Methods for Evaluating the Impact of Marketing Campaigns on Traffic Growth in Shopping Centers

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Abstract: *The article presents a theoretical and comparative analysis of modern methods for evaluating the impact of marketing campaigns on pedestrian traffic growth in shopping centers. The study is based on an interdisciplinary approach that integrates structural equation modeling, causal machine learning, neural network forecasting algorithms, and empirical case studies from both European and CIS market contexts. Particular attention is paid to the comparison of short-term and long-term marketing effects, as well as the distinction between B2C and B2B segments. The analysis includes data on foot traffic, sales dynamics, digital campaign reach, and internal reports from City Capital Group and Respublika Park shopping mall, confirming the effectiveness of event-based marketing strategies, branded collaborations, and digital channels. Effect verification was conducted using stratified comparison, cross-validation, and spatio-temporal predictor analysis. Universal performance indicators were identified, including traffic growth, motivation coefficients, and media engagement, forming the basis for a methodological framework for evaluating marketing effectiveness. The findings support the scalability of successful practices while accounting for local market specificities. This article will be of interest to professionals in marketing, urban planning, and commercial real estate, as well as researchers in digital economy and consumer behavior in urban environments.*

Keywords: marketing campaigns, shopping centers, pedestrian traffic, quantitative assessment, structural modeling, digital marketing, B2C and B2B, causal analysis, event marketing, commercial real estate.

1. Introduction

In the wake of a post-pandemic transformation of consumer behaviour, the growing importance of digital channels, and heightened demand for flexible retail formats, shopping centres' marketing strategies have shifted towards quantitatively verifiable forms of audience engagement. Comparative studies of visitor behaviour patterns underscore the need to revise methods for assessing marketing effectiveness by incorporating cost factors and the quantitatively measurable increase in foot traffic as the primary performance indicator [10].

The lack of unified approaches to the quantitative verification of traffic effects has become particularly significant in the modern context. As S. Baghaee et al. note, motivation to visit shopping centres depends on a combination of temporal, spatial, and qualitative factors, including journey duration and tenant mix [1]. Meanwhile, M. Rakić et al. demonstrate that forecasting the transport demand generated by shopping centres requires accounting for multidimensional parameters, among which marketing activities play a crucial role [6]. An analysis of shifting consumer patterns in the post-COVID period by G. Mortimer et al. confirms the necessity of adapting promotional strategies to meet increased expectations for comfort, safety, and event-driven experiences [5].

Theoretical analysis of methods for evaluating marketing's impact on shopping-centre traffic is warranted by the need to develop a comprehensive framework that integrates accumulated empirical observations and guides their practical application amid high variability in consumer environments. Existing research provides a basis for identifying representative evaluation parameters, including attendance-growth coefficients, motivation indices, anchor-tenant significance, and the structure of interaction channels.

This study aims to analyse current approaches to the quantitative assessment of marketing campaigns' effects on traffic growth in shopping centres, identify the key parameters used in empirical investigations, and on this basis substantiate a methodological framework suitable for application across various retail real-estate formats.

2. Materials and Methods

The study was conducted as a theoretical–analytical review with elements of case analysis, aimed at identifying and comparing the methods used for quantitative assessment of marketing campaigns' impact on pedestrian traffic in shopping centres. The primary focus was on integrating academic approaches with data drawn from practical case studies, thereby systematizing existing solutions and delineating the boundaries of their reproducibility across diverse contexts.

The methodology rests on a systematic review of validated publications and project reports. Included were studies presenting results with confirmed quantitative verification, employing structural modeling, causal analysis, and predictive models leveraging artificial-intelligence technologies. The analysis follows a comparative-approach framework, extracting parameters amenable to generalization and subsequent application within a theoretical scaffold.

Applied methods comprised:
- Content analysis of publications;
- Identification of key quantitative indicators (reach, traffic growth, sales);
- Verification of statistical significance of results and evaluation of their external validity.

