



## Driving Business Growth through Data Decision Making: The Role of Marketing Automation

Budi Johan<sup>1</sup>, Manahan Parlindungan Saragih Siallagan<sup>2</sup>

<sup>1,2</sup> School of Business Management, Institut Teknologi Bandung

**ABSTRACT:** The business landscape has transformed significantly with the abundance of information and rapid technological advances, creating numerous opportunities for data-driven decision-making to foster company growth. This research evaluates the impact of marketing automation systems on marketing communication channels using a quantitative analysis approach with data from organizations that have implemented these systems. Marketing automation has become essential for businesses, automating repetitive tasks such as email marketing and customer segmentation. This software personalizes messages for different segments, increasing customer engagement, adoption rates, and accelerating company growth while enhancing profit margins. This research contributes new knowledge by demonstrating the positive effects of marketing automation on organizational growth rates. It shows that companies adopting automated platforms see dramatic efficiency increases. Businesses using these platforms for data-driven decision-making experience higher effectiveness rates and attract more customers, improving overall performance. The study also addresses potential challenges during implementation, such as integrating data management systems and customizing processes for organizational readiness. Examining how marketing automation supports business growth, the insights gained are relevant for both academia and practitioners. This research highlights the importance of information-based marketing strategies and the potential of marketing automation to foster sustainable business growth. The findings provide practical guidance for optimizing marketing activities to achieve a competitive edge through appropriate marketing automation systems.

**KEYWORDS:** Business growth, Customer engagement platform, Data-driven decision making, Marketing automation, Marketing effectiveness.

### INTRODUCTION

The business world has been transformed by the explosion of data and technological advancements, which provide organizations with more information than ever before for making decisions that can drive growth. Against this backdrop, the current study investigates how marketing automation influences revenue generation as well as client acquisition and retention – all key performance indicators (KPIs). It adopts a quantitative methodology using data from establishments with implemented systems for automating their marketing. This study illuminates ways in which marketing automation drives business growth thereby serving academic researchers' and practitioners' requirements. The significance of basing marketing strategies on data is highlighted while also showing how transformative sustainable business development can be achieved through adopting automated marketing systems. Furthermore, findings from this research have practical implications for businesses seeking to improve their promotional activities by helping them choose relevant KPIs as well as guide them towards gaining competitive advantage through utilization of long-term oriented successfulness bringing about marketing automated systems.

### LITERATURE REVIEW

The business issues at BTPN Jenius, which currently operates and runs mostly manual processes, indicate a dire need for transformation.

Business Exploration

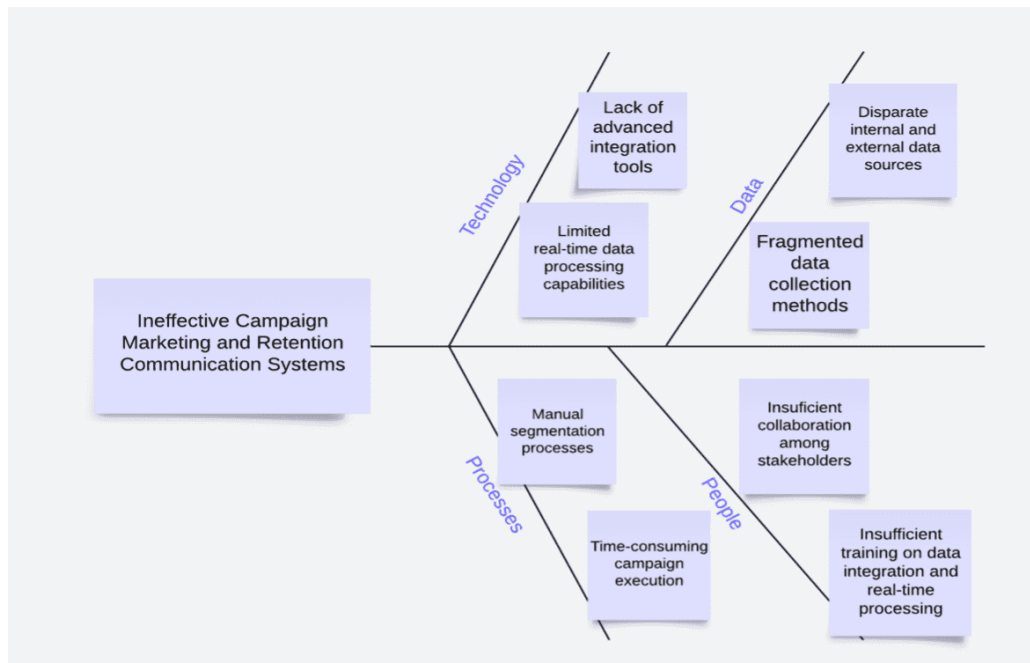


Figure 2.1 Fishbone Diagram on The Problem Business Exploration

Source: Author, 2024

According to Business exploration through the identification of launching a campaign with digital channel communication, there were some problems in marketing communication channel. All these problems are due to processes that are still operated manually which leads to inefficiency and ineffectiveness of marketing followed by retention campaign systems.

