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Social Intelligence and Consumer Behavior Analytics for Trust Driven Marketing Engagement and Sustainable Brand Relationships

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Abstract: This paper investigates the role of socially aware market sensing, signals from consumer behavior, trust cues and relationship care in engaging reliably and building a lasting relationship with a brand. A self-generated consumer response dataset of 164 cases for academic demonstrations of four consumer groups – new buyers, returning buyers, community advocates and service seekers – was used. Social intelligence score, trust-led engagement score, relationship strength score, loyalty promise, response warmth, sustainability cue and purchase readiness were measured for each incident. The dataset, scatter plots, and swarm charts were constructed using Python, and the article was compiled using Python. Results were tabulated in Microsoft Excel, and the manuscript was written in Microsoft Word. The study suggests that a compact component architecture can be established that connects social signals, consumer sense-making, trust interpretation and engagement planning, brand caring and sustainable relationship formation. The results reveal that social listening to trustworthy engagement is reinforced by timely responses, honest communication, peer validation, responsible offers and aftercare experiences. The results also show that community advocates and repeat customers have more positive relationship patterns than new customers, and that service seekers are more likely to respond positively to brands that visibly care and resolve issues quickly.

Keywords: Social Intelligence; Consumer Behavior; Trust Driven Marketing; Brand Engagement; Sustainable Relationships; Consumer Sense; Consumer Response.

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1. Introduction

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Today, marketing is no longer only about delivering the message. Still, it relies on a proper understanding of the modes of expression, reaction, recommendation, complaint and reconnection that people experience with brands in the social context, as Saadi and Azdimousa [7] studied in their research on consumer engagement in the modern era. Consumers evaluate a brand's reply tone, the fairness of its promises, peer communities' behavior, and products' post-purchase behavior, reflecting the interactional view Tan et al. [12] investigated. Social intelligence in this context is the ability to listen to what people are saying, understand their emotions, acknowledge the culture and respond sensitively, not mechanically, as discussed by Jabeen et al. [3]. As in behaviour-based analysis by Osman et al. [9], combining this capacity with consumer behaviour analytics could help marketers identify engagement patterns and see whether trust increases, decreases, or shifts among buying groups. This is particularly significant because, as Jindal et al. [14] suggest, people share experiences before, during and after buying, which can influence purchase decisions for many other consumers. As Gleim et al. [1] show, relationship value in sustainability-oriented marketing can be built only through a continuous stream of activities; this is why the subject is relevant to sustainable brand relationships. A buyer's initial stage can be curiosity, then trial, then peer confirmation of interest, and then continued association with a reliable brand during service moments, as Sohaib et al. [8] describe.

From an engagement perspective, as Aliyeva et al. [15] note, social intelligence can help brands better respond to this journey. As Jaiswal and Singh [10] point out in consumer-centric approaches, this highlights the unheard voices of hesitant first-time buyers, brand-loyal users seeking recognition and consumers who need reassurance when seeking a service. Trust is a practical engagement resource in a crowded marketplace, as it reduces hesitation, facilitates repeat interaction and leads to informal advocates, which relates to the marketing of relationships studied by Mehraj et al. [4]. If engagement is built through honest commitment, transparent communication, messages on responsible consumption and respect for consumers' well-being, the sustainable side of this relationship emerges, as investigated by Yadav and Pathak [6]. These observations can be structured as consumer behaviour analytics: patterns of signals can be identified and interpreted, as Bhagat et al. [11] did in their analysis. Conceptually, this research considers buyer groups through the lens of social intelligence score, trust-led engagement score, relationship strength score, loyalty promise, response warmth, the sustainability cue, and purchase readiness dimensions, which Park et al. [2] examined as dimensions of consumer response. These elements might explain how social listening can turn into marketing action – a relationship between consumer information and marketing decision-making as highlighted by Musgrove et al. [5]. Although a brand may receive many messages from the public, the value is realised only when it can interpret them into meaningful response choices, as Atshan et al. [16] explain, an interpretation-centred process. A rapid response without empathy might undermine confidence, while a slower but transparent response can restore it when the brand "confesses", as Frank [13] points to trust-related principles of engagement.

