Frontiers in Economics and Management Volume 7 Issue 11, 2026
ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

Research on the Optimisation of Business Analysis to Empower Omni-channel Marketing Resource Allocation

Jiadi Zhao[a]

Changsha Tuite Intelligent Technology Co., Ltd., Changsha, China

[a]17673100594@163.com

Abstract

In the omni-channel marketing environment, enterprise marketing channels continue to extend to e-commerce platforms, social media, short video platforms, offline stores and private domain channels, and the allocation of marketing resources faces problems such as increasing channels, data dispersion and changes in user demand. Business analysis can rely on multi-source data integration, user behaviour analysis and market trend prediction to provide data support for enterprises to identify channel value, judge user needs and adjust marketing investment. This article focusses on business analysis to empower omni-channel marketing resource allocation, analyses its role in channel identification, resource investment and allocation forecasting, and sorts out the real dilemmas brought about by channel data dispersion, channel value differences and changes in user behaviour. On this basis, optimisation paths are proposed from different aspects to provide reference for enterprises to improve the efficiency of omni-channel marketing resource allocation.

Keywords

Business Analysis; Omni-Channel Marketing; Resource Allocation; User Behaviour; Marketing Decision-Making.

1. Introduction

Digital technology promotes the continuous expansion of consumption scenarios. The channels for consumers to obtain information, choose goods and complete transactions are more diversified, and enterprise marketing activities have gradually formed an omni-channel pattern of online and offline interconnection. Marketing resources are crucial drivers of a firm's business strategy. Businesses deploying their marketing resources better than their competitors can obtain competitive advantages.

Different channels have different functions in user access, brand communication, transaction transformation and relationship maintenance. The traditional way of budgeting based on single-channel data is difficult to accurately reflect the cross-channel behaviour of users and the actual effect of resources[1-2]. Business analysis can integrate data such as sales, users, platforms and marketing activities, and assist marketing decision-making with the help of behaviour analysis and trend prediction, providing a more detailed data basis for resource allocation. Based on this, this article analyses from the three levels of action mechanism, actual dilemma and optimisation path, and explores how business analysis can promote the rational allocation of omni-channel marketing resources and provide ideas for enterprises to improve the level of marketing management.

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

2. The Mechanism of Business Analysis to Empower Omni-channel Marketing Resource Allocation

2.1. Integrate Multi-source Data to Improve Channel Recognition Ability

Omni-channel marketing resource allocation needs to be based on relatively complete data. Enterprises can integrate data such as sales systems, customer relationship management systems, e-commerce platforms, social media and offline stores into the unified analysis framework. Data integration is not simply to summarise the data of different platforms, but to establish a unified index calibre and user identification method, so that information from different channels can be analysed in association. After cleaning, de-weighting and standardised processing, enterprises can form a relatively complete channel data set and compare it from the dimensions of user source, access frequency, conversion behaviour, consumption amount and repurchase situation. Business analysis tools can further transform complex data into visual results, so that managers can intuitively understand the operating status of each channel. When channel data can be interconnected, enterprises can identify the specific roles of different channels in user contact, relationship maintenance and transaction transformation, and provide a more reliable information basis for marketing budget and operational resource allocation.

2.2. Analyse User Behaviour and Optimise Marketing Resource Investment

Table 1. User behaviour characteristics and marketing resource investment

User Type	Key Behavioral Characteristics	Marketing Resource Allocation
Potential Converting Users	Frequent browsing and substantial interaction, no purchases yet	Content push & discount reminders
High-value Users	Repeated purchases and high spending volume	Membership benefits & repurchase incentives
Category-preference Users	Purchases concentrated on specific product categories	Targeted recommendation & associated marketing
Low-activity Users	Low browsing frequency and weak interaction	Low-cost outreach & re-engagement campaigns
New Users	First-time visits with limited purchase records	New-customer offers & product introduction

User behaviour data covers consumer browsing, interaction, purchase and repurchase, which can provide a basis for the differentiated investment of marketing resources. Enterprises can identify different user groups according to the frequency of user behaviour, consumption amount, purchase category and degree of interaction, and allocate marketing resources in combination with their current consumption stage[3-4]. As shown in Table 1, for potential conversion users who browse frequently but have not yet purchased, content push and discount reminders can be added; for users who have purchased many times and have a high consumption amount, resources can be invested in membership rights, repurchase incentives and new product recommendations; for users with obvious category preferences, they can buy around their history. Record and carry out related recommendations. Low-activity users are suitable for low-cost wake-up methods, and new users can lower the threshold of first consumption through new customer discounts and product introductions. Business analysis can transform user behaviour data into a layered basis, so that marketing investment can shift