The Root Cause Categories based on the above analysis can be categorized into four (4) main frames:

1. Technology. Despite Jenius by Bank BTPN is well known as a pioneer of Digital Banking in Indonesia, it lacks the advanced integration tools to connect smart business processes with its core banking system. Additionally, the processes are primarily driven by manual work, severely limiting real-time data processing capabilities.
2. Processes. The research was noted from the study that segmenting data for one single campaign still depends on MIS team, this makes it not truly automated hence prone to human error, server downtime or any other technological challenge may also make it difficult to deliver marketing campaigns within tight schedules.
3. Data. While a significant amount of data points have been collected, the integration technology and processes still dump data into a datamart banking system. This leads to highly fragmented data, which can hinder the cleanup process of internal and external data sources.
4. People. There is a lack of coordination among stakeholders, and insufficient knowledge on know-how data integration and real-time processing exacerbates the issues. This affects the overall efficiency and effectiveness of marketing and retention campaigns.

The collection of information for marketing automation can be attributed to businesses adopting smart business practices. This approach encapsulates the entire architecture required for effective marketing automation.

The research will use, but is not limited to, the following study.

Smart business theory:

The establishment of a smart business entails the automation of a vast array of operational decisions, predominantly reliant on real-time data processing by machine-driven systems rather than human intervention supported by manual data analysis. This transformative endeavor unfolds through a systematic four-step approach. Firstly, the initiation of this process necessitates the comprehensive integration of data capture mechanisms across every customer interaction, effectively "datafying" the entirety of

customer exchanges. Secondly, the subsequent phase involves the encapsulation of all operational activities within software frameworks, thereby enabling the mechanization of decision-making processes. Thirdly, the pivotal step of facilitating seamless data transmission throughout the organizational ecosystem ensues, ensuring a continuous flow of information vital for informed decision-making. Lastly, the application of sophisticated algorithms is paramount, serving as the bedrock for automated decision-making processes, thus maximizing the efficacy of the system. This iterative progression towards automation underscores the concerted effort required to imbue businesses with the agility and adaptability essential for navigating the complexities of contemporary market dynamics (Zeng, 2018)

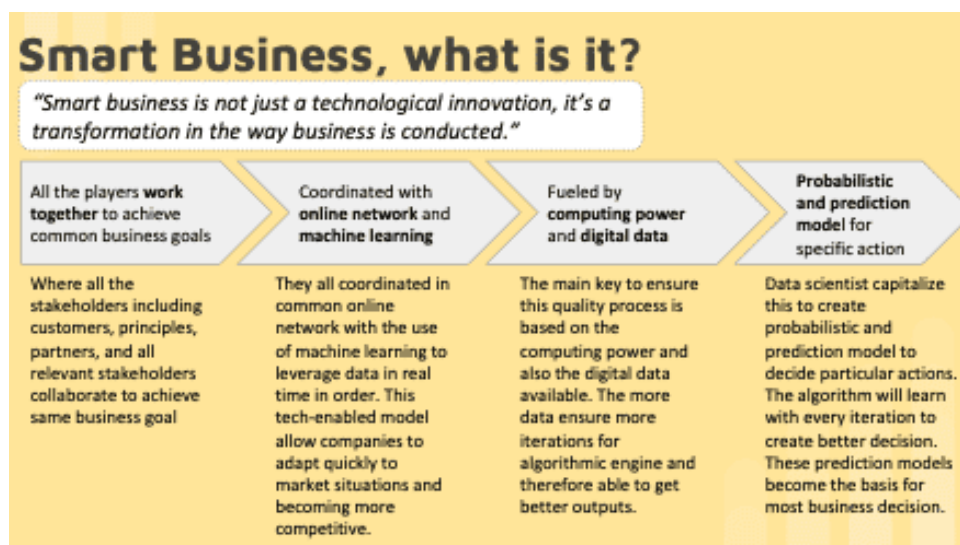


Figure 1.1 Smart Business

Source: Zeng (2018)

7Ds or Pillars Supporting Effective Digital Marketing:

As delineated by Chaffey (2022), marketing automation constitutes a pivotal component within the framework of digital marketing, facilitating enhanced strategization of audience engagement. It encompasses the integration of various elements encapsulated within the '7Ds or pillars supporting effective digital marketing', as illustrated in Figure 2.3 below

