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Digital Marketing and Reported Consumer Purchasing Behaviour at MTN Rwanda

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Abstract: *Digital marketing can generate favourable engagement without demonstrating equivalent purchasing responses. This study examined the associations of social media, email and content marketing with reported consumer purchasing behaviour at MTN Rwanda in Kigali. The Stimulus Organism Response framework and Theory of Planned Behaviour guided interpretation. A cross-sectional survey with supplementary staff interview accounts drew on a documented organisational frame of 138 individuals. Of 103 planned questionnaires, 95 were returned (92.2%). Five-point agreement scales yielded reported Cronbach's alpha coefficients of .821–.938 for the focal marketing constructs and .846 for purchasing behaviour. SPSS analysis used descriptive statistics, Pearson correlations and the original regression, which also adjusted for influencer marketing. Social media showed the strongest bivariate association ($r = .703$, $p < .001$) and adjusted coefficient ($\beta = .680$, $p < .001$). Email was not significantly associated at the bivariate level ($r = .158$, $p = .125$), but its adjusted coefficient was significant ($\beta = .177$, $p = .010$). Content marketing showed positive bivariate ($r = .272$, $p = .008$) and adjusted associations ($\beta = .142$, $p = .043$). The complete four-predictor model explained 60.2% of reported score variation. Findings support evaluating interactive social media, targeted email and useful content through channel-specific conversion measures. However, the employee-based frame, overlapping self-report measures and cross-sectional design limit inference to general customers and preclude causal conclusions. The study recommends customer-based replication and transaction-linked campaign evaluation.*

Keywords: *Marketing, Purchasing, Telecommunications, Engagement, Personalisation, Rwanda*

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1. Introduction

Digital marketing provides telecommunications firms with several routes to inform customers about services, answer questions and encourage purchases. Social media can support public interaction, email can deliver direct messages, and digital content can explain products in greater detail. These functions overlap, but their outcomes need not be identical. A favourable assessment of a message, a click on a link and a completed purchase represent different stages of customer response. Distinguishing these stages matters when deciding where to invest marketing resources.

Lemon and Verhoef (2016) conceptualise the customer journey as involving multiple touchpoints across channels and over time. Their synthesis helps explain why purchasing cannot always be attributed to the last message encountered. In telecommunications, a customer may first encounter a promotion on social media, consult explanatory content and subsequently activate a service through another route. This article examines reported associations between three marketing channels and purchasing-related responses, while recognising that a cross-sectional survey cannot reconstruct that sequence.

International evidence also indicates that channel execution matters. Alalwan (2018) examined social media advertising features in relation to purchase intention, while Sahni et al. (2018) used field experiments to assess email personalisation. These studies address different outcomes and provide different

strengths of causal evidence. Hollebeek and Macky (2019) further distinguish content that develops engagement and trust from messages intended to persuade immediately. Together, these perspectives justify examining channels separately rather than treating favourable digital engagement as a uniform measure of purchasing effectiveness.

African research offers an additional contextual perspective. Boateng and Okoe (2015) found a relationship between attitudes towards social media advertising and behavioural responses in a convenience survey of 441 respondents, with corporate reputation moderating that relationship. The result identifies the importance of how advertising is received, but its cross-sectional design limits causal interpretation. It also raises a practical question for telecommunications firms: whether positive channel perceptions are associated with purchasing-related responses within a particular organisational setting.

In Rwanda, the Rwanda Utilities Regulatory Authority (RURA, 2026) reported 13,685,892 mobile-cellular subscriptions and 10,487,460 internet subscriptions at the end of 2025. MTN Rwandacell accounted for 66.3% of mobile-cellular subscriptions. These figures describe subscriptions, not unique individuals or digital marketing exposure. They nevertheless establish the scale of the service environment in which marketing operates. More directly, Twahirwa and Mararo (2025) examined MTN Rwandacell's social media publicity in relation to reputation and customer loyalty, illustrating the relevance of digital interaction while leaving purchasing as a distinct outcome for investigation.