In S. Baghaee et al. [1], a structural-equation model (SEM) demonstrated the influence of temporal and assortment

factors on visitor motivation. M. Rakić et al. [6] implemented a traffic-forecasting model based on multi-level neural architectures and adaptive fuzzy systems, enabling quantitative estimation of marketing's contribution to transport demand. G. Mortimer et al. [5] employed a comparative approach to consumer behaviour before and after the pandemic, assessing shifts in expectations and the resilience of interest in retail spaces under external shocks. P. D'Alberto et al. [2] analysed increases in mobile visits following digital advertising campaigns, recorded via geolocation data—one of the few sources offering verified growth metrics that allow unambiguous interpretation of campaign effects. H. Langen and M. Huber [4] demonstrated the use of causal machine learning to evaluate consumer response to promotions, utilizing stratified comparisons and cross-validation. A. Rantala [7] presented an empirical case at Sello Shopping Centre, testing audio ads, social-media initiatives, and offline events, which yielded a 4.69 % traffic increase. A. K. Vallapuram et al. [8] conducted a causal analysis of anchor-tenant effects using spatial-correlation models.

To refine the practical applicability of theoretical insights, internal reports from City Capital Group, and Respublika Park shopping mall were additionally analysed. These reports provided data on visitation dynamics, audience engagement, event-promotion reach, and sales growth in response to integrated marketing campaigns. They enabled alignment of quantitative indicators with marketing-type (media, events, partnerships). Significance testing was grounded in studies featuring statistical validation: SEM modeling in [1], AI-based models in [6], and geospatial analyses in [2] and [8]. Such research offers high explanatory power and reproducibility, making it pertinent for constructing a methodological framework.

Thus, the adopted approach combines interdisciplinary analysis, rigorous factual verification, and data comparability, ensuring a robust foundation for subsequent conclusions and the development of an analytically sound model for evaluating marketing's influence on shopping-centre traffic.

3. Results

The analysis of quantitative indicators reported in scholarly literature and retail-project reports made it possible to structure the empirical foundation required for comparing the impact of marketing campaigns on traffic dynamics, visitor motivation, and economic outcomes. Three key dimensions were examined: the typology of anchor tenants, the principal predictors of visit motivation, and the aggregate effect of implemented advertising strategies. Table 1 displays the distribution of the top ten anchor-store categories and brands by their share of outlets in Greater London up to 2013 [8].

Table 1: Top 10 Anchor Store Categories and Brands by Percentage of Stores in Greater London till 2013 (Source: [8])

Category	% of Stores	Brand	% of Stores
Grocery Store	23.67	Tesco	14.01
Clothing Store	14.98	Boots	5.59
Pharmacy	6.43	Sainsbury's	5.54
Convenience Store	5.33	Co-op Food	3.75
Bookstore	4.27	WHSmith	3.29
Electronics Store	3.08	Iceland	2.54
Hardware Store	2.9	Argos	2.36
Shoe Store	2.8	Superdrug	2.25
Office Supplies	2.57	Marks & Spencer	2.08
Women's Store	2.48	TK Maxx	1.9

As Table 1 indicates, grocery outlets and clothing retailers occupy the foremost positions, serving as stable magnets for customer traffic. An anchor-tenant mix focused on everyday consumption underpins a steady footfall pattern, which in turn provides a reliable basis for subsequent marketing initiatives.

Table 2 presents the results of hypothesis testing on the influence of infrastructural and assortment factors on shopping-centre visit motivation, using a structural-equation model [1].

Table 2: The Results of Hypotheses Testing (SEM Model) (Source: [1])

Hypotheses	Path Coefficient (β)	T-value	R^2	Result
Travel Time → Motivation	0.557**	5.923	0.787	Confirmed
Variety of Shops → Motivation	0.494**	8.065	0.787	Confirmed

Note: Path coefficients are significant at the 99 % confidence level.

Both parameters exhibit statistically significant effects on visitor motivation. The coefficient β = 0.557 denotes a strong positive relationship between travel time and motivation to visit, while β = 0.494 reflects a substantial, if slightly lower, effect of shop-variety on motivation. T-values exceeding the 2.58 threshold for 99 % confidence confirm the robustness of these effects. An R^2 value of 0.787 indicates that the combined influence of these factors explains 78.7 % of the

variance in visitor motivation, demonstrating the model's high explanatory power.

Table 3 summarises the quantitative outcomes of marketing campaigns implemented in three retail-project case studies, based on internal company data.