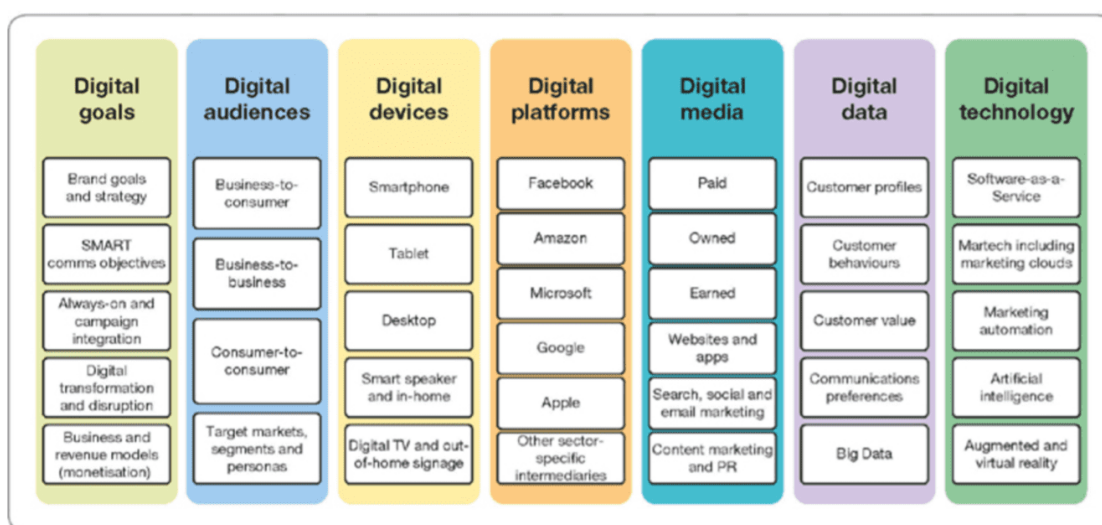
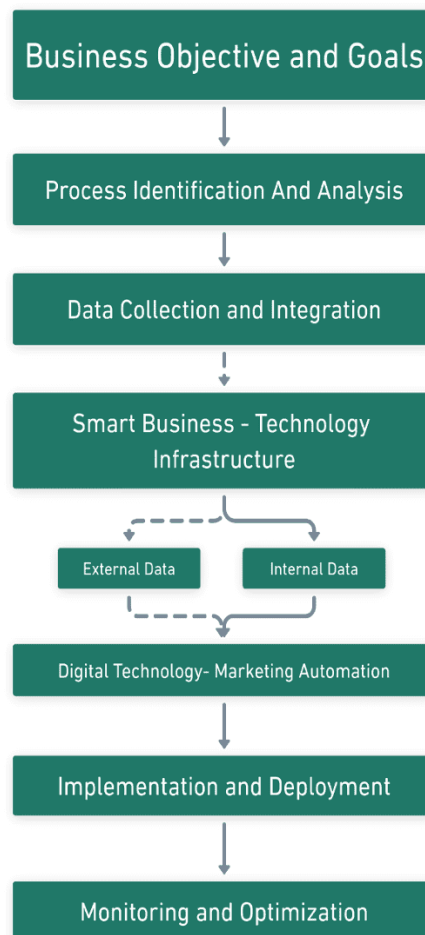


Figure 1.2 The 7ds Or Pillars Supporting Effective Digital Marketing

Source: Chaffey (2022)



The implementation of MAPs is particularly relevant in the financial sector, where personalized and efficient marketing strategies are crucial for customer acquisition and retention. To do this segmentation, the data need to be refined and datafying need to be done to input all data source and navigate between the segmentations. The effectiveness of multi-channel marketing campaigns is significantly enhanced using MAPs. Chaffey (2022) highlights that integrated marketing campaigns, which include push notifications, email communications, and social media advertising, provide a cohesive customer experience and improve overall campaign effectiveness. By leveraging MAPs, Jenius BTPN can ensure consistent messaging across various channels, thereby improving customer engagement and retention. For Jenius BTPN, utilizing MAPs to manage these communication channels can significantly improve response rates and customer engagement. Effective segmentation and personalization are critical for the success of marketing campaigns. MAPs enable businesses to analyze customer data and segment audiences based on behavior, preferences, and demographics (Peppers & Rogers, 2017). This capability allows Jenius BTPN to deliver highly targeted push notifications, email communications, and social media ads, enhancing the relevance and impact of their marketing efforts.



**Figure 3.1 Conceptual Framework**  
Source: Author, 2024

Research Question:

How does the implementation of a MAP influence Jenius BTPN's growth strategies to increasing product usage through cross-selling and upselling, improving customer retention, by enhancing the efficiency and effectiveness of customized multi-channel marketing campaigns, specifically focusing on the segmentation result of personalized push notifications, email communications, and social media advertising?

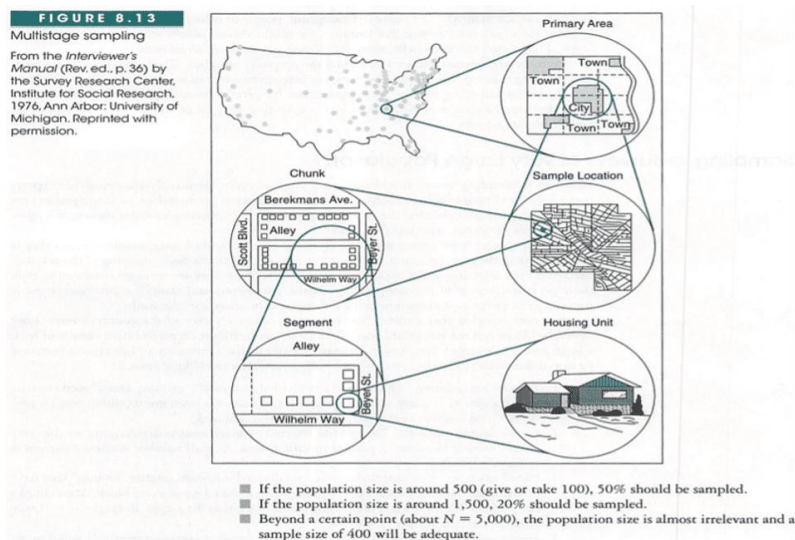
Objectives:

1. How effective are customized marketing campaigns managed by a Marketing Automation Platform in improving key metrics such as push notification response rates and email communications?
2. How does a multi-channel marketing strategy driven by a Marketing Automation Platform that incorporates Facebook Ads audience integration with platform identifiers reduce manual work while also increasing identifier matching rates?