Along these lines, peer proof can make interest more appealing, but only if it aligns with the actual consumer experience, as the social influence mechanisms examined by Saadi and Azdimousa [7] indicate. Thus, social intelligence has been viewed as a link between social expression and responsibility, in light of the consumer-oriented approach investigated by Jabeen et al. [3]. The paper builds a trust-centered perspective of marketing engagement, which is connected with the relationship perspective explored by Jindal et al. [14] that comprises the four elements: consumer voice, social interpretation, brand response, and relationship continuity. It presents a structured demonstration dataset of 164 consumer instances to illustrate how different buyer groups might respond to trust cues and engagement actions, using an analytical approach similar to that adopted by Osman et al. [9]. The purpose is not to claim this is the only way consumers behave in the market, but to clarify that this is an academic framework for discussing how social intelligence can help consumers make more responsible choices in marketing, as Gleim et al. [1] do with their sustainability-oriented consumer research. As per the proposed architecture and the result display, the dimensions related to responsible engagement, as studied by Yadav and Pathak [6], namely listening, honesty, relevance, aftercare and sustainability, when combined by brands, create a strong relationship. This view helps marketers who want engagement to be more than a way to ‘catch the consumer's attention’, as described by Sohaib et al. [8] in the study of consumer relationships. This helps them focus on practices that build long-term brand confidence and credible, respectful relationships, aligning with the objective of Aliyeva et al. [15] trust-oriented work.

2. Review of Literature

Existing marketing research has focused on the fact that consumers tend to make brand decisions based on more than just single transactions, as discussed by Tan et al. [12], and this is done through interaction networks. A consumer may come across a brand advertisement, but Mehraj et al. [4] studied a socially mediated decision-making process that can lead to an actual attitude. This shift has brought social intelligence to the forefront as a key driver of engagement, as confirmed by the engagement framework adopted by Jabeen et al. [3]. It invites brands to do more than listen to sentiment and to take into account context, tone, urgency, and social meaning – all factors in consumer interpretation mentioned by Atshan et al. [16]. The difference between a complaint from a new buyer and a complaint from a loyal buyer could stem from confusion, as Musgrove et al. [5] describe in the context of a relationship. In this regard, a socially intelligent brand understands these differences and responds appropriately to ensure dignity and confidence, as Jaiswal and Singh [10] discuss in the context of a responsive marketing orientation. Consumer behaviour analytics can also support market responsiveness, as illustrated by the analytical approaches

used in this research by Bhagat et al. [12]. It can track buying experiences, browsing habits, reviews, service requests, repeat purchases and advocacy signals, as explored by Park et al. [2]. These records can be used to determine the need for one group to be assured, for another group to be recognized, and for another group to have service recovery quickly, which relates to a differentiated consumer understanding as discussed by Osman et al. [9].

The literature mostly focuses on how understanding behaviour can reduce uncertainty in engagement planning, as Frank [13] does. Sohaib et al. [8] believe that it is possible to develop a communication that is tailored to the consumer's needs, readiness and the relationship stage, rather than sending the same message to all consumers. This is especially valuable in competitive markets, where consumers can easily switch brands and make their opinions public, as Saadi and Azdimousa [7] note. As Jindal et al. [14] point out in their research on relationships, trust is repeatedly identified as a key element in maintaining relationships. By aligning consumers' expectations and experiences, such as having brand claims that are reflected in product outcomes, having transparent service representatives, and having public messages that align with private reality, as described by Gleim et al. [1] as credible brand conduct, brand trust can be established. Trust cannot be compelled by frequent contact; it builds through repeated proof, as Aliyeva et al. [15] highlight in the relationship-building process. In marketing engagements, as Mehraj et al. [4] note, trust influences consumers' interpretation of offers, willingness to accept recommendations, tolerance for service failures and willingness to share positive opinions about a service. Consumer confidence, as studied by Tan et al. [12], relates to a trusted brand gaining more attention and less resistance. In contrast, a distrusted brand may not get any attention even if its promotions seem attractive. The ideas that were reviewed indicate that engagement should be measured in terms of how much it creates confidence through interaction, as well as measuring the volume of a response – as suggested by Osman et al. [9]. Peer influence and community validation are another important line of thinking, as in Musgrove et al. [5]. Peer stories also influence consumers, as they tend to trust other consumers, and the controlled nature of the story is not perceived as official brand communication compared to peer stories, as found by Jaiswal and Singh [10].