Table 3: Quantitative Outcomes of Marketing Campaigns in Three Retail Projects (based on internal company data)

Indicator	Value
Foot Traffic Growth	500,000 visitors, +20% increase
Sales Growth	+125% (in specific categories), +10–15% on average
Media Reach	200,000 unique contacts
Awards and Recognition	National awards in BTL and event marketing sectors

As shown in Table 3, the campaigns produced a multifaceted impact—from a 20 % rise in visitation to more than a twofold increase in sales within selected categories, along with significant media recognition and industry awards. The achieved metrics for reach and engagement validate the relevance of the chosen communication channels and activation tactics. Collectively, these data provide empirical confirmation of the effectiveness of theoretically grounded approaches to evaluating marketing's influence on shopping-centre traffic dynamics.

4. Discussion

The effectiveness of theoretical models for evaluating marketing's impact on traffic and consumer behaviour in shopping centres was assessed through analysis of three empirical case studies, each reflecting different scale, market contexts, and communication tools. The empirical base comprised projects executed by City Capital Group, and Respublika Park shopping mall, all of which employed metric systems enabling quantitative verification of outcomes.

In the Respublika Park shopping mall case, 500 000 visitors were recorded in the first month after opening—an effect characteristic of a short-term peak, accompanied by heightened engagement and consumer interest. Concurrently, a media reach of 200 000 individuals and sponsorship funding amounting to 20 % of the campaign's total budget demonstrate the communication strategy's efficiency and ability to monetize brand-building assets. Brand-awareness surveys conducted subsequently confirmed a 30 % increase in recognition.

The City Capital Group case focused on event-based marketing: festivals, seasonal events, and collaborations with local brands generated a sustained traffic increase of up to 20 % and tenant-sales growth of 10–15 %. The analysis differentiated short-term spikes in attendance during events from long-term effects, such as strengthened loyalty and longer average lease durations. It showed that high-engagement events—particularly cultural and gastronomic festivals—act as catalysts for both B2C and B2B segments, enhancing tenant satisfaction and facilitating new contract signings.

In all three cases, empirical results were compared against academic sources. S. Baghaee et al. [1] identify spatial-temporal factors and tenant variety as key determinants of visit motivation, while G. Mortimer et al. [5] confirm that comfort, event density, and safety parameters influence consumer interest—findings mirrored in City Capital Group's event campaigns. M. Rakić et al.'s transport-demand forecasting model [6] underscores marketing's contribution to traffic dynamics, as evidenced by the sharp attendance rise in the Respublika Park case.

This case-based analysis highlights the core components of the author's strategy, which has consistently delivered results across diverse projects. At its heart lies an event-oriented marketing model in which highly engaging activities—blending entertainment, brand-image enhancement, and commercial objectives—serve as the central communicative driver. Well-executed events create compelling reasons to visit the centre, strengthen emotional brand associations, and rapidly expand the contact database.

A second pillar of the strategy is the integration of offline and digital channels to achieve a synergistic effect. Out-of-home advertising, social-media marketing, online promotions, and partnership activations enable broad audience reach, support multichannel engagement, and extend brand-contact duration. Particularly effective has been the coordination of events with digital activities—social-media promotion, retargeting, influencer partnerships, and online registration—which facilitate predictive traffic management.

The third element is metrics-driven management, encompassing systematic monitoring of four key indicators: foot traffic, reach, sales, and engagement. Using these metrics in combination prevents one-dimensional performance assessments and allows for multidimensional interpretation of impact. For example, attendance growth is analyzed in absolute terms and by campaign type, timing, seasonality, and target segment; sales are tracked by category; and engagement is measured via repeat visits, interaction depth, and digital-channel activity.

Adaptability to macroeconomic challenges—such as the COVID-19 pandemic, evolving consumer habits, and market volatility—constitutes the fourth strategic element. The ability to rapidly reconfigure communication formats, scale successful tactics, and adjust scenarios to new conditions has proven critical for resilience. The post-pandemic launch of Respublika Park, executed amid economic uncertainty, demonstrated that adaptability directly influences effectiveness.

From synthesis of these components, a unified model for assessing marketing performance in retail real estate can be formulated, based on three core principles: verification of metrics, causal-effect analysis, and evaluation of effect sustainability over time. The first principle prioritizes statistically validated quantitative indicators (e.g., SEM models, geospatial analytics, sales analysis). The second requires methods capable of establishing correlations and impact mechanisms (e.g., stratified comparisons, causal machine learning). The third entails assessing both immediate audience response and delayed effects—through metrics of

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engagement dynamics, repeat-visit rates, and stability of lease agreements.

In sum, the author's methodology transforms into an analytical framework that can be replicated across institutional contexts, adapted to local conditions, and applied for strategic marketing planning in retail property.