This research about project-based marketing automation will concentrate on implementation and efficiency of Marketing Automation Platform (MAP) towards achieving set objectives which includes increase in effectiveness through different communication channels. It is also concerned with finding holistic remedies for various challenges encountered within BTPN Jenius business segment. The analysis will investigate how key performance indicators are affected upon adoption of this system; these KPIs are active customer growth, and reduction in churn rate among others. Evaluation shall be done on capabilities and features of chosen MAP to meet functional & technical requirements stated in project description. In its course, data integration, campaign execution, customer segmentation, multi-channel marketing as well as overall effectiveness used by the automation platform will be considered during this research. However, this research also will only use aggregate data in answering research questions thus experiencing difficulties reaching high level of realism and depth analysis. This limit can affect accuracy of produced conclusions. However, despite above limitations this study still aims at giving insights which are useful and making significant contributions towards knowledge concerning marketing automation also data driven segmentation strategy in banking.

**METHODOLOGY**

The data collection method is using behavioral data of users within app. Some of the data used are using Marketing Automation tools and mobile measurement partners/ trackers. The sampling also will be using a multistage version of cluster sampling (see Figure 3.1). At each stage of the game, units are selected randomly.

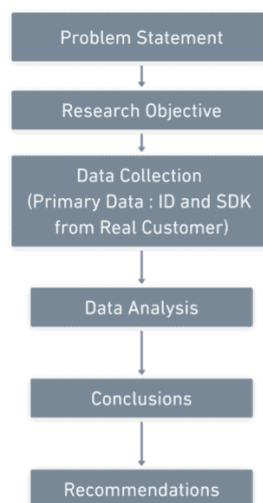


**Figure 3.2 Data Collection**

Source: Author, 2024

"Randomly" does not mean haphazardly or capriciously. Instead, a mathematical procedure is employed to ensure that selection is entirely random and the result of blind chance. This process should yield a sample that is, in all important respects, representative of the country's population. (Leedy & Ormrod, 2019). Marketing Automation Platform tools used in this research is called MoEngage. It helps marketers or product managers/owners looking to engage, reacquire, or retain customers. Consumer brands use MoEngage as a one-stop MarTech platform to keep customers engaged on multiple channels (such as PN, EDM, SMS, in-app, or WhatsApp) and multiple platforms (like mobile app and website). In other words, MoEngage is an insights-led omnichannel customer engagement platform. However, this research will be focusing solely on the EDM and PN and comparing between the manual process and the automated triggers with the full extent of features of Marketing Automation. Those insight and research will

be compared to the goals tracked using audience segmentations from trackers. The tracker used here are called MoEngage. MoEngage is insights-led Customer Engagement platform that empowers consumer brands to create personalized and impactful experiences for their customers across various channels. By integrating MoEngage SDK into the apps, attribution and analytics data are automatically collected for our apps. We can easily enhance our SDK integration to collect user IDs (this will be used to populate and clustering audiences by passing back to MAP), send custom in-app events with values, deep-link existing users. This useful to be used in data collections method due to robust mapping of each page inside the app. Monitoring the user's behaviour in more granular level. The users IDs populated here is the audience we used in clustering. Combination of these data sets used will be leveraged to be used in this research and data collection methods.



**Figure 3.3 Research Design**

Source: Author, 2024

By focusing on objective description rather than manipulation or control of variables, descriptive research serves as a foundational approach to gathering information and forming an initial understanding of a research topic. It is especially useful in situations where little or no previous research exists, as it can lay the groundwork for future investigations and hypotheses generation. Data source in this research are aggregate level of numbers of actions and results from campaign being done in Jenius BTPN. Both for answering the research questions on effectiveness owned channel media (especially PN and EDM) and Matching rate identifiers for paid digital channel media (advertising purposes). Data comparison will be looking into the NTB campaign of 7th Anniversary of Jenius that extended across Aug-Sep-Oct 2023. The result will be aggregate numbers as a sample comparison before implementing MA and compare it with June-July 2024 after go live MoEngage. Whilst for the integration data will be comparing the manual upload to Facebook before and After using MA period June-July 2024.

Occasionally researchers use inferential statistics not to analyse and draw conclusions from data they have collected but instead to analyse and draw conclusions about other researchers statistical analyses. Such analysis of analyses is known as meta-analysis. A meta-analysis is most useful when many studies have already been conducted on a particular topic or research problem and another researcher wants to pull all of the results together into a neat and mathematically concise package. (Leedy & Ormrod, 2019).