The present article focuses on the first three objectives of a broader MTN Rwanda research project: social media marketing, email marketing and content marketing. Social media refers here to perceived interaction, relevance and credibility on social platforms; email concerns direct promotional communication; and content marketing concerns the usefulness and appeal of explanatory digital material. The outcome is a self-reported purchasing-behaviour score encompassing buying, preference, information seeking and recommendation. It is not a measure of verified transactions. This distinction defines both the contribution and the limits of the analysis.

1.1 Statement of the Problem

Telecommunications firms need to distinguish digital activity that attracts attention from communication associated with purchasing. High ratings of timeliness, relevance or trust do not by themselves show that a channel generates additional sales. Without comparable evidence across channels, resource allocation may follow visibility or engagement metrics while overlooking differences between immediate response, service understanding and ongoing customer contact. This problem is particularly relevant when several channels are used simultaneously and their respective associations must be interpreted together.

The reviewed literature leaves a specific empirical gap. International studies examine advertising features, email execution and content value, but their settings and outcomes cannot be transferred directly to MTN Rwanda. Local research on MTN's publicity addresses reputation and loyalty rather than the same purchasing-related measure used here. The gap is therefore a context-specific comparison of social media, email and content marketing within one analytical setting, with a clear distinction between bivariate and adjusted associations. This study addressed that gap using survey results and supplementary interview accounts from MTN Rwanda in Kigali. Its findings inform marketing evaluation but do not establish campaign effects on actual customer expenditure.

1.2 Research Objectives

The study examined the following objectives:

1. To examine the association between social media marketing and reported consumer purchasing behaviour at MTN Rwanda.
2. To establish the association between email marketing and reported consumer purchasing behaviour at MTN Rwanda.
3. To determine the association between content marketing and reported consumer purchasing behaviour at MTN Rwanda.

1.3 Research Hypotheses

The following null hypotheses guided the analysis:

H_{01}: Social media marketing has no statistically significant association with reported consumer purchasing behaviour at MTN Rwanda.

H_{02}: Email marketing has no statistically significant association with reported consumer purchasing behaviour at MTN Rwanda.

H_{03}: Content marketing has no statistically significant association with reported consumer purchasing behaviour at MTN Rwanda.

2. Literature Review

2.1 Theoretical Review

The Stimulus Organism Response framework links environmental stimuli to internal responses and subsequent behaviour (Mehrabian & Russell, 1974). Applied to digital marketing, a message or platform interaction may be understood as a stimulus, perceived usefulness or trust as an internal response, and a

purchasing-related action as a behavioural response. The framework helps organise the channel comparison: interactive social posts, direct emails and explanatory content may provide different kinds of information and experience. However, the present regression does not estimate an intervening trust or value pathway, so the framework guides interpretation rather than providing a tested mediation model.

The Theory of Planned Behaviour explains behaviour through intention, attitudes, subjective norms and perceived behavioural control (Ajzen, 1991). It clarifies why willingness to purchase and completed purchasing must be distinguished. A customer can view a promotion favourably while facing financial or practical barriers to buying. Recommendations from others may also matter, as reflected in the purchasing questionnaire. The article uses this theory to interpret the relationship between communication and purchasing-related responses; it does not claim a full test because separate measures of all theoretical constructs and their proposed paths were not reported.

These perspectives are complementary. The first directs attention to marketing communication and the responses it can evoke; the second identifies conditions under which favourable intentions may translate into behaviour. Both support examining perceived relevance, credibility and information utility, while requiring caution about causal language. They also motivate the distinction between the survey's combined purchasing-related score and independently recorded service activation, expenditure or repeat purchases.

2.2 Empirical Review

2.2.1 Social Media Marketing and Purchasing Behaviour

Alalwan (2018) investigated social media advertising features in relation to customer purchase intention. The study directs attention to characteristics such as interactivity, informativeness and perceived relevance rather than treating platform presence alone as marketing performance. Its focus on intention is useful for understanding favourable responses to communication, but it does not establish the volume of completed purchases at MTN Rwanda. The present study therefore examines a broader self-reported purchasing-related measure and interprets the association within its own sampling limits.

Yadav and Rahman (2017) developed and validated a 15-item, five-dimensional measure of perceived social media marketing activities through five studies in e-commerce. They reported relationships with purchase intention and brand equity. Their work demonstrates that perceived social media marketing is multidimensional and benefits from explicit measurement development. It does not validate the eight-item scale used in the current project by implication: adaptation to another sector and respondent group requires its own evidence. The comparison is therefore conceptual and methodological rather than a claim that the same instrument was replicated.