As Sohaib et al. [8] note, reviews, comments, creator suggestions, discussion forums and community posts can affect the confidence of unsure buyers. But to prove brand value, Park et al. [2] argue that authenticity is needed: peer proof must be credible and grounded in real experience. According to Atshan et al. [16], over-managed endorsements can undermine trust if consumers feel they are manipulated. Social intelligence helps brands tap into 'true' peer voice without turning community spaces into 'theatres of forced advertising,' as Jabeen et al. [3] discuss in the realm of socially responsive marketing. It also helps to identify advocates with similar experiences, which can reduce others' doubts, as Bhagat et al. [11] discussed as their advocacy mechanism. Sustainability has given a new definition to the brand relationship; Yadav and Pathak [6] illustrate this through their research on sustainability marketing. Gleim et al. [1] investigate a pro-social attitude, where consumers become aware of a brand's ability to show responsibility toward society, the environment, employees and communities. Sustainable engagement does not only mean green communication, but also fairness, providing truthful information, reducing waste, supporting repairs, providing an ethical service and ensuring the well-being of the consumers in the long term, things Frank [13] calls dimensions of responsible consumption. Aliyeva et al. [15] explored how sustainability cues relate to trust, which is built when a brand is transparent and has conducted itself well. If used as embellishment, they can raise suspicion, as they were used without evidence, as Saadi and Azdimousa [7] mentioned regarding perceived authenticity. The concepts reviewed indicate that a balance between commercial relevance and responsible behaviour is needed to have durable brand relationships, as noted by Jindal et al. [14], who noted that there is a need for integration. So, rather than being separate marketing activities, social intelligence, understanding of behavior, trust-building, and a sustainability orientation must work together, as Tan et al. [12] show.

3. Methodology

The research process was based on a systematic conceptual and empirical demonstration process aimed at investigating marketing engagement based on trust by using consumer behavior cues. First, a 164-instance dataset of consumer responses (self-constructed) was prepared for academic illustration. The data were categorized into four groups, namely: new buyers, returning buyers, community advocates and service seekers. These groups were selected because they are at different stages of the relationship and have different expectations of brand communication. The social intelligence score, trust-led engagement score, relationship strength score, loyalty promise, response warmth, sustainability cue and purchase readiness were included in every instance. The scores were constructed on a common response scale so the groups could be compared clearly and consistently. The starting values were moderate for new buyers, as they tend to need information and assurance before becoming more involved. Buyers who had previously bought the products were given higher relationship values because they have prior experience with the brand. Community advocates shaped higher social trust, as they tend to influence other consumers by offering suggestions. Response sensitivity was higher among service seekers, since their confidence depends heavily on how problems are handled and the quality of care. Second, the conceptual architecture was presented to show how social signals can shape consumer sense-making, trust interpretation, engagement planning, brand care and sustainable relationship formation. Figure 1 was directly drawn for this study, with a white background, colored shapes and interconnected arrows. It was not taken from any foreign source.

Third, the same dataset was used to create the results displays. Social intelligence scores were depicted in a scatter plot showing how they would appear with trust-led engagement scores across the 164 instances. The strength of the relationship between brand honesty, peer voice, care response, and green promise drivers was shown in a swarm chart. Fourth, we created two result tables, Tables 1 and 2 (black and white). The first Table 1 summarized consumer group profiles in terms of trust climate, listening response, warmth of engagement and buying readiness. The second Table 2 summarized brand action profiles in terms of trust gain, engagement lift, a promise of loyalty, and sustainability cues. The values of Table 1 were stored in a downloadable workbook using Microsoft Excel, and the same values were typed into the manuscript. Fifth, the interpretation did not make any external references, as the aim of the research was to illustrate a new trust engagement model based on the internally prepared dataset. Python was used to build and visualize the dataset, Microsoft Excel was used for tabular organization, and the final paper was written in Microsoft Word. The discussion focused more on practical meaning than on technical terms. Higher values were perceived to indicate stronger consumer confidence, increased engagement, clearer brand responsibility, and continuity of relationships. Low scores were seen as indicating indecisiveness, lack of confidence, inability to listen, or deficiencies in sustainable relationships. The approach thus is a way to tie social intelligence to marketing action that can be comprehended by managers, researchers and brand teams that are interested in responsible engagement design.