## RESULTS AND DISCUSSIONS

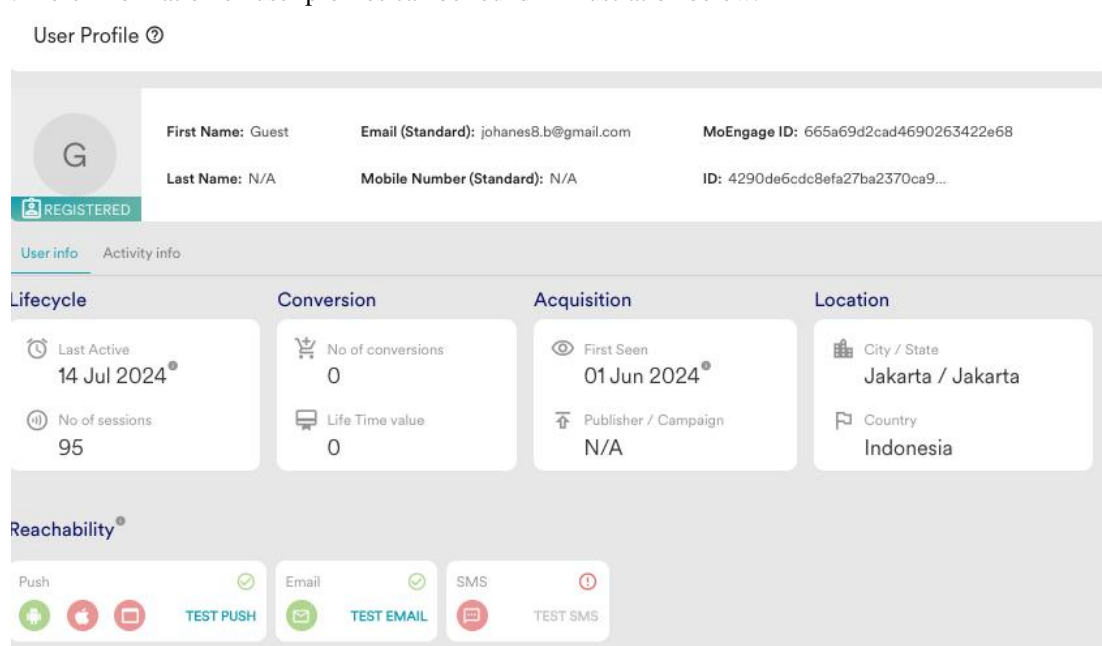
Based on those business exploration research find comprehensive analysis of the business challenges faced by Bank BTPN's Jenius in their marketing and retention systems, the solutions proposed to address these challenges, and the implementation plan.

One of the key points in improving the effectiveness of communication channel is by building Single Customer Profile (Enhancing Customer Database) for easier segmentation purposes. The data for every customer is stored in a non-relational format. Further, Jenius data model can be bucketed into 3 sub-modules:

1. User Attribute: Attributes which define a user's persona i.e., email, age, gender etc.

2. User Behaviour/Events/Action: The online behavior of the user e.g., “App Opened,” “Application Submitted” within the App.
3. Event Attribute: The metadata which defines a specific action e.g., “Push Campaign Name: Survey XYZ”, “No. of Questions: 15” etc, “Successful transaction amount xxx”.

A single user profile is created against each of the Jenius’s current customers, with user data and event data enriched with data coming from various systems/sources of Jenius. Each user profile is referenced between MA servers and Jenius’s database using the unique ID. More information on user profiles can be found in illustration below:



**Figure 4.1 Single Customer User Profile in MA**

Source: Author, 2024

Marketing automation also helps by automating all manual processes through its automation features. Implementing a comprehensive marketing automation platform will streamline and enhance marketing operations.

Some of the feature in the pilot stages are:

1. Intelligent Trigger Based Segment. Due to unified customer point of view. The segmentation that often being done manually can be populated based on trigger segment:
  - Primary + Secondary Custom Event Triggers: Any campaign across any channel can be triggered based on a set of primary-secondary events e.g., if a user does “started a registration” but does not “complete the eKYC”
  - Custom Event Triggers (Primary Only): As soon as the primary event is sufficed the campaign will be sent
  - Time-based Triggers: Irrespective of the size of the segment, campaigns can be triggered periodically at a fix time of the day
  - Location-based Triggers: You can set real-time location-based triggers which will be activated as soon as the user suffices the geo configuration
  - Exit-intent-based Triggers: As soon as the user plans to exit the app/website we can trigger a message in within 3 secs
  - Delay + Scroll % based Triggers
  - Pre-set Segment entry-based Triggers: As soon as a user migrates from one segment to another set of campaigns can be launched
2. AI-based Predictive Segments. Similarly, with the SAAS and AI it can help to do upsell, and cross-sell use cases, while manual logic is one of the ways to go about segmenting the users, MA can also leverage the user affinity feature on its

platform to understand which users could have an affinity towards the product you would like to run the campaign for and accordingly create the segment. In Affinity-based segmentation, you can utilize conditions like “predominantly”, “max times”, “min times” etc. In this sample, you could look at your customers whose user affinities are more toward completing a survey. Further, you can also check for affinity towards the time of the day and day of the week to reach the users at their preferred time as well.