Boateng and Okoe's (2015) African evidence adds the role of corporate reputation. Their hierarchical regression linked advertising attitudes with behavioural responses, while the convenience sample limited wider inference. This suggests that favourable channel assessments should be interpreted alongside brand perceptions and the sampling setting. The MTN Rwanda study did not estimate reputation as a moderator, so it can assess a channel association but cannot establish whether reputation explains its strength.

2.2.2 Email Marketing and Purchasing Behaviour

Ellis-Chadwick and Doherty (2012) analysed almost 1,000 promotional emails from 20 leading UK e-retailers over 18 months and interviewed nine marketing executives. Their findings identified executional choices concerning format, addressing, subject lines, links and interactivity. This is evidence about campaign design and managerial reasoning rather than an experimental estimate of purchasing gains. It supports examining whether emails are perceived as clear, relevant and appropriately timed, but it cannot determine how strongly email relates to buying in Rwanda's telecommunications sector.

Sahni et al. (2018) provide stronger causal evidence through randomised field experiments involving three companies and millions of email recipients. In their main experiment, adding the recipient's name to the subject line improved opening and sales-lead outcomes. The important methodological contribution is the separation of message variation from observed recipient responses. However, a sales lead is not necessarily a completed purchase, and effects from those firms do not establish the effectiveness of MTN Rwanda's emails. This study examines reported email perceptions alongside other channels and identifies where transaction-based testing would be needed.

2.2.3 Content Marketing and Purchasing Behaviour

Holliman and Rowley (2014) conducted semi-structured interviews with 15 content-marketing informants across five sectors in the United States, United Kingdom and France. They emphasised useful, relevant and timely material aligned with audience information needs. Their qualitative design provides insight into how practitioners understand content strategy, but the business-to-business setting differs from individual telecommunications consumption. It supports attention to content utility

without supplying a directly transferable estimate of purchasing outcomes.

Hollebeek and Macky (2019) developed a conceptual framework linking valuable digital content to engagement, trust and relationships. Their distinction between relationship development and immediate persuasion is particularly relevant when high content ratings coexist with a modest purchasing association. Because the article presents a framework rather than a new local experiment, it provides an explanatory lens rather than confirmatory evidence for MTN Rwanda. The present analysis examines whether respondents' content assessments vary with their purchasing-related scores; the intervening processes remain untested.

2.2.4 Evidence from Rwanda and the Research Gap

Twahirwa and Mararo (2025) used questionnaires and interviews with a purposively selected sample of 232 people who actively interacted with MTN on social media in Kigali. They reported positive associations involving publicity, loyalty and reputation. Their study offers a close organisational comparison, although the digitally engaged sample restricts generalisation, and loyalty is not equivalent to purchasing. The current study adds a three-channel comparison using a common outcome score, while its documented organisational frame creates a different limitation: employee perspectives cannot automatically represent the wider subscriber population.

Across the literature, three distinctions remain important: perceptions versus observed transactions, single-channel versus adjusted associations, and consumer samples versus organisational respondents. The present study contributes evidence on the first three digital marketing channels within one MTN Rwanda survey and retains the original regression specification. It does not resolve the broader attribution problem through causal identification. Instead, the channel-specific findings identify priorities for better-targeted customer research and campaign evaluation.

3 Methodology

3.1 Design and Study Setting

The study used a descriptive cross-sectional survey at MTN Rwanda in Kigali, supplemented by semi-structured staff interviews. The project's substantive period was 2023–2025, whereas the questionnaire results are labelled as 2026 study data. These dates are treated as the campaign context and reporting year, respectively; the analysis is not a three-year panel. The quantitative component provides the primary evidence for the hypotheses, while reported interview accounts supply contextual explanations.

3.2 Population and Sampling

The documented population frame comprised 138 individuals in four organisational groups: customer service agents (42), sales and marketing officers (51), technical support staff (39) and human resources personnel (6). The planned allocation was 31, 38, 29 and five, respectively, totalling 103. The project attributes the sample size to Slovin's formula and describes stratified selection for consumers alongside purposive staff selection. However, the frame itself lists employees, and the achieved profile also records organisational roles. The article consequently interprets the results as responses within an organisational sampling context, rather than a representative survey of all MTN subscribers. A total of 95 questionnaires were returned, representing 92.2% of the 103 distributed.

3.3 Measures and Instrument Quality

The questionnaire used five-point agreement responses, from 1 (strongly disagree) to 5 (strongly agree). Each focal marketing construct and the purchasing outcome contained eight statements. Social media items covered engagement, interaction, promotional currency, personalisation, information, peer comments and trust. Email items addressed receipt, relevance, information clarity, timing, frequency, action and trust. Content items assessed usefulness, decision support, clarity, interest, relevance, purchase likelihood, trust and sharing. The outcome combined reported buying, willingness to pay, brand preference, promotional response, recommendations, information seeking, increased spending and advocacy. It is therefore interpreted as a purchasing-related response score rather than a transaction count.

A pilot at MTN Kicukiro involved 12 questionnaires and trial staff interviews. Feedback was used to refine clarity, relevance and completion time. Expert review was reported, and the pilot reliability coefficients for the article's constructs are presented in Table 1. These estimates describe reported internal consistency; they do not demonstrate criterion validity against transaction records or establish that the constructs are empirically distinct. A numerical content-validity index is not used because the project's rater table contains inconsistent item totals and ratios.

Table 1: Questionnaire scales and reported pilot reliability

Construct	Items	Cronbach's α
Social media marketing	8	.821
Email marketing	8	.881
Content marketing	8	.938
Reported purchasing behaviour	8	.846

3.4 Data Analysis

Quantitative analysis used SPSS version 27. Frequencies and percentages describe respondents; item means and standard deviations summarise agreement. The reported overall item averages are retained, but averages of item standard deviations are not labelled as composite-score standard deviations. Pearson correlations describe bivariate relationships. The hypothesis decisions use the focal coefficients from the original four-predictor regression, rather than an unestimated three-predictor model:

$$Y = \alpha + b_1SM + b_2EM + b_3CM + b_4IM + \varepsilon$$

Here, Y denotes the reported purchasing-behaviour score; SM, EM and CM denote social media, email and content marketing scores; IM denotes influencer marketing; α is the intercept; and ε is the error term. Influencer marketing is retained solely to disclose the original adjustment set and is not a fourth article objective. The significance threshold was .05. Values printed as p = .000 in SPSS-style tables are expressed as p < .001. Model fit refers jointly to all four predictors. No new regression, mediation or moderation analysis was conducted for this article.

The project reports thematic analysis of staff interviews using NVivo 14. The available account identifies interviewees by professional role, but does not specify the completed interview count or provide a coding audit. Interview statements are therefore used as illustrative organisational accounts, without claims of thematic saturation, intercoder agreement or independent validation of purchases. Regression residual, influence and variance-inflation diagnostics were not supplied; reported coefficients are interpreted subject to these analytical limits.

3.5 Ethical Considerations

Ethical approval was granted by the Mount Kenya University Rwanda Ethical Review Board on 15 May 2026 (Ref. MKU04/ERC/1021; approval number 1021). The project includes a data-collection acceptance letter from MTN Rwandacell dated 28 May 2026 and an adult consent form. Participants were informed of the study purpose, confidentiality, voluntary participation and withdrawal rights. The project reports written consent and storage of electronic files under password protection and physical records in locked cabinets. Results are reported in aggregate, with interview accounts identified by role rather than personal name.

4. Results and Discussion

4.1 Response and Respondent Profile

Of the 103 distributed questionnaires, 95 were returned (92.2%) and eight were not returned (7.8%). This response rate describes participation among those approached; it does not resolve sampling-frame coverage or establish the absence of non-response bias. Table 2 presents the recorded gender, education and organisational roles. Women represented 50.5% and men 49.5%. Most respondents held a degree or postgraduate qualification, and technical support and sales/marketing were the largest recorded role groups.

Table 2: Recorded profile of questionnaire respondents

Characteristic	Category	n	%
Gender	Male	47	49.5
	Female	48	50.5
Education	Certificate	5	5.3
	Diploma	14	14.7

Characteristic	Category	n	%
	Degree	52	54.7
	Masters	17	17.9
	PhD	7	7.4
Organisational role	Customer Service Agent	19	20.0
	Sales and Marketing Officer	27	28.4
	Technical Support Staff	28	29.5
	Human Resource Staff	11	11.6
	Finance	10	10.5

4.2 Reported Purchasing Behaviour

The reported overall purchasing-related item average was 4.34. Information seeking before a purchase had the highest mean (M = 4.45, SD = 0.822), while willingness to pay for new products after online exposure was the lowest (M = 4.23, SD = 0.881). Table 3 shows that the outcome includes both behaviour and dispositions towards the brand. High agreement therefore indicates favourable purchasing-related responses but does not quantify purchases attributable to a campaign.

Table 3: Reported purchasing behaviour items

Item summary	M	SD
Frequently purchase MTN products or services	4.36	0.898
Willing to pay for new products after online information	4.23	0.881
Prefer MTN offerings to competitors' offerings	4.32	0.748
Base purchasing decisions on promotions and campaigns	4.36	0.798
Respond to recommendations from others or online sources	4.29	0.698
Seek product information before a purchase	4.45	0.822
Increased MTN spending during the preceding year	4.39	0.816
Likely to recommend MTN offerings	4.36	0.910

4.3 Social Media Marketing

For the first objective, respondents rated social media marketing favourably overall (reported item average = 4.23). Current promotional content received the highest rating (M = 4.41, SD = 0.940), followed by perceived influence on purchasing (M = 4.37, SD = 0.813). Peer reviews or comments (M = 3.87, SD = 1.064) and trust in promotional content (M = 3.98, SD = 0.978) were lower-rated items. These differences are descriptive; no test comparing item means was reported.

Table 4: Social media marketing ratings

Item summary	M	SD
Posts are entertaining and engaging	4.33	0.972
Frequently interact through likes, comments or shares	4.28	0.986
Content is current and reflects up-to-date promotions	4.41	0.940
Posts are personalised to interests and needs	4.31	1.032
Posts influence decisions to purchase	4.37	0.813
Information helps select products or services	4.32	0.841
Reviews or comments encourage purchasing	3.87	1.064
Trust promotional messages and social content	3.98	0.978

Staff interview accounts described customer interaction with social posts and a perceived connection with interest in data bundles and promotional offers. These accounts help explain why interactivity may matter to staff, but they do not independently verify sales. The correlation and adjusted estimates reported in Section 4.6 provide the quantitative evidence for the first hypothesis.

4.4 Email Marketing

For the second objective, the reported overall email item average was 4.32. Appropriate communication frequency was rated highest (M = 4.60, SD = 0.721), followed by trust in content and promotions (M = 4.56, SD = 0.596). Personalisation received the lowest mean (M = 3.98, SD = 0.978), while perceived purchase influence was also relatively lower (M = 4.04, SD = 1.010). The action item combined clicking links, visiting a website and making purchases; its high mean cannot be interpreted as a verified purchase-conversion rate.

Table 5: Email marketing ratings

Item summary	M	SD
Regularly receive promotional emails	4.29	0.898
Emails are personalised to needs and preferences	3.98	0.978
Information is clear, accurate and useful	4.19	1.034
Emails influence decisions to purchase	4.04	1.010
Offers are timely and relevant	4.41	0.857
Communication frequency is appropriate	4.60	0.721
Take action through clicks, visits or purchases	4.52	0.599
Trust email content and promotions	4.56	0.596

The customer-relations interview account described email as maintaining contact with existing customers and communicating promotions or renewals, while judging it less persuasive than social media. This suggests a possible difference in channel function. The survey did not separately estimate acquisition and retention outcomes, so that interpretation remains an organisational perspective rather than a tested explanation for the regression result.

4.5 Content Marketing

For the third objective, content marketing had the highest reported overall item average among the three focal channels (4.40). Motivation to share content with friends or family was rated highest (M = 4.53, SD = 0.727), followed by relevance to needs and preferences (M = 4.47, SD = 0.783). Ease of understanding and brand trust each had a mean of 4.33. These ratings indicate favourable perceptions of content, but their position relative to other channel averages does not establish stronger purchasing influence.

