

Research Article

Multicriteria Evaluation of the Emotional Intelligence of Small Retail E-Commerce Network Firms

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The electronic commerce (e-commerce) market is experiencing explosive growth. Millions of retail network firms compete in the virtual e-commerce market. A key aspect of online trading is emotional intelligence: these retail firms adopt emotional tactics to attract and retain customers. This article evaluates the emotional intelligence of small retail e-commerce network firms. By analyzing the emotional information transmitting process, we propose a framework to measure virtual emotional intelligence abilities in e-commerce. Based on that framework, we adopt the ELECTRE III multicriteria evaluation method to evaluate the emotional intelligence of some small retail network firms on the TAOBAO e-commerce website. The results show that a correlation exists between emotional intelligence and sales in a network environment. Thus, improving virtual emotional intelligence abilities is important for retail network firms to increase customers' satisfaction, gain competitive advantage, and promote their sales in the current information society.

1. Introduction

In the current information society, electronic commerce (e-commerce) is evolving at unimaginable speed. The expansion of e-commerce has provided extensive opportunities for small and medium size enterprises (SME), particularly retail firms, and a large number of retail network firms have emerged.

With these opportunities come challenges. For example, many people started their small online network businesses in the TAOBAO Network, a famous Chinese C2C e-commerce company. Because there are a large number of network firms, customers can choose their optimal commodities by comparing prices, brands, or other factors, and product and sale information can be transferred easily to potential buyers because of the convenient network environment. In this almost-complete information market, the competition is fierce among small retail network firms. Some firms may receive substantial attention, but others could be ignored by customers. The Matthew effect is evident, and it is not easy for small network retailers to survive.

Thus, some strategies and methods are crucial in the new retail market. A low-cost strategy may not be an effective

weapon because the price of commodities is transparent, and profit margins are too small for firms to reduce prices. A high-quality strategy may also not be a determinative factor because many commodities exist in the market and the quality gap is small. Retail network firms want to enhance the favorable impression that customers have of their businesses to encourage purchases and attract potential buyers. For this purpose, small firms have adopted various marketing gimmicks to increase customer satisfaction. For example, small gifts often accompany sales; the bundling strategy that offers lower overall prices is adopted; substantial discounts are advertised; postage is reduced according to customers' requirements; and popular network language is used to communicate with customers. All of these examples can be considered emotional tactics. When information asymmetry is not as obvious in the network environment as it is in the traditional realistic market, there are too many similar commodities to choose from, and it is necessary to please customers using emotional tactics. Therefore, the emotional intelligence of small and medium retail network firms plays an important role in e-commerce.

This paper contributes to the research on network emotional intelligence. The remainder of the paper is organized

as follows. In literature review section, we discuss related works that show gaps in the research on emotional intelligence in e-commerce. In virtual emotional intelligence in e-commerce section, we propose a framework measuring the emotional intelligence of retail network firms in e-commerce. In algorithm section, based on the framework, we adopt a multicriteria evaluation method to show network emotional intelligence. In a case study section, a case from the TAOBAO network proves that a correlation exists between emotional intelligence and sales volume. Finally, in discussion and conclusions section, we discuss the implications, present the conclusions, and show some limitations of this study.

2. Literature Review

Emotional intelligence was originally conceptualized in 1990. It was defined as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them, and to use this information to guide one’s thinking and actions” [1]. In just a few years, emotional intelligence has received much attention from scholars. It has become a well-known concept in many fields.

Various definitions and conceptions have been suggested to improve scholarly understanding of emotional intelligence. Most are linked to skills or abilities. For instance, Salovey and Mayer [2] suggested that conception is “the ability to perceive, accurately appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth.” Goleman [3, 4] explained that emotional intelligence “refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions well in ourselves and in our relationships.” Bar-On et al. [5] defined emotional intelligence as “an array of emotional, personal, and social abilities and skills that influence an individual’s ability to cope effectively with environmental demands and pressures.” Druskat and Wolff [6] developed Goleman’s [3, 4] conception of team emotional intelligence that was defined as a team’s ability to manage the emotions involved in forming multitrust, group identity, and team effectiveness.

These conceptions of emotional intelligence draw forth the components of emotional intelligence. Salovey and Mayer’s [2] model includes four emotional intelligence abilities: perceiving one’s own and others’ emotions, utilizing emotions, understanding emotions, and managing one’s own and others’ emotions. Based on these four factors, Mayer, Salovey, and Caruso [7] introduced the measuring approach to test emotional intelligence, which has been developed to version 2.0 (MSCEIT). In addition, MacCann and Roberts [8] also developed abilities-based measures including the Situational Test of Emotional Understanding (STEU) and the Situational Test of Emotion Management (STEM). Warwick et al. [9] developed a new Ability Emotional Intelligence Measure (AEIM), which results indicated that the AEIM is a reliable and valid measure of emotional intelligence.