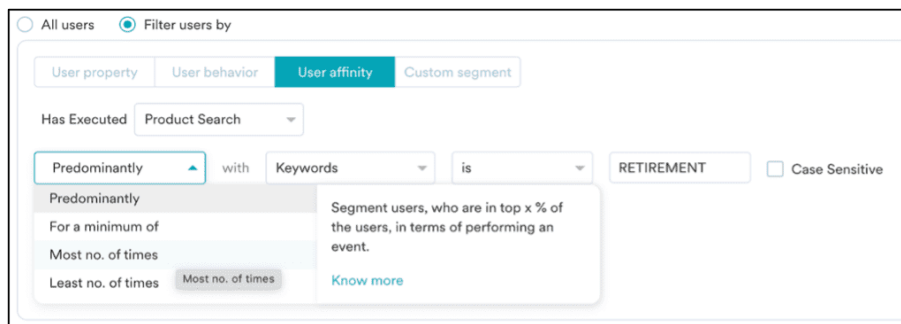


Figure 4.2 Filter Segment Features in MA Based on AI

Source: Author, 2024

- RFF Based Segmentation are based on industry-standard “Recency Frequency and Monetary” values, which help auto-populate users in buckets like Loyal, Potential Loyalist, At Risk, Needs Attention, etc. For example, you can find out who are the users who has not complete registration form at all and reach out to them with rewards or offers or incentive for finishing eKYC or to do first Trx with Jenius.

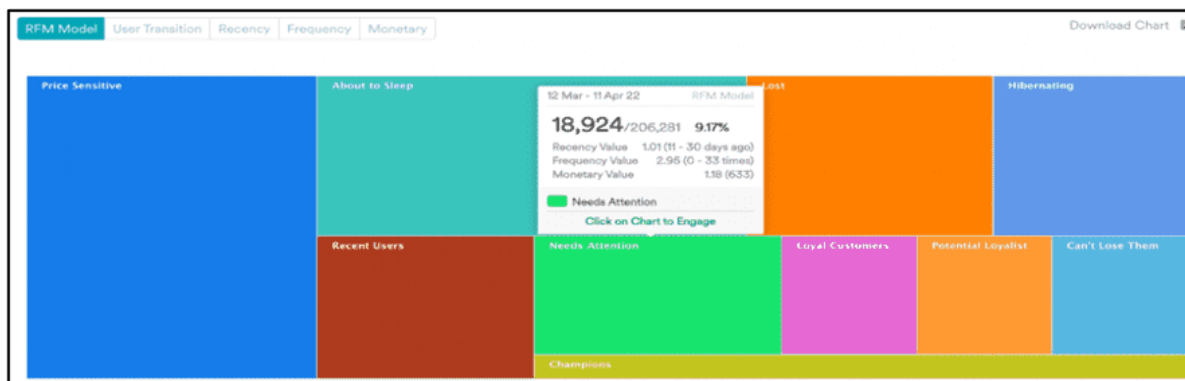


Figure 4.3 Segment RFM Features Based on AI in MA

Source: Author, 2024

- Predictions-based Segmentation. Using Data Modelling. MA Predictions model can help Marketing team to predict user behavior for the next few weeks and enable them to act proactively. Below options for predictions in the MA.

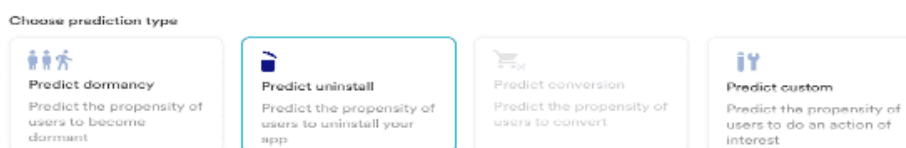


Figure 4.4 Prediction Based Segment Based on AI in MA

Source: Author, 2024

- Propensity distribution. Model metrics such as distribution, correlation, and bucketing into High, Medium, and Low propensity buckets.