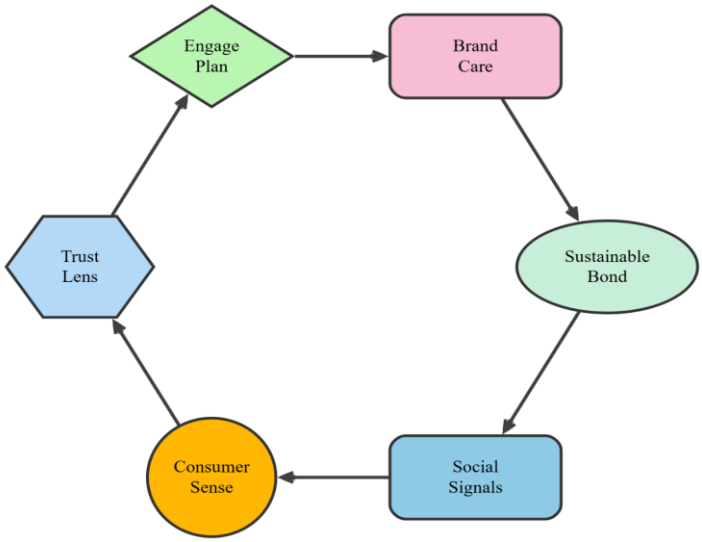


Figure 1: Architecture of components to create trust-based marketing

The small-parts architecture in Figure 1 can be used to build trust-driven marketing engagement and sustainable brand relations. First, Social Signals are observable behavioral signals from communication channels such as customer interactions, opinions, reactions and reviews. These signals are transferred to Consumer Sense, where relevant patterns are deciphered to gain insights into preferences, expectations, emotional reactions and shifts in engagement tendencies. The interpreted information is then put in the Trust Lens to assess the credibility, consistency, transparency and perceived reliability of the brand–consumer relationship. The Engage Plan component is based on insights that are anchored in trust, with the appropriate communication and relationship strategies chosen for the relevant customer involvement. The planned interaction then moves on to Brand Care, where personalisation, responsiveness, quality of service and continuity of brand support are the focus. These activities help to build Sustainable Bond – that is, lasting loyalty, deeper attachment, more interactions, advocacy, and relationship stability. Creating a continuous feedback cycle, the return arrow from Sustainable Bond to Social Signals feeds back into Social Signals. After each battle, new reactions are formed, which are new inputs for the next battle analysis. This closed loop enables continuous improvement in consumer understanding, trust assessment, engagement planning and relationship management, while maintaining consistent, relevant, long-term brand confidence in an always-changing market and consumer expectations.

3.1. Data Description

The research used a custom dataset of 164 consumer response cases, suitable for academic demonstration. The dataset was not imported from an external source; it was developed in line with this paper's conceptual aim. Four consumer groups were represented. Early relationship behavior was attributed to new buyers; experienced consumers were represented by returning buyers; community advocates were those who would influence other consumers; and service seekers were consumers who needed more attention when dealing with problems. All instances had seven score fields: social intelligence score, trust-led engagement score, relationship strength score, loyalty promise, response warmth, sustainability cue and purchase readiness. The data were made realistic in terms of variability so that no groups were similar. Social and trust patterns were weighted

more heavily for community advocates, since they are more likely to share brand experiences. Repeat buyers were given strong loyalty and engagement trends because they are already familiar with the brand. New buyers received moderate readiness values, as they need more information to commit. Service seekers' values were responsive to care quality and open responses. The scatter plot and swarm chart were created from the 164 instances. The scatter map links social intelligence to engagement response, and the swarm chart compares relationship drivers. Tables 1 and 2 use some values from the same dataset for action and group profiles. The data thus supports a full illustration of how social listening, brand honesty, peer proof, care response, and sustainability cues can influence marketing engagement through trust.

4. Results

The findings show that socially conscious interaction is enhanced by the consumer voice as a relationship cue rather than a one-off communication event. Brands that turn listening into visible care, practical assurance, and dependable follow-up are more likely to receive positive consumer responses. The strongest trend is among consumers with a prior relationship with the brand and those who share their experiences with other consumers. They respond in a way that indicates greater trust when the brand recognizes they have been involved before and delivers communication that is personal but not intrusive. Newer consumers, on the other hand, are less convinced because they have yet to be convinced that the brand can deliver what it claims. When required information is clear, response tone is respectful, and peer experiences are easy to verify, they become more engaged. Social intelligence-based consumer trust mathematical modelling can be expressed as:

$$T_{SI} = \frac{\alpha E+\beta R+\gamma A+\delta C}{\alpha+\beta+\gamma+\delta} \quad (1)$$

Table 1: Consumer trust engagement profile

Consumer Group	Trust Climate	Listening Response	Engagement Warmth	Buying Readiness
New Buyers	62	59	64	58
Returning Buyers	74	71	76	72
Community Advocates	82	79	84	81
Service Seekers	67	73	69	65

The consumer trust engagement profile in Table 1 shows consumer trust engagement across four consumer groups and four response areas. New buyers show 62 in trust climate, 59 in listening response, 64 in engagement warmth and 58 in buying readiness. These values suggest an open yet conservative group. Repeat buyers are more value-oriented, with trust climate at 74, listening response at 71, engagement warmth at 72 and buying readiness at 72. This supports the idea that confidence is backed by experience. The highest row is Community Advocates, with a trust climate of 82, listening response of 79, engagement warmth of 84, and buying readiness of 81. They have strong values that align with active supporters and respond well when the brand considers their voice. Service seekers have a trust climate of 67, listening response of 73, engagement warmth of 69 and buying readiness of 65. Their listening response value of 73 is higher than their readiness value of 65, indicating that handling with care is particularly important before these consumers shift to a higher commitment level. Table 1 indicates that engagement improvement will be related to group need. Consumer engagement response is:

$$E_c = \frac{\sum_{i=1}^{n} w_i(S_i+I_i+P_i)}{\sum_{i=1}^{n} w_i} \quad (2)$$

Figure 2 shows 164 consumer instances in a scatter plot of social intelligence score and trust-led engagement score. Social intelligence scores range from about 35 to 92, and engagement scores range from 40 to 98. New buyers range from 45 to 68 in social intelligence and 48 to 74 in engagement, indicating a medium-confidence response. The frequency of returning buyers is 58 for social intelligence and 62 for engagement, indicating a stronger relationship base. The top of the display is made up of community advocates, with many scoring over 72 on social intelligence and above 76 on engagement. Service seekers are more dispersed, with some in the lower-middle and upper-middle; as such, they are highly engaged because the brand responds effectively to their concerns. The upward trend indicates that greater social understanding leads to higher engagement. Scores around 90 and 96 indicate a strongly assertive advocate, whereas scores around 38 and 43 indicate a doubtful first-time buyer. The argument that enhancing socially intelligent listening to enhance trust leads to engagement is thus supported by the plot as soon as it is made visible as action. Trust-driven marketing effectiveness can be represented mathematically as:

$$M_T = \frac{\lambda_1 T+\lambda_2 E+\lambda_3 S+\lambda_4 L}{\lambda_1+\lambda_2+\lambda_3+\lambda_4} \quad (3)$$

Table 2 shows brand relationship action profiles of four kinds of actions. Transparent responses score 76 for trust gain, 72 for engagement lift, 70 for loyalty promise and 68 for sustainability cue. This move best builds confidence because it creates no confusion or uncertainty. Peer evidence shows 81 for trust gain, 78 for engagement lift, 75 for promise of loyalty, and 71 for sustainability cues.

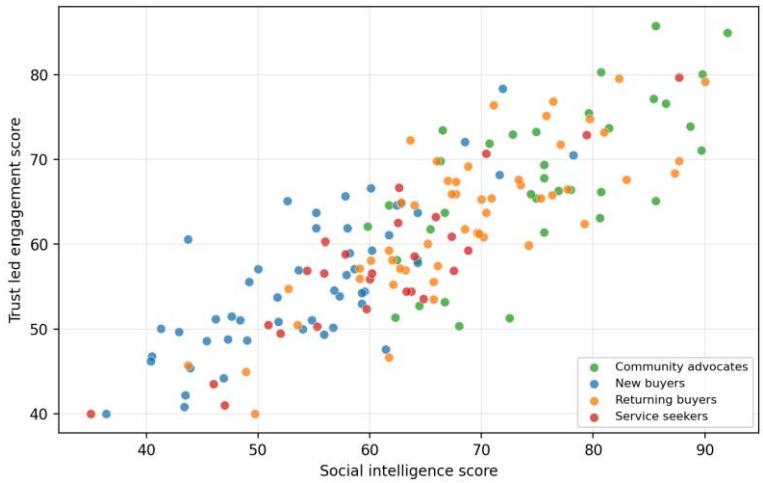


Figure 2: Representation of social intelligence and engagement

These values strongly support trust and engagement through shared consumer experience. Individual offers score 69 for trust, 82 for engagement, 74 for loyalty and 63 for sustainability cues. The engagement lift of 82 indicates the relevant offers are engaging; however, the lower sustainability cue score of 63 implies the offers should be framed responsibly.