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

from the average configuration for the whole user to the precise configuration for different groups. With the continuous changes in user browsing, purchasing and interaction behaviour, the system can also dynamically update user classification and promote the adjustment of advertisements, discounts and content resources according to changes in user value, so as to reduce ineffective reach and improve the efficiency of marketing resource use.

2.3. Predict Market Changes to Enhance the Forward-looking Nature of Resource Allocation

Market demand is highly uncertain. Seasonal changes, holidays, consumption trends and competitive activities may all affect consumers' purchasing behaviour. If enterprises rely entirely on historical sales data for resource arrangement, it is easy to be unprepared when demand changes rapidly[5-6]. Business analysis can use historical orders, user searches, browsing trends and marketing activity data to establish predictive models to judge changes in demand at different times in the future. For example, before the peak of festival consumption, enterprises can estimate commodity demand according to historical sales trends and current search popularity, and arrange advertising budgets, inventory publicity and promotional resources in advance. When the forecast shows that the user activity of a channel may decline, it is also possible to reduce resource investment in advance and transfer the budget to channels with higher growth potential. Predictive analysis has changed the way of "post-adjustment" of traditional marketing resources, so that resource allocation can be moderately moved forward to market changes and improve the ability of enterprises to cope with demand fluctuations.

3. The Real Dilemma of Omni-channel Marketing Resource Allocation

3.1. Channel Data Dispersion Leads to Insufficient Basis for Resource Allocation

With the increasing number of marketing channels, multiple independent data systems are often formed within enterprises. The e-commerce platform records order and payment information, social media precipitates interactive data, offline stores grasp in-store consumption and membership information, and the live platform forms viewing, click and conversion data. Different systems have differences in data format, statistical calibre and update frequency, which is easy to form information islands. When marketing managers need to judge the overall effect of an activity, they often need to extract data from multiple platforms and summarise it manually, which not only increases the cost of analysis, but also may cause data omissions. Although some enterprises have established data platforms, unified user identification rules have not been formed between channels, and it is difficult to judge the continuous behaviour of the same consumer in different channels. Incomplete data base will weaken the application effect of business analysis, so that resource allocation still relies more on historical experience, and establish a more stable data base for subsequent marketing analysis[7].

3.2. Marketing Investment Imbalance Caused by Channel Value Differences

Judging from the current background, there are differences in user coverage, communication efficiency, conversion ability and operating costs between different marketing channels. It is easy to allocate budgets based on sales or exposure, which is easy to cause imbalance in resource investment. Take Coca-Cola Hong Kong's omni-channel marketing practice as an example. The enterprise optimises the media mix with the help of data analysis. The activity conversion rate increased by 23% compared with the benchmark, and the sales increased by 6% compared with the same period last year, reflecting the need for dynamic evaluation of different channels based on actual contributions. Based on this idea, this article builds a channel value evaluation model from the dimensions of user reach, interactive communication,

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

transaction conversion and cost investment. The value of e-commerce platforms, social media, search channels, short video platforms and offline retail is shown in Figure 1. E-commerce platforms undertake transaction transformation, social media focusses on brand communication, search channels connect active demand, short video platforms expand content reach, and offline retail strengthens consumption experience[8-9]. Enterprises should combine the channel cost, conversion effect, repurchase performance and user life cycle value adjustment input ratio to avoid excessive concentration of the budget on a single channel.