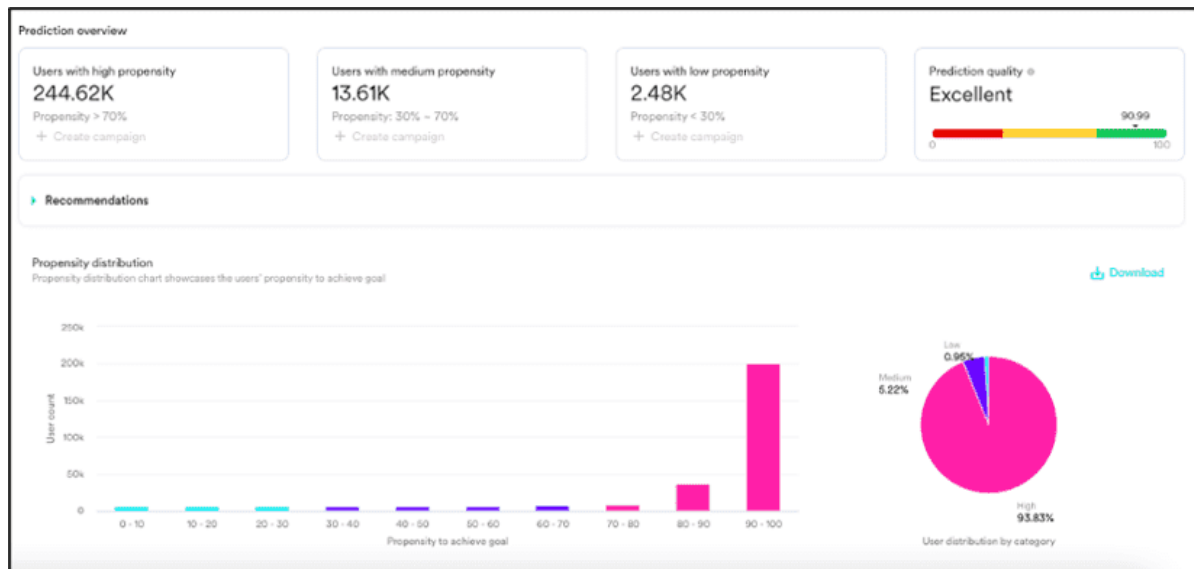


Figure 4.5 Propensity distribution segment based on AI in MA

Source: Author, 2024

Decile buckets (1-10%, 11-20%, etc.) of propensity show the user count in the respective propensity range. Distribution by category shows the high (propensity > 70%), mid (propensity 40-70%), and low (propensity < 30%) propensity respectively.

As suggested in the solutions above, selecting a suitable marketing automation platform, integrating it with existing systems, and providing comprehensive training to the staff will bring tremendous benefits. This approach will help build a seamless marketing campaign operation involving all stakeholders. Therefore, the use of marketing automation is no longer an option but a prerequisite for driving business growth at scale and sustainably.

**CONCLUSION**

The implementation of the Marketing Automation Platform (MAP) at Jenius BTPN has shown significant improvements in the effectiveness and efficiency of marketing campaigns. Initial customer data and daily updates were successfully uploaded to the system, allowing for better audience segmentation per campaign. This transition to MAP resulted in a substantial increase in user detection, although not all users have downloaded the updated Jenius version with the MAP SDK. The actual campaign results during the pilot duration demonstrate the platform's potential. For example, the Travel Promo campaign managed through MoEngage had a higher sent rate and click rate compared to the manually managed Promo all user campaign. Specifically, the MoEngage Travel Promo had a sent rate of 98.19% and a click rate of 4.35%, significantly outperforming the manual Promo Hokben with a 1.83% click rate. Similarly, the MoEngage-managed Travel FCY EDM campaign showed a higher open rate and click rate compared to the manual Promo Hokben EDM campaign. Overall, the improvement of performance range and exceed more than 30% and the operational baseline also increase more than 3 times with shortened time preparation.

The efficiency gains from MAP are notable. The time required for the MIS team to populate and segment millions of customer data was reduced from 1-3 days to approximately 30 minutes. This real-time processing capability significantly improved customer targeting and engagement.

The overall results indicate that the implementation of MAP has improved the segmentation accuracy, sent rates, and user engagement metrics. The sent rate previously never reached 100% due to infrastructure limitations, but with MAP, there has been a marked improvement in segment targeting. Additionally, the identification rate for active users on social media for targeted advertising increased from 30% to 100% post-MAP implementation.

In summary, the implementation of the Marketing Automation Platform has effectively enhanced Jenius BTPN's marketing strategies, leading to better campaign performance, increased efficiency, and more accurate customer targeting. These improvements are crucial for driving business growth through cross-selling, upselling, and improved customer retention.



Recommendation: Select a suitable Marketing Automation Platform (MAP) that drives the architectural infrastructure, and functional capabilities needed for Jenius BTPN's growth strategies. Ensure the chosen MAP can integrate seamlessly with existing systems and support real-time data processing to maintain updated customer information and improve campaign responsiveness. Continuously enhance marketing strategies and operations by exploring additional features of the MAP, such as implementing models that determine the best active hours for sending communications and identifying the most preferred channels for user engagement, which helps the marketing team send communications at optimal times and through the most effective channels. Use the MAP to generate segments and launch campaigns directly from the dashboard and utilize correlation graphs to understand the relationship between goals and features, helping stakeholders identify the most influential parameters and optimize strategies accordingly. Finally, conduct further research on the long-term impact of marketing automation on customer engagement and business growth to refine and enhance strategies continuously

**Ethical Approval:** The study was approved by the Institutional Ethics Committee of School of Business and Management ITB