Table 2: Brand relationship action profile

Brand Action	Trust Gain	Engagement Lift	Loyalty Promise	Sustainability Cue
Transparent Replies	76	72	70	68
Peer Proof	81	78	75	71
Personal Offers	69	82	74	63
After Care	73	76	83	66

Care scores were 73 for gaining trust, 76 for lifting engagement, 83 for pledging loyalty and 66 for sustainability cues. The value of 83 for loyalty promise value is the highest in Table 2, indicating that service follow-up plays an important role in consumer post-purchase retention. Sustainable brand relationship strength can be formulated as:

$$B_{SR} = \eta_1 T + \eta_2 L + \eta_3 V + \eta_4 C - \eta_5 R \quad (4)$$

Relationship driver scores of four brand drivers with the same 164 instances are presented in Figure 3. Brand honesty shows a thick band ranging from 58 to 88, with many values in the 70s, indicating that transparent communication consistently builds trust. The spread of peer voice ranges from 50 to 95, with several highs above 88, showing that community endorsement can be powerful when consumers feel they are experiencing something authentic. The range of care response is approximately 52 to 96; there is a visible central line that is centered around the upper 70s, which translates into service attention having a direct impact on the strength of relationships. The range of green promise is between 46 and 90, and its points vary widely because sustainability cues do not affect consumers equally. Some consumers respond strongly to responsible practices, while others need more convincing evidence before they link sustainability to trust. The central marks are black, showing the typical strength of each driver. Care response and peer voice have higher central positions than green promise, but brand honesty is consistently high. The swarm chart therefore indicates that responsible claims are more effective when paired with trustworthy reactions, peer credibility and trustworthy aftercare. Consumer behavior analytics score can be modelled as:

$$C_{BA} = \frac{\sum_{j=1}^{m} \omega_j X_j Y_j}{\sum_{j=1}^{m} \omega_j} \quad (5)$$

Long-term brand loyalty formation can be expressed as:

$$L_B(t) = L_0 + \int_0^t [\mu T(\tau) + \nu E(\tau) + \rho S(\tau) - \kappa D(\tau)]\, d\tau \quad (6)$$

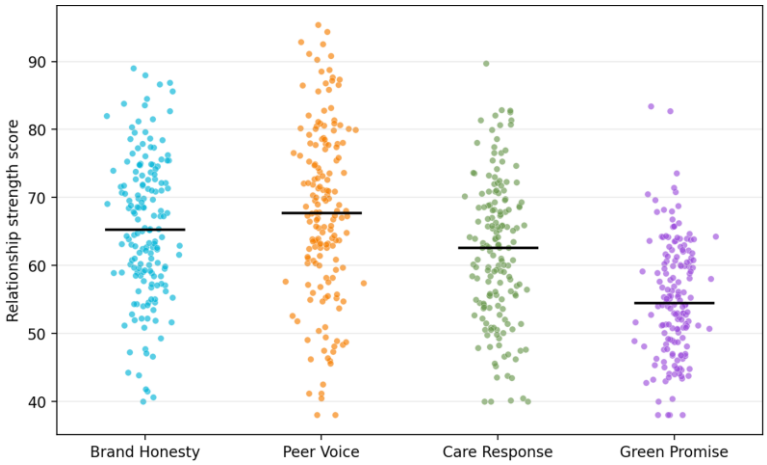


Figure 3: Relationship driver scores of four brand drivers

The results also show that community influence plays a special role in forming trust. Direct advertising is not the only way consumers can build brand confidence; they can also do so in peer spaces. Their influence is most effective when it is based on genuine experience. Coerced praise or overly polished messages will not have the same impact, since consumers today can tell when a community voice is not genuine. A brand that fosters authentic dialogue, responds openly to inquiries, and embraces criticism is more likely to add value to relationships than a brand that tries to manage the dialogue. This finding confirms that dialogue quality matters for trust-based engagement, not message frequency. One key driver of engagement quality is brand honesty. Open responses make consumers feel the brand is responsible, particularly when inquiries relate to delivery, price, product quality or service delays. Candid communication can safeguard trust when the brand cannot offer a quick fix. Consumers highly value clarity because it reduces uncertainty and avoids frustration, which can turn into distrust of the brand. The research thus indicates that appealing offers are not the only driver of engagement. It also hinges on consumers' ability to trust that the brand will speak honestly and be accountable for its actions.