Table 6: Content marketing ratings

Item summary	M	SD
Content provides informative and useful product details	4.35	0.884
Digital material supports purchasing decisions	4.39	0.842
Content is engaging and easy to understand	4.33	0.805
Content increases interest in products or services	4.41	0.722
Content is relevant to needs and preferences	4.47	0.783
More likely to purchase after interacting with content	4.38	0.788
Content marketing strengthens brand trust	4.33	0.764
Content quality motivates sharing with others	4.53	0.727

The content-strategy interview account emphasised blogs, videos and promotional material as helping customers understand services and gain confidence. This interpretation is consistent with an informational role for content. It does not establish that understanding mediated the association with purchasing, because the study did not estimate that pathway or observe customer comprehension independently.

4.6 Associations and Hypothesis Tests

Table 7 shows the bivariate correlations for the three focal objectives. Social media had the strongest positive association with reported purchasing behaviour ($r = .703$, $p < .001$). Content marketing had a smaller positive association ($r = .272$, $p = .008$). The email association was positive but not statistically significant ($r = .158$, $p = .125$). Consequently, the high descriptive email rating does not imply a strong unadjusted relationship with the outcome.

Table 7: Pearson correlations with reported purchasing behaviour

Marketing channel	r	p
Social media marketing	.703	< .001
Email marketing	.158	.125
Content marketing	.272	.008

The original four-predictor regression was statistically significant, $F(4, 90) = 33.987$, $p < .001$, with $R = .776$, $R^2 = .602$ and adjusted $R^2 = .584$. The standard error of the estimate was .23364. These values describe all four predictors jointly and are not the fit of a three-channel model. Table 8 retains the full coefficient context so that the focal estimates are not presented as if influencer marketing had been removed from the analysis.

Table 8: Original regression coefficients for reported purchasing behaviour

Predictor	B	SE	β	t	p
Constant	−2.069	.674	—	−3.070	.003
Social media marketing	.797	.080	.680	9.905	< .001
Email marketing	.179	.068	.177	2.640	.010
Content marketing	.135	.066	.142	2.056	.043
Influencer marketing a	.340	.097	.238	3.523	.001

Social media marketing had a positive conditional coefficient ($\beta = .680$, $p < .001$), leading to rejection of H_{01}. Email marketing also had a positive conditional coefficient ($\beta = .177$, $p = .010$), so H_{02} was rejected in the adjusted analysis despite its non-significant bivariate correlation. Content marketing had a positive conditional coefficient ($\beta = .142$, $p = .043$), leading to rejection of H_{03} at the prespecified .05 level. These decisions concern

statistical associations within the reported model, not proof that increasing marketing activity causes an increase in purchases.

The email result illustrates why adjustment matters. The original correlation matrix reports a slightly negative relationship between email and social media scores ($r = -.065$) and little association between email and content scores ($r = .016$). Holding the other marketing scores constant changes the association being estimated. This is consistent with the difference between the bivariate and conditional email results, but it does not identify a causal mechanism or prove that email performs independently of the wider customer journey.

4.7 Discussion of Findings

The first objective identifies social media as the focal channel with the largest association in both the bivariate and adjusted analyses. Its relatively high ratings for promotional currency and useful information are compatible with the advertising-feature perspective in Alalwan (2018). The lower trust and peer-comment ratings indicate areas for examination rather than evidence that any particular feature caused the association. Yadav and Rahman's (2017) multidimensional approach likewise supports assessing channel components separately, although this study did not estimate component-level effects.

The positive result also accords with Boateng and Okoe's (2015) finding that social advertising attitudes relate to behavioural responses and with Twahirwa and Mararo's (2025) local evidence on MTN publicity and loyalty. However, differences in outcomes and respondent selection prevent direct comparison of coefficient sizes. The current study adds a purchasing-related score within an organisational survey; it cannot establish that the same relationship holds among all subscribers or that online reputation is the explanatory mechanism.

The second objective reveals a more conditional pattern. Respondents viewed email favourably, yet its unadjusted association was weak and non-significant. Its positive adjusted coefficient suggests a relationship with the outcome after the other scores are held constant. This finding supports retaining email in comparative evaluation rather than declaring it ineffective from the correlation alone. Equally, it does not justify asserting that all recipients buy because they receive email. Exposure, preference and response were measured together at one point in time.