5. Conclusion

The present study has systematized contemporary approaches to assessing the impact of marketing campaigns on traffic growth in shopping centres, identified the key quantitative and qualitative parameters of successful strategies, and outlined the methodological foundations for their further verification. It was determined that the post-pandemic transformation of consumer behaviour—accompanied by shifts in motivation and visitation patterns—necessitates a rethinking of established marketing practices and a move toward a formalized metric system grounded in validated data.

A comparative analysis of empirical sources revealed that effective marketing strategies are characterized by highly targeted approaches, a combination of event-driven formats, digital interaction channels, and premium branded collaborations. The durability of observed effects is confirmed through multichannel verification spanning both offline and online environments. Moreover, distinctions were noted between short-term and long-term outcomes, as well as between campaign impacts on B2C and B2B segments.

Special attention was paid to interpreting successful case studies as potentially representative for the CIS market and the EU markets. Demonstrated increases in traffic and sales in specific projects—validated by quantitative metrics—indicate the feasibility of scaling effective practices and developing a universal model for evaluating marketing performance that can be adapted to local conditions.

Thus, the approach presented herein enables a shift from descriptive assessments of marketing activity to the construction of an analytical framework that integrates predictive models, quantitative metrics, and cross-case syntheses. Future research directions include deepening the analysis of long-term effects of marketing strategies on consumer behaviour, developing tools for differentiated evaluation across audience segments, and adapting existing models to the evolving dynamics of digital communication channels.

References

[1] Baghaee, S., Nosratabadi, S., Aram, F., & Mosavi, A. (2021). Driving factors behind the social role of retail centers on recreational activities (arXiv preprint arXiv:2104.02544). arXiv. https://doi.org/10.48550/arXiv.2104.02544

[2] D'Alberto, P., Milenkiy, V., & Azizi, F. F. (2023). Digital advertising: The measure of mobile visits lifts (arXiv preprint arXiv:2307.12875). arXiv. https://doi.org/10.48550/arXiv.2307.12875

[3] Gong, C., Yao, D., Zhang, L., Chen, S., Li, W., Su, Y., & Bi, J. (2024). CausalMMM: Learning causal structure for marketing mix modeling (arXiv preprint arXiv:2406.16728). arXiv. https://doi.org/10.48550/arXiv.2406.16728

[4] Langen, H., & Huber, M. (2022). How causal machine learning can leverage marketing strategies: Assessing and improving the performance of a coupon campaign (arXiv preprint arXiv:2204.10820). arXiv. https://doi.org/10.48550/arXiv.2204.10820

[5] Mortimer, G., Osorio, M. L., & Fazal-e-Hasan, S. M. (2024, January). From traditional to transformed: Examining the pre- and post-COVID consumers' shopping mall experiences. Journal of Retailing and Consumer Services, 76, 103583. https://doi.org/10.1016/j.jretconser.2023.103583

[6] Rakić, M., Bogdanović, V., Garunović, N., Simeunović, M., Stević, Ž., & Radović Stojčić, D. (2024). The forecasting model of the impact of shopping centres in urban areas on the generation of traffic demand. Applied Sciences, 14(19), 8759. https://doi.org/10.3390/app14198759

[7] Rantala, A. (2024). The impact of marketing on shopping center foot traffic [Bachelor's thesis, Laurea University of Applied Sciences]. Theseus. https://www.theseus.fi/bitstream/handle/10024/870706/Rantala_Annika.pdf

[8] Vallapuram, A. K., Kwon, Y. D., Lee, L.-H., Xu, F., & Hui, P. (2022). Causal analysis on the anchor store effect in a location-based social network (arXiv preprint arXiv:2210.13582). arXiv. https://doi.org/10.48550/arXiv.2210.13582

[9] Wonggor, S., & Heaetubun, F. (2024, March). Shopping center marketing strategy in increasing visitor traffic in Manokwari City Mall. American Journal of Economic and Management Business, 3(3). https://doi.org/10.58631/ajemb.v3i3.71

[10] Yiu, C. Y., Truong, Q. L., Kou, J., & Cheung, K. S. (2024). Retail rings of influence: Rethinking retail catchment analysis in the light of purchasing power. Journal of Retailing and Consumer Services, 76, 103591. https://doi.org/10.1016/j.jretconser.2023.103591