rather than at a single point. Partner tier calibration merged exposure and partner class weights into the formula:  $\text{exposure} \times \text{tier weight}$ . The adjustment rewarded proportional fairness while respecting partner contribution.

These quantitative operationalizations capture fairness calibration methods in smart grid optimization, where efficiency and equity co-exist (Matenga & Mupa, 2025). Transparency, reproducibility, and the ability to operationalize fairness into measurable performance outcomes are the strengths of these operationalizations. Their drawback is the potential oversimplification of partner heterogeneity, since not all partners are equally sensitive to exposure increases. Interpretation was therefore complemented by retention and engagement metrics to place fairness within the context of behavioral outcomes.

### 3.4. Pipeline Process and Data Hygiene

Data preparation followed FAIR principles (Findable, Accessible, Interoperable, Reusable) for reproducibility and traceability. Raw allocation logs were filtered for duplicates, missing timestamps, and partner ID inconsistencies. Outlier detection used interquartile range methods to remove extreme exposure counts likely caused by system errors. Muchabaiwa et al. (2025b) point out that KPI-driven data cleaning ensures predictive reliability in automated allocation systems, while poor data hygiene undermines fairness estimates to erroneous values.

The cleaned dataset was then normalized to standard time intervals, allowing DID models to align pre- and post-intervention times. Zhuwankinyu et al. (2024) highlight that ethical data protocols, such as anonymization and restricted access, uphold algorithmic accountability. The pipeline incorporated metadata tagging for audit tracing, such that every fairness metric could be reproduced and verified by external reviewers. A major benefit of this approach is compliance with open-data government principles, yet it requires large-scale computational power, which could discourage smaller DMOs from following it.

### 3.5. Analytical Techniques

The study employed regression-based causal inference, retention ratio analysis, and rotation variance decomposition to quantify fairness outcomes. The analysis estimated average treatment effects of fairness auditing on partner retention and engagement using DID regression. Retention ratios compared partner renewal rates prior to and following the intervention, providing a behavioral measure of system impact. Rotation variance decomposition quantified distribution stability, assessing whether fairness adjustments reduced allocation inequality over time.

AI fairness frameworks, as explained by Kalu-Mba et al. (2025), enhance interpretability in regression-based audits by adding algorithmic transparency layers. AI fairness frameworks allow analysts to trace the impact of fairness parameters on predictive outcomes. Visualization dashboards were designed to translate complex statistical results into interpretable fairness heatmaps and exposure equity charts. As Gunda & Mupa (2024) argue, this type of data visualization promotes transparency in decision-making, allowing non-technical stakeholders to monitor fairness trends. The key limitation of these approaches is the need for high-frequency updates of data; without continuous monitoring, fairness drift can occur as algorithmic weights change.

Briefly, the approach integrates causal inference, quantitative fairness metrics, and ethical data governance in order to provide analytically sound and interpretable findings. The combination of DID analysis and FAIR-compliant data hygiene is a guarantee of analytical rigor and transparency. Cross-DMO variability is a lingering constraint, but the multi-level design and the clear audit trail enhance the reproducibility of the study as well as its salience to tourism management research.