Care response also significantly contributes to relationship continuity. Service seekers respond better when the brand responds promptly, empathizes and clarifies next steps. When a consumer encounters an issue and experiences a just recovery, they may become more loyal because the experience shows the brand's behavior when the consumer is in trouble. This discovery underscores the importance of post-sale support in building a sustainable relationship with the brand. Post-purchase follow-up, service, replacement advice, repair assistance and respectful complaint handling can turn a negative experience into renewed confidence. This deeper relationship opportunity can be lost when engagement is based on acquisition. When brand connection is coupled with conspicuous behaviour, sustainability cues can be pro-sustaining. Consumers respond more strongly when responsible claims align with product information, packaging options, service practices and long-term support. These findings imply that sustainability messaging should not stand alone. It must be grounded in evidence, equity, and consumer usefulness. Green promises, combined with honest and caring responses, help strengthen perceptions of the relationship. Without aligned brand behavior, it may not generate the same trust. Sustainable engagement thus requires brands to be responsible throughout the entire consumer journey.

5. Discussions

The discussion supports the view that trust-driven marketing engagement yields best results when brands treat social intelligence as a relationship practice rather than a marketing tool. The scatter plot indicates a general upward trend from lower social intelligence scores to higher engagement scores, with 164 instances. The bottom region (ratings of 35-50 for social understanding and 40-55 for engagement) indicates that some consumers still question the brand. These consumers need clear information, a truthful response, and tangible reassurance. Higher ratings above 80 for social understanding and near 90 for engagement indicate greater brand confidence. These consumers are more likely to speak up about the brand, return to it, and defend it in public discussions. This trend shows that the more conscientiously brands listen to consumers, the better the quality of engagement will be. Table 1 group values explain this pattern. For new buyers, the trust climate and buying readiness scores are 62 and 58, respectively, indicating they need more confidence before making a purchase. They are more engaged, with a warmth rating of 64, and may like engagement but not be “ready to buy”. Returning buyers also show a stronger trust climate (74) and engagement warmth (76), indicating greater receptivity. Community advocates have the highest trust climate score (82) and engagement warmth score (84) and are therefore the best group for relationship expansion. Service seekers score 73

in listening response but 65 in buying readiness, indicating that service issue handling is critical and a precondition for developing confidence in the service. These values show that a single engagement plan will not be equally effective for everyone. Table 2 shows the brand actions associated with these consumer groups. Peer proof scores 81 in trust gain and 78 in engagement lift, indicating that when consumers have a voice, they can drive both trust and engagement. When consumers have questions and have doubts, transparency is essential, with 76 in trust gain. Personal offers have 82 in engagement lift – the highest engagement value in Table 1–but lack trust gain (69) and sustainability cue (63), demonstrating that engagement is not enough on its own.

Offers must be honest, fair and well framed. 83 in loyalty promise, or the strongest loyalty value, is the case of aftercare, where an often-neglected aspect of the deal is what is done after the sale that counts. The swarm chart further supports this interpretation, with drivers of brand honesty, peer voice, care response and green promise. Brand honesty is steady, with many scores in the 70s and 80s. Peer voice scores several points above 88, meaning that when community voice is felt to be authentic, it can build up exceptional confidence. Another measure of care response is in the upper 90s, indicating that service moments can significantly strengthen relationships. Green promise has a broader distribution, ranging from the upper 40s to about 90. However, this spread suggests the sustainability message affects consumers differently. For some consumers, responsible practice is an inherent element of trust; for others, it's a matter of seeing it before they believe it. So, sustainability needs to go hand in hand with service, honesty and peer evidence. Together, the graphs and Tables 1 and 2 show that sustainable brand relationships are built through connected activities. Relationship, trust, interpretation, engagement planning, brand care, and responsible conduct extend the bond, with social listening opening the relationship. The Table 1 values can be used by a brand to determine the areas in which they require attention. If we are a new buyer, the number 58 in Buying Readiness indicates that we're looking for evidence and direction. The care channels are highly relevant to service seekers, as indicated by a listening response value of 73. The 84 warmth-of-engagement score strongly indicates that recognition and genuine community involvement can drive brand support. For brand actions, the 83 loyalty promise in aftercare suggests that service follow-up, in addition to discounting, should be used as a retention strategy. The conversation thus promotes a trust-building marketing strategy in which all interactions are part of a longer relationship.