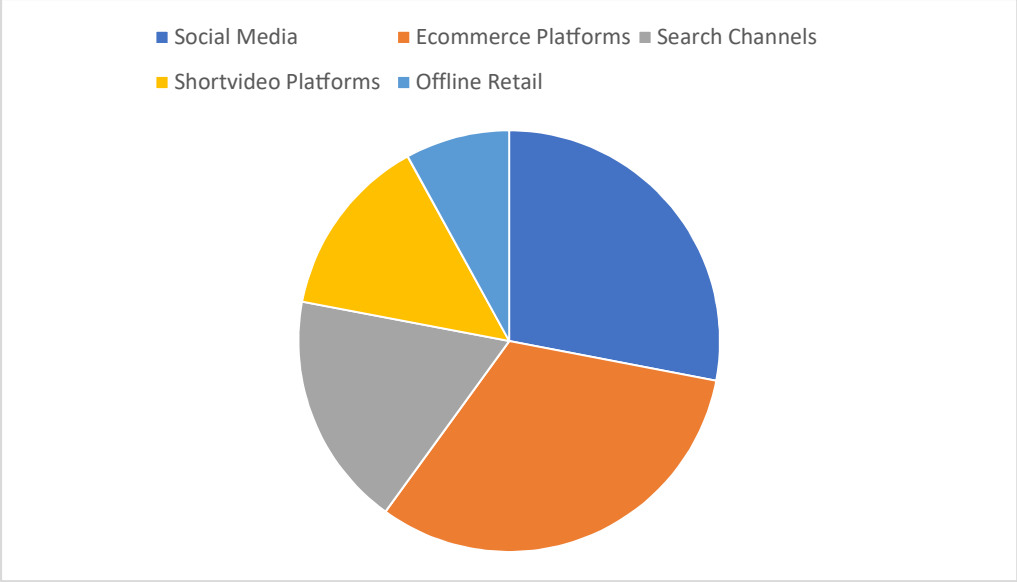


Figure 1. The proportion of value of different marketing channels

3.3. Changes in User Behaviour Increase the Difficulty of Resource Allocation

Consumers' behaviour in an omni-channel environment has strong mobility, and age, consumption scenarios, product types and promotional activities may all affect their channel choices. If the user portraits formed in the past are not updated for a long time, they may not accurately reflect the current needs of consumers. For example, users may enter the e-commerce platform to search for products after contacting brand information on the short video platform, or they may complete the purchase through online channels after experiencing it in physical stores. Traditional marketing management often counts users according to channels, and it is difficult to completely restore this cross-channel behaviour. After the user's interests change, if the enterprise still advertises according to the old labels, it may cause the marketing content to mismatch with consumer demand, affecting the effect of resource use. Business analysis can identify consumption changes through behavioural data such as user browsing, clicking, collecting, purchasing and repurchase, and adjust user classification according to behavioural characteristics to improve the matching between marketing activities and the actual needs of consumers.

4. Business Analysis Empowers the Optimisation Path of Omni-channel Marketing Resource Allocation

4.1. Build an Omni-channel Marketing Data Analysis System

The optimisation of omni-channel resource allocation needs to start from the construction of data infrastructure, and enterprises should establish a unified data analysis framework around the complete marketing journey of consumers. User sources, browsing behaviour, content interaction, consultation records, purchase orders, after-sales feedback and repurchases can be

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

included in the data system, and unified data standards can be formulated for different business scenarios. For the data generated by e-commerce, stores, social platforms and private domain channels, a clear data interface and update mechanism should be established to reduce the information barriers between different systems. At the analysis level, indicators such as channel traffic, user conversion, marketing cost, customer value and repurchase performance can be set to form a data calibre that can be compared between different channels[10]. Data visualisation tools can transform the analysis results into channel operation boards, so that marketers can keep abreast of budget usage and channel performance. A stable data system can provide a foundation for the continuous operation of business analysis, which is also conducive to the formation of a more standardised marketing resource allocation process for enterprises.

4.2. Implement the Differentiated Channel Resource Allocation Strategy

There are differences in the marketing functions undertaken by different channels, and enterprises cannot use exactly the same resource input method for management. For channels with strong brand communication ability, content production, brand promotion and user interaction resources can be appropriately allocated; for transaction channels with high conversion ability, the budget can be arranged around advertising, promotional activities and member operation; for private domain channels with strong user relationship maintenance, it can increase Add community operation, membership service and accurate recommendation resources. Business analysis can judge the input and output performance of different channels through indicators such as channel customer acquisition cost, conversion rate, user value and repurchase rate, and then determine the proportion of resources in combination with the enterprise's stage marketing goals. After the channel performance changes, the resource allocation ratio also needs to be adjusted accordingly. Differentiation strategies can avoid resource mismatch caused by equal allocation of budgets, so that different channels can undertake marketing tasks that match their own characteristics.

4.3. Establish a User Stratification and Accurate Marketing Mechanism

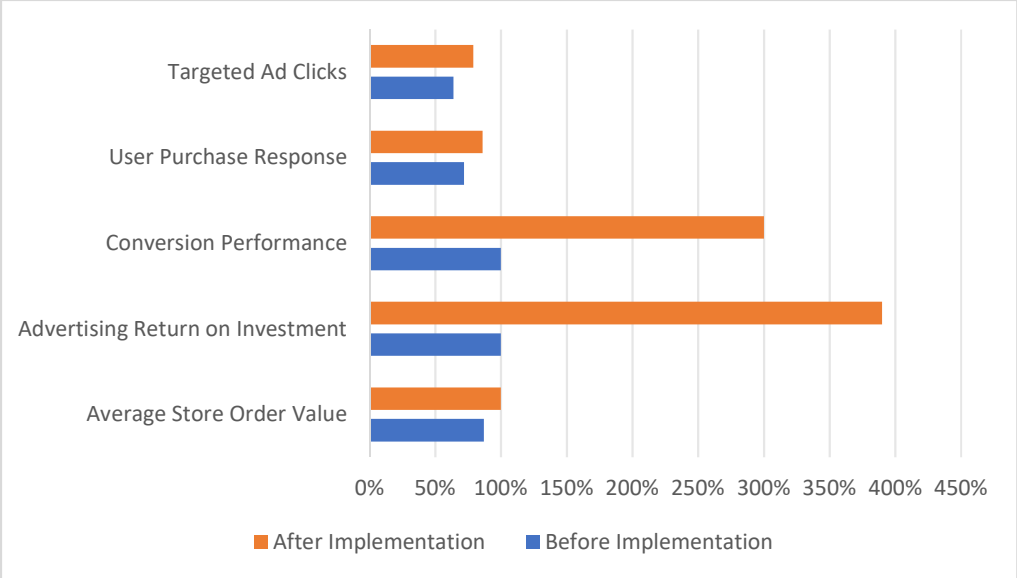


Figure 2. Comparison of the effect before and after the implementation of user stratification and precision marketing

Differences in consumer demand make it difficult for unified marketing to cover different groups. Enterprises can establish user stratification based on consumption frequency, purchase amount, product preference, degree of interaction and life cycle, and dynamically adjust labels in combination with channel behaviour data. Taking Sephora's digital marketing practises in

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

Singapore as an example, enterprises integrate online advertising, website visits and members' offline purchase data through Google Analytics 360, identify the consumption paths of different users, and optimise advertising placement and marketing resource allocation accordingly. According to the public case, after optimisation, the average store order amount increased by 13%, the return rate of advertising investment reached 3.9 times, and the conversion performance increased to 3 times. As shown in Figure 2, data analysis can help enterprises identify high-value users and adjust marketing methods according to the response of different groups. New users are suitable for configuring content education and preferential experience. Active users can get new product recommendations and membership rights and interests, and silent users can be activated through personalised reminders. With the changes in consumption behaviour, enterprises should also update user labels in time to make limited marketing resources closer to real needs.

4.4. Improve the Dynamic Allocation Mode of Marketing Resources

The marketing market is changing rapidly, and the resource allocation needs to keep a certain adjustment space. Enterprises can establish a budget dynamic allocation mechanism based on data monitoring, divide marketing resources into basic input and mobile input, and make moderate adjustments according to the real-time performance of the channel. The basic investment is used to maintain brand exposure, member operation and daily channel operation, while the mobile investment can be flexibly transferred according to sales trends, user activity and the effect of marketing activities. When a channel has traffic growth and good conversion performance, promotion resources can be increased; when the cost of channel customer acquisition continues to rise, it is necessary to reduce ineffective input and analyse the reasons. Dynamic allocation should also set clear adjustment standards to avoid managers from frequently changing marketing strategies due to short-term data fluctuations. By establishing a management process that connects data monitoring, abnormal identification, budget adjustment and result review, marketing resources can form a more flexible flow mechanism between different channels.

4.5. Strengthen the Evaluation of Marketing Input and Output Effect

Whether the allocation of marketing resources is reasonable needs to be verified through continuous effect evaluation. Enterprises can combine input costs with indicators such as sales revenue, new customers, user conversion and repurchase value to carry out comprehensive evaluation of different marketing channels. It is easy to ignore the functional differences between channels by simply using sales to measure marketing effects. Therefore, corresponding indicators can be set according to different goals such as brand communication, user interaction and transaction conversion. Business analysis can compare the data before and after the implementation of marketing activities, observe the relationship between changes in resource input and business results, and form a channel effect ranking and input-output analysis report. For channels with long-term investment but low returns, it is necessary to further judge whether there are problems in user quality, content form or operation mode; for channels with stable performance, their replicable operation experience can be studied. Continuous evaluation can help enterprises form a perfect closed loop and promote the gradual refinement of marketing resource allocation.

5. Conclusion

Under the background of omni-channel marketing, the allocation of enterprise marketing resources has gradually shifted from single-channel investment to data-driven multi-channel collaborative management. Business analysis can provide a more adequate basis for marketing budget arrangement and resource investment by integrating multi-source data, identifying

ISSN: 2692-7608 DOI: 10.6981/FEM.202611_7(11).0011

user behaviour, evaluating channel value and predicting market changes. In response to problems such as channel data dispersion, imbalance of marketing investment and changes in user behaviour, enterprises need to improve the omni-channel data analysis system, implement differentiated configuration according to different channel functions, and improve the efficiency of resource use in combination with user stratification and dynamic allocation mechanisms. Through continuous evaluation of marketing input and output, it can also form a management closed loop connecting data collection, analysis and judgement, resource allocation and effect feedback. In future practice, enterprises should continuously improve the level of coordination between data analysis ability and marketing decision-making to better adapt to changes in the omni-channel market environment.

References

[1] Anderl, E., Becker, I., von Wangenheim, F., & Schumann, J. H. (2016). Mapping the customer journey: Lessons learned from graph-based online attribution modeling. International Journal of Research in Marketing, 33(3), 457–474. https://doi.org/10.1016/j.ijresmar.2016.03.001

[2] Bradlow, E. T., Gangwar, M., Kopalle, P. K., & Voleti, S. (2017). The role of big data and predictive analytics in retailing. Journal of Retailing, 93(1), 79–95. https://doi.org/10.1016/j.jretai.2016.12.004

[3] Verhoef, P. C., Kannan, P. K., & Inman, J. J. (2015). From multi-channel retailing to omni-channel retailing: Introduction to the special issue on multi-channel retailing. Journal of Retailing, 91(2), 174–181. https://doi.org/10.1016/j.jretai.2015.02.005

[4] Buhalis, D., & Volchek, K. (2021). Bridging marketing theory and big data analytics: The taxonomy of marketing attribution. International Journal of Information Management, 56, 102253. https://doi.org/10.1016/j.ijinfomgt.2020.102253

[5] Danaher, P. J., & van Heerde, H. J. (2018). Delusion in attribution: Caveats in using attribution for multimedia budget allocation. Journal of Marketing Research, 55(5), 667–685. https://doi.org/10.1177/0022243718802845

[6] Li, H., & Kannan, P. K. (2014). Attributing conversions in a multichannel online marketing environment: An empirical model and a field experiment. Journal of Marketing Research, 51(1), 40–56. https://doi.org/10.1509/jmr.13.0050

[7] Cui, T. H., Ghose, A., Halaburda, H., Iyengar, R., Pauwels, K., Sriram, S., Tucker, C., & Venkataraman, S. (2021). Informational challenges in omnichannel marketing: Remedies and future research. Journal of Marketing, 85(1), 103–120. https://doi.org/10.1177/0022242920968810

[8] Neslin, S. A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M. L., Thomas, J. S., & Verhoef, P. C. (2006). Challenges and opportunities in multichannel customer management. Journal of Service Research, 9(2), 95–112. https://doi.org/10.1177/1094670506293559

[9] Shankar, V., & Kushwaha, T. (2021). Omnichannel marketing: Are cross-channel effects symmetric? International Journal of Research in Marketing, 38(2), 290–310. https://doi.org/10.1016/j.ijresmar.2020.09.001

[10] Wedel, M., & Kannan, P. K. (2016). Marketing analytics for data-rich environments. Journal of Marketing, 80(6), 97–121. https://doi.org/10.1509/jm.15.0413