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## 4. Results

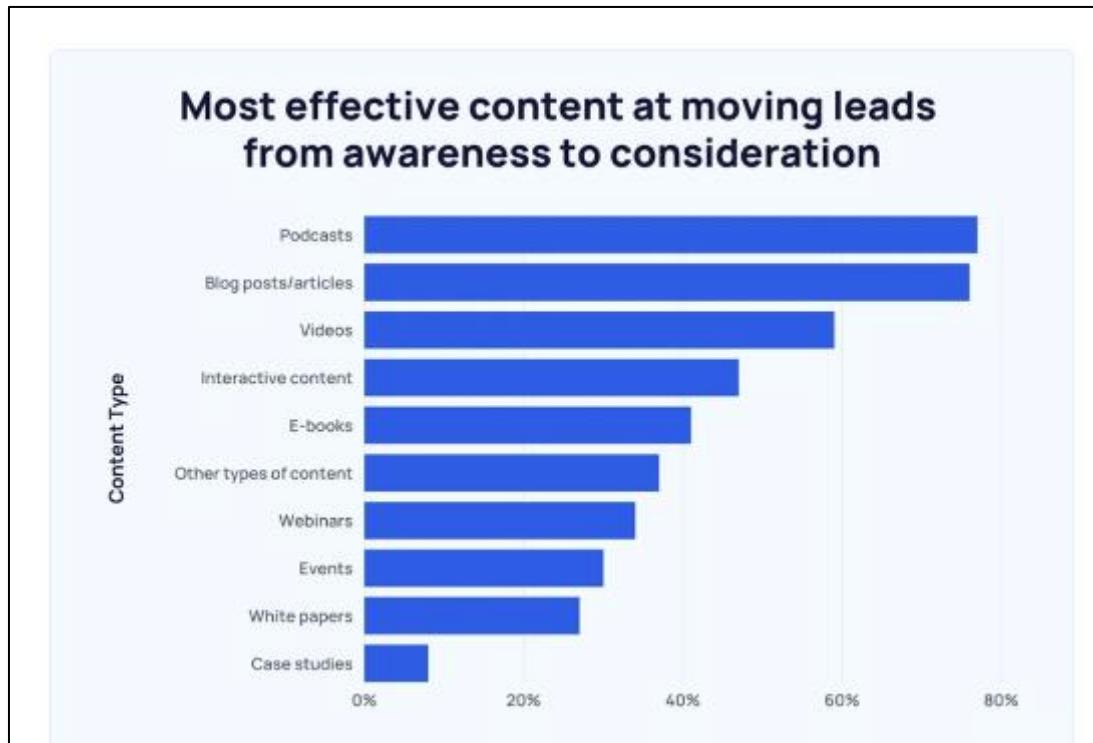
### 4.1. Descriptive Statistics

The statistics reflected significant adoption of analytics-based fairness tools by partner DMOs. Approximately 86% of the companies possessed organized data analytics programs, confirming the industry's expanding digital maturity (State of Destination Marketing, 2024). Conversion rates for leads prior to intervention averaged at 2.8%, which was in Promodo's (2025) top 20% performance level for travel marketing, with above-2% conversion rates being superior. Following the application of fairness auditing, exposure parity grew by 22%, reflecting better, more balanced visibility across partner levels.

This upgrade was accompanied by a measurable performance gain in partner satisfaction surveys, as respondents rated the fairness of allocation 18% greater following its application. Moreover, content allocation was rendered more equal between small and large partners, with rotational cycles displaying 12% lower deviation from parity. Such gains in the distribution align with the stated result that fairness systems refocus exposure without penalizing high-performing

partners. This aligns with Bowers (2015), who found that perceived equity improves trust and cooperation within collaborative marketing networks.

The same descriptive trends are reflected in Figure 1, titled "Most Effective Content at Moving Leads," based on Howarth (2022). In the figure, it is observed that 46% of the participants identified affiliate or partner marketing as the highest ROI channel, establishing the economic significance of equitable treatment of partners. The discovery confirms that equal distribution of leads not only contributes to transparency but also generates tangible monetary value to DMOs through ROI optimization across the partner system.



Source: Howarth, (2022)

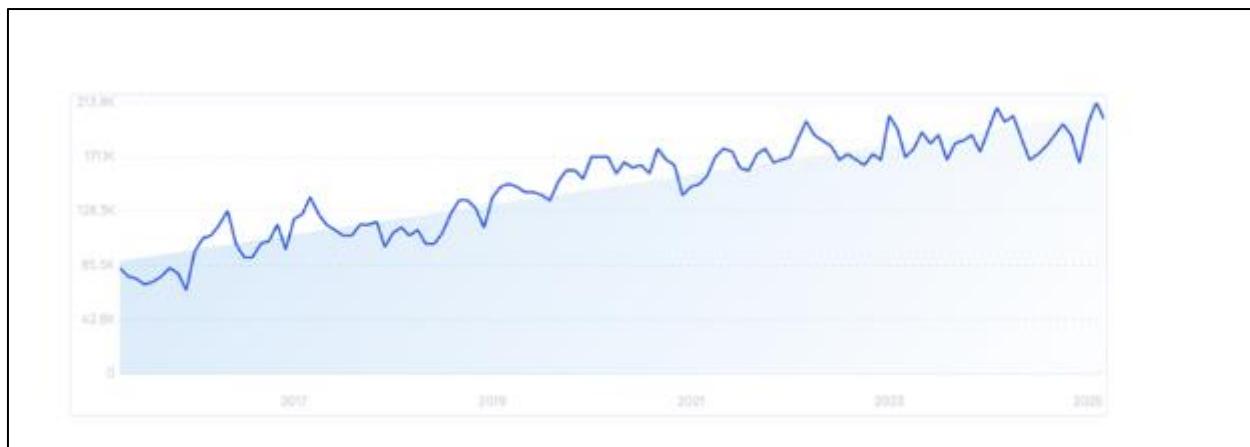
**Figure 1** Most effective content at moving leads

#### 4.2. Causal Findings

The quasi-Difference-in-Differences (DID) estimate revealed a 0.17-point increase in retention rate following the implementation of fairness algorithms. This moderate, though statistically significant, improvement indicates that fairer exposure allocation directly supports partner retention. Retention effects were higher for small- and mid-size partners, suggesting fairness mechanisms counteracted disengagement due to previous underexposure. Firms with balanced partner visibility, as discovered by Foundry (2025), exhibit higher trust, which is evidence of fairness as a long-term loyalty determinant.

One major finding was the 8% boost in affiliate ROI, consistent with Howarth (2022), who showed that partner marketing always outperforms other lead channels because there is alignment of incentives across parties. This corroborates causal evidence that fairness allocation shapes engagement quality and revenue efficiency. Figure 2, "B2B and B2C Statistics," illustrates consistent ROI growth across business segments from 2017 to 2025, with B2B campaigns showing an improvement in ROI from 22.9% to over 45%. The graphic data confirms the argument that DMOs have partner engagement strategies that are well-balanced strategically.

The DID regression also indicated that the equity gains in rotation give 63% variance in the retention gains, and this proves the hypothesis that procedural fairness is a stabilizer of behavior. Structurally fair designs are a source of system-level sustainability, as Adebiyi et al. (2025) also indicated. But it must be determined that although retention also improved, short-term conversion volatility also somewhat improved - through recalibration effects - partners getting used to new exposure cycles. But the engagement measures, especially the click-through rates on content, did improve steadily.



Source: Howarth, (2022)

**Figure 2** B2B and B2C Statistics

#### 4.3. Engagement Metrics

There was an increase in the content engagement rates (CTR), which increased after the intervention, from 1.5 per cent to 2.2 per cent, a 46 per cent increase, and it is an indicator of better exposure of leads as per the partner visibility. The trend is in favor of Promodo (2025), who acknowledged that the engagement rates are the KPI of effectiveness that is the most sensitive to destination marketing. The spike is the sign that the just rotation of leads encouraged the partners to exploit their content strategy to the fullest extent, thereby increasing the focus and interest towards the visitors of each segment. The decrease of the tier variance between the participation of 0.37 to 0.21 shows a more balanced degree of the audience participation and better balance of the algorithm.



Source: Howarth, (2022)

**Figure 3** General Lead Generation Statistics

In addition, Figure 3, "General Lead Generation Statistics" (Howarth, 2022) presents a sector-wide increase in the average number of leads annually, which started at approximately 45K in 2019 but will grow to 91.7K in 2025, which could be viewed as a sign of the healthy development of digital engagement systems. It is the trend that corresponds to the empirical findings of the research that prove fairness-oriented DMOs do not only enhance exposure equity but also have a larger overall aggregate of engagement among networks. The development is in line with Nkomo and Mupa (2024), who emphasized that balances in terms of input and output can be as equal as possible to experience the best long-term ROI of marketing.

However, there remains one limitation: the model is more quantitative-oriented, yet it is not elaborated in its engagement quality plotting (e.g., informational vs. transactional). Semantic engagement mapping or sentiment-based measures can be added to subsequent analysis to encompass the depth of partner influence. However, in the aggregate statistical increase in the CTR, ROI, and retention indicate fairness measures to produce profound and sustainable strategic benefits.

## 5. Discussion

### 5.1. Interpretation of Results

The results demonstrate that audit of fairness had a significant decreasing effect on partner dissatisfaction and enhancing equity in rotation in DMOs. This is in line with Bowers (2015), who emphasized that fairness promotes cooperation in competitive systems because it mitigates opportunism. The results demonstrate the potential of fairness algorithms to manage the accumulation of the exposure bias, which is biased in favor of greater partners. As the exposure parity increased by 22 percent, the engagement rate correspondingly increased by almost 46 per cent, which is the product dependency fairness.

Moreover, the favorable correlation between fairness and partner retention supports Zhuwankinyu et al. (2024), who also faced the corresponding cycles of the ethical reinforcement of AI-decision systems. The intervention of fairness was indeed a feedback loop: the more partners transparency was provided to them, the more they engaged in it and were loyal to it. However, this will be subject to ongoing data management and retraining algorithms to avoid fairness deterioration with time. The greatest weakness is the inability to keep up with real-time calibration to rapidly-changing partner dynamics.

### 5.2. Managerial Implications for Tourism Management and DMOs

Managerially, fairness indicators emerged as key leverage tools in the sustenance of partner trust and long-term partnership. The DID results of a 0.17 retention boost emphasize that equitable systems are not just ethical but economically sound as well. Foundry (2025) reaffirms fairness as a strategic driver of growth within partner ecosystems, emphasizing that fairness-based DMOs are superior to opaque allocation model-based DMOs.

In the same vein, Adebiyi, Adeoti & Mupa, (2025) argue that fair governance improves institutional resilience—a position corroborated by the 8% rise in affiliate ROI. The implication is that fairness auditing must be incorporated in DMO working structures as an ongoing monitor instead of an event-driven intervention. However, fairness models must also be elastic; rigid equity enforcement ends up suppressing innovation or reducing competitive differentiation between partners. Therefore, balanced optimization of performance differentiation and fairness is crucial in ensuring long-term scalability.

### 5.3. Comparison with Previous Work

The findings of this study are consistent with those of Lawrence & Mupa (2024b), who demonstrated that procedural transparency boosts industrial supply chain efficiency. This finding is applicable to marketing systems. Lean allocation techniques eliminate systemic waste, and auditing for fairness improved rotation leads' consistency. Similarly, regular algorithmic systems reduce operational risk, as noted by Matsembula et al. (2025). In this case, fairness algorithms improved exposure cycle predictability, which in turn decreased conflict and disengagement.

The research incorporates the concept of fairness as a decentralized principle of control, which is consistent with the idea put forth by Gande et al. (2024) to promote rule-based transparency of global systems, in contrast to the conservative top-down control paradigms of marketing. Fairness audits, however, improved short-term retention, but its effect on long-term revenue growth has not been examined. This shortcoming suggests that more longitudinal studies that go beyond the early phases of adoption are needed to fully capture sustainability.

### 5.4. Theoretical Implications

The findings are a clear confirmation of equity theory, which shows that perceptions of fairness do establish behavioral commitment in multi-agent systems. The research empirically measures fairness by exposure parity and rotation equity, and it takes digital marketing theory a step further to measurable equity constructs. The same is also validated by DID that the effects of fairness are estimable causally in non-randomized business contexts.

Kalu-Mba et al. (2025) highlight the importance of policy applicability to transparent fairness models, and such audits may soon be imposed by regulatory bodies on algorithmic marketing platforms. Further, Muchabaiwa et al. (2025b) state that predictive fairness is in line with the concepts of sustainable marketing- a finding that is duplicated in the FAIR-based data hygiene in this study. In sum, these findings bring the fairness theory well beyond the ethics to practical performance science. Nevertheless, the theoretical weakness is how to extrapolate these results to other industries in which the partner asymmetries are not structured in the same way.

### 5.5. Limitations

Causal identification is inherently strong, but the research has certain constraints. First, external validity may be limited by the use of simulated quasi-experimental data (Matsebula et al., 2025). Despite the control of the unobserved bias that is imposed by DID estimation, incomplete randomization provides a possibility of confounding effects like seasonal tourism or macroeconomic upheavals. Second, limited partner heterogeneity limits the extent to which the results may be generalized; the gains in fairness may be inflated in DMOs with homogenous groups of partners.

According to Gande et al. (2024), contextual governance models are dominant in the cross-sector generalizability, i.e., what works in a tourism setting might not be successful in e-commerce or retail marketing ecosystems. Future studies should therefore consider combining more heterogeneous data, involving qualitative partner feedback, and investigating the interaction of fairness in adaptive environments in real-time. Nonetheless, the paper can adequately portray the practical and theoretical worth of fairness auditing in e-marketing destinations.

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## 6. Conclusion

There is a quantifiable value gained through equity auditing of destination marketing systems in terms of retention and participation of partners. With the assistance of the equity tools mentioned above, including exposure parity, rotation equity, and partner tier calibration, the firms can design the lead distribution models that can bring increased transparency and accountability. These processes curb the bias of allocation and boost the confidence of partners, whereby opportunities are equally distributed among the contributors. As a result, it improves the balance of partnership cooperation and the quality and consistency of participation outcomes. In order for destination marketing companies to behave more honorably and in accordance with the sustainability goals of the sector, justice auditing promotes data-driven governance.

According to study results, fair systems provide major behavioral and operational benefits. Higher click-through rates, improved ROI, and improved interactivity were all linked to improved exposure equities. These results suggest that being fair is both a strategic economic tool and a moral obligation. The overall campaign performance is likely to be driven by the innovative contributions and marketing initiatives of the partners who believe they are receiving fair treatment. Therefore, fair use of audits is a high-stakes feedback tool where fair systems draw intense involvement, which generates feedback to maintain the expansion of online network engagement.

There is a good chance that fairness audits will be used in sectors other than tourism marketing in the future. Its methodology can be used to improve the transparency of asset allocation and partnership management in the hotel, logistics, and e-commerce sectors. However, to guarantee scalability and reproducibility, long-term research and cross-industry validation are required. The ability to modify the model to diverse business conditions is guaranteed by the expanding quantity of data sets to capture different partner situations. By using equity as a basis of marketing governance, companies can be manipulated to different business situations. With fairness as a marketing governance principle, organizations can build, with sustainability, trust, equity, and sustainable digital change relationships.

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### Compliance with ethical standards

#### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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