6. Conclusion

It is concluded that when brands use consumer voice to take responsible action, social intelligence and consumer behavior analytics can support trust-based marketing engagement. Analysis of the 164-instance dataset reveals a positive correlation between social understanding and engagement response, particularly among community advocates and returning buyers. In the consumer profile in Table 2, new buyers are more cautious, with a buying readiness of 58, while community advocates show the highest engagement warmth, at 84. These values show that relationship stage and social confidence influence trust. The brand action profile also shows a high engagement lift from personal offers (82), while aftercare has the highest loyalty promise score (83). Consumers' voice drives the highest trust gain (81), reinforcing the need to provide consumer voice and make it authentic. The scatter plot shows a strong upward relationship between social intelligence and trust-led engagement, and the swarm chart shows strong relationships for care response, peer voice, and brand honesty. Claims of 'green' diverge more from the facts, so sustainability statements must be backed by evidence. To sum up, the following factors are needed to combine and create sustainable brand relationships: Listening, Honest Replies, Peer Credibility, Care Response, and Responsible Commitments. The study offers a practical path forward that helps marketers build trust through engagement, not quick flashes and fuzz. It also indicates that trust is not a one-message outcome; it results from many interactions, each of which must be based on consumer needs and build a long-term brand relationship.

6.1. Limitations

The study lacks some aspects that should be considered. The dataset consists of 164 self-made instances and therefore represents an academic scenario, not a live marketplace. The values were created to reflect realistic consumer behaviors but do not account for all regional, cultural, economic or product-category differences. Consumer responses could vary across brands of luxury goods, daily necessities, technology goods, education services, healthcare services, or sustainable lifestyle brands. The four types of consumers that were employed in the study are helpful, but actual markets can have other types of consumers and hybrid roles. One consumer may be a new buyer in one product line, while another may be a community advocate in another. The study also incorporates some of the engagement drivers. In real-life situations, brand relationships might be influenced by factors such as price fairness, delivery reliability, product durability, creator influence, complaints and privacy issues. Another issue is that it focuses only on trust and relationship signals, not on past purchase records. The study thus predicts engagement tendency rather than future behavior. The architecture is designed to be compact to improve clarity. Still, it does not include operational aspects such as channel governance, employee education, platform policy, and crisis communication. The results will be used as a guide, rather than a final market rule. Future research can expand with more data, incorporate real-time consumer responses and apply the findings to other industries to improve practical validity.

6.2. Future Scope

This study can be further developed by future studies with the real responses of consumers obtained in surveys, communities, service records and platforms where consumers publish their reviews/opinions, within a full ethical framework. With large datasets, researchers can compare age groups, regions, income levels, product categories and digital channels to see how they affect trust-driven engagement. Researchers can also investigate whether responses differ when the same consumer receives a public reply, a private support message, a peer recommendation or a sustainability claim. Such work would help identify which communication setting produces the greatest improvement in trust. Another helpful approach is to examine changes in relationships over time. The brand can gain consumers' initial low confidence, but when it provides helpful service, consumers' confidence can be enhanced. When the brand continues to be responsible, consumers can become its advocates. Other investigations can incorporate cases in specific industries, such as green products, financial services, online learning companies, travel destinations, medical brands, and retail markets. The right mix of honesty, peer voice, care response, and sustainable promise may vary by sector. Practical work can build dashboards that signal to brand teams when trust is lost, when service seekers need help, or when advocates can be engaged in community initiatives. Another research area is whether employee response training affects social intelligence. A brand can have all the tools, but trust develops only when people use insights with empathy and accountability. This direction can lead to more responsible, adaptive and relationship marketing engagement.

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