**Citation:** <https://journals.sagepub.com/doi/full/10.1177/09732586211031164>

## REFERENCES

1. Amplitude, 2021. The Retention lifecycle framework. [Online] Available at: <https://amplitude.com/mastering-retention/retention-lifecycle-framework>
2. Brodie, R.J., Hollebeek, L.D., & Conduit, J. (Eds.). (2015). Customer Engagement: Contemporary issues and challenges (1st ed.). Routledge. <https://doi.org/10.4324/9781315725185>
3. Chaffey, D. a. F. E.-C., 2022. Digital Marketing. s.l.:Pearson International Content. Chaffey, D., & Ellis-Chadwick, F. (2022). Digital Marketing: Strategy, Implementation and Practice (8th ed.). Pearson Education Limited. © Pearson Education Limited 2000, 2003, 2006, 2009, 2012, 2016, 2019, 2022. Retrieved from VitalSource Bookshelf: Chaffey: Digital Marketing
4. Chambers, S., 2020. How to develop a world-class customer communication plan. [Online] Available at: <https://front.com/blog/how-to-develop-customer-communication-plan>
5. Dean, B, 2022. Tik tok User Statistics (2022). [Online] Available at: <https://backlinko.com/tiktok-users>
6. Eggspert Team, 2021. What is customer retention, importance, Example & Technique. [Online] Available at: <https://www.crazyegg.com/blog/customer-retention/>
7. Grandhi, B., Patwa, N. & Saleem, K., 2021. Data-driven marketing for growth and profitability. EuroMed Journal of Business, 19(1), pp. 1-18.
8. Hadad, 2017. Kuliah Imum Tentang Fintech. [Online] Available at: <http://www.ibs.ac.id/img/doc/MDH%20%20FinTech%20IBS%20June%202017.pdf>
9. Hasan, G. et al., 2023. Analisa Customer RelationShip Management pada UMKM Es potong Moex. Jurnal Pengabdian kepada Masyarakat Nusantara (JPKMN), 4(2), pp. 1402-1411.
10. Heimbach, I., Dipl-Kffr, Kostyra, D. S., Dr, & Hinz, O., Prof Dr. (2015). Marketing automation. Business & Information Systems Engineering, 57(2), 129-133. doi: <https://doi.org/10.1007/s12599-015-0370-8>
11. Indonesia Internet Service Provider Association, 2017. Penetrasi & Perilaku Pengguna Internet Indonesia 2017, Jakarta: APJII.
12. Leedy, P. D. & Ormrod, J. E., 2019. Practical Research: Planning and Design. 12th Edition ed. New Jersey: Pearson.
13. Makhija, P, 2020. Cohort Analysis : Beginners Guide to improving retention. [Online] Available at: <https://clevertap.com/blog/cohort-analysis/>
14. MoEngage, 2024. Kredivo Uses MoEngage Automated Flows to Influence Up To 40% Conversions. [Online] Available at: <https://www.moengage.com/casestudy/kredivo-case-study/>
15. Mutia, A., 2021. Databoks Pusat Data Ekonomi dan Bisnis Indonesia. [Online] Available at: <https://databoks.katadata.co.id/datapublish/2021/08/31/bps-tingkat-pengangguran-anak-muda-semakin-tinggi-saat-pandemi>



16. Nababan, A., Sholva, Y. & Perwitasari, A., 2023. Perangkat Lunak Automasi Pemasaran pada Bisnis Jasa Fotografi (Studi Kasus: Sinema Untan). JURISTI (Jurnal Riset Sains dan Teknologi Informatika), 1(1), pp. 125-132.
17. Office of Assistant to Deputy Cabinet Secretary for State Document & Translation, 2020. Identify Metrics That Matter. In: The Pragmatist's Guide to Corporate Lean Strategy. [Online] Available at: <https://setkab.go.id/en/govt-issues-regulation-on-national-strategy-for-financial-inclusion/>
18. Pramoditha, R., 2019. Why do we set a random state in machine learning models?. [Online] Available at: <https://towardsdatascience.com/why-do-we-set-a-random-state-in-machine-learning-models-bb2dc68d8431>
19. ProductPlan, 2021. AARRR Pirate Metrics Framework. [Online] Available at: <https://www.productplan.com/glossary/aarrframework/#:~:text=AARRR%20Pirate%20Metrics%20framework%20is,retention%2C%20referral%2C%20and%20revenue>
20. PwC, 2018. PwC Survey: Digital Banking in Indonesia 2018, Jakarta: PwC.
21. Redding, S. (2015). Can marketing automation be the glue that helps align sales and marketing? Journal of Direct, Data and Digital Marketing Practice, 16(4), 260-265. doi: <https://doi.org/10.1057/dddmp.2015.27>
22. Ryals, L., 2012. Managing customers profitability. s.l.:Wiley; 1st edition (January 7,2009).
23. Sendoso, 2020. The best warelationship marketing strategies to grow your business. [Online] Available at: <https://sendoso.com/blog/the-best-relationship-marketing-strategies-to-grow-your-business/>
24. Sharon, T., 2018. Measuring user retention. [Online] Available at: <https://medium.com/@tsharon/measuring-user-retention-a2f937234b99>
25. Todor, R. D., 2016. Marketing automation. Bulletin of the Transilvania University of Braşov Series V: Economic Sciences, 98(2), pp. 87-94.
26. Utomo, W. P., 2019. Indonesia Millenial Report 2019, Jakarta: IDN Media.
27. Watkinson, M., 2017. The Grid : The Decision-Making Tool for Every Business (Including Yours). London: Random House Business Books.
28. Wertenbroch, K., 2021. Marketing Automation: Marketing Utopia or Marketing Dystopia?. NIM Marketing Intelligence, 13(1), pp. 18-23.
29. Zeng, M., 2018. Strategy Alibaba and the Future of Business. Harvard Business Review Digital Article, pp. 88-96.

---

*Cite this Article: Budi Johanès, Manahan Parlindungan Saragih Siallagan (2024). Driving Business Growth through Data Decision Making: The Role of Marketing Automation. International Journal of Current Science Research and Review, 7(8), 6000-6010*