Ellis-Chadwick and Doherty (2012) show why format and execution deserve attention, while Sahni et al. (2018) demonstrate how personalisation can be evaluated experimentally. Here, the relatively lower personalisation rating offers a practical question for testing. Staff accounts of ongoing contact and renewals suggest that future work should distinguish customer retention from immediate campaign response. Under the Theory of Planned Behaviour, favourable communication can inform attitudes without ensuring action (Ajzen, 1991); that distinction remains relevant when interpreting both email ratings and coefficients.

The third objective shows that highly rated content can have a modest purchasing association. The positive correlation and adjusted coefficient support a relationship, but the smaller conditional estimate does not imply that useful content lacks strategic value. Holliman and Rowley (2014) emphasise addressing audience information needs, and Hollebeek and Macky (2019) position content as developing engagement and relationships. These perspectives are compatible with the staff account of improved service understanding, while the study itself does not test trust or comprehension as mediators.

Across the objectives, the findings distinguish channel ratings from the strength of association with purchasing-related responses. Content received the highest overall rating, social media had the largest adjusted coefficient, and email's significance depended on adjustment. This pattern is consistent with different channel functions within a customer journey (Lemon & Verhoef, 2016), but no interaction or combined-campaign benefit was tested. The evidence supports channel-specific follow-up evaluation, rather than a universal ranking of sales returns or an unqualified recommendation to increase every channel equally.

5. Conclusion and Recommendations

5.1 Conclusion

For the first objective, social media marketing was positively associated with reported purchasing behaviour and had the largest focal coefficient in the adjusted model. For the second, email marketing had a weak, non-significant bivariate association but a significant positive conditional coefficient, indicating that its interpretation depends on the analytical context. For the third, content marketing was positively associated with the outcome despite its smaller adjusted coefficient and high descriptive ratings. All three null hypotheses were rejected using the original regression, which included influencer marketing as an adjustment variable.

The study concludes that the three channels warrant distinct evaluation within MTN Rwanda's marketing activity. It contributes evidence about reported perceptions and purchasing-related responses in the documented organisational sample. It does not demonstrate causal increases in customer purchases, verify transaction growth or estimate the return on marketing expenditure. The full model's 60.2% explained variation belongs to the four-predictor

specification and cannot be attributed solely to the three focal channels.

5.2 Recommendations

Based on the findings the following recommendations are made:

1. For social media marketing, MTN Rwanda's marketing team should evaluate timely promotional information, responsive interaction and message credibility together. Campaign assessment should connect exposure to clearly defined outcomes such as service activation or repeat purchase, using appropriate consent and data protection. Engagement counts should remain separate from transaction measures.
2. For email marketing, the customer-relations team should test relevant segmentation and personalisation, with clear comparisons of message variants. Renewal communication, link clicks and purchases should be recorded as distinct outcomes. The adjusted finding supports further evaluation of email's role; it does not establish that raising message frequency or expenditure will improve sales.
3. For content marketing, the content team should prioritise accurate service explanations, relevant product comparisons and material that answers customer questions. Tests should assess comprehension and subsequent purchase-related actions separately. Sharing and trust ratings can inform development, but decisions about expansion should also consider observed customer outcomes and the costs of producing content.

5.3 Limitations and Future Research

The study's generalizability is limited by its employee-based sampling frame, discrepancies between planned and achieved respondent roles, and small sample from a single organization. The cross-sectional design and simultaneous self-report measurement also preclude causal conclusions. Several predictor items explicitly refer to purchasing influence, while the outcome includes responses to promotions, creating conceptual overlap that may have inflated the observed associations. Common-method bias may also have affected the findings (Podsakoff et al., 2003), although its magnitude was not assessed. Incomplete interview documentation and regression diagnostics further limit evaluation of the results.

Future research should recruit a verified customer sample, distinguish channel exposure from attitudes and purchasing behaviour, and incorporate transaction records obtained with informed consent. Longitudinal or experimental designs could then examine channel interactions, customer retention and sustained purchasing outcomes.

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