In addition, some scholars also investigated the effects of emotional intelligence, and the significance of emotional intelligence was quickly approved in many fields. For example, Day [10] suggested that emotional intelligence was very important for leadership efficiency including individuals’ awareness of self-identity (emotional cognition, and confident), self-regulation (self-control, trustworthiness, and adaptability), and self-motivation (commitment, initiative, and optimism). Edward and Natalija [11] investigated the importance of the role of emotional intelligence in negotiation and mediation considering the ability of intelligence to optimize the emotional climate in negotiation and mediation. Ansari and Malik [12] analyzed the relationship between emotional intelligence and knowledge sharing and tested the direct effects of emotional intelligence on knowledge sharing among co-workers.

The current studies are mainly based on or developed from the academic achievements of three schools of the thought: (1) Salovey and Mayer [2], (2) Goleman [3, 4], and (3) Bar-on et al. [5]. Emotional intelligence is considered to be the ability to process emotion, and the concept has been expanded to apply to teams as well as individuals. Salovey and Mayer [2] emphasized emotional reaction, Goleman [3, 4] emphasized social relationships, and Bar-on et al. [5] emphasized affection in the external environment. In this study, we consider the following: in a special environment or relationship, how do actors react emotionally= and what defines emotional intelligence ability?

Some people thrive in a network. They are associated with interesting topics and attract substantial attention. However, that same person may also retreat from social interaction. The individual might be shy and find it difficult to express their feelings, and few who know the person would consider them a source of social inspiration. Is that person’s emotional intelligence high or low? Some would say low because the person is shy, but then how can that person’s behavior and success in the network be explained? There is some difference in emotional intelligence applied to the virtual world and the real world.

In the current research, there is little discussion of emotional intelligence related to networks, particularly those associated with e-commerce. This implies that academic attention has not transferred from the real world to the virtual world. However, e-commerce is having a huge impact on global business, and many small retail network firms are facing fierce competition. Emotional intelligence plays an important role in enterprise performance. Therefore, we consider it necessary to probe the dynamics of network emotional intelligence among retail network firms in the virtual world.

This study contributes to the existing literature in the following ways: (1) we define virtual network emotional intelligence in the context of electronic commerce; (2) we evaluate the emotional intelligence of small retail network firms using multiple criteria; and (3) we investigate whether emotional intelligence is connected with the performance of small retail network firms in the e-commerce network environment.

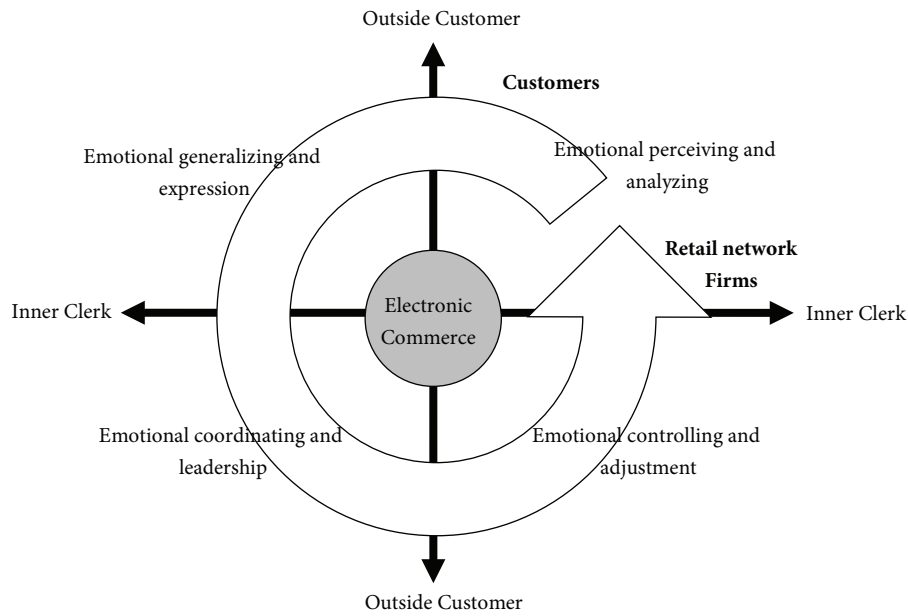


FIGURE 1: Framework for emotional intelligence in e-commerce.

3. Virtual Emotional Intelligence in E-Commerce

3.1. *A Framework for Emotional Intelligence in E-Commerce.* Emotional intelligence is considered as an ability that spans three academic streams. Salovey and Mayer [2] originally conceptualized emotional intelligence. Goleman [3, 4] and Bar-on et al. [5] developed that conception. Many extrinsic factors were also incorporated into their notion, such as social relations and environmental pressures. According to the three conceptions above, virtual network emotional intelligence is conceptualized below in the systemic view: virtual network emotional intelligence is the individual or team’s ability to manage emotions when interacting with others or to cope effectively with some condition in the virtual network. For example, engaging in a social relationship requires emotional perception and analysis, emotional generalizing and expression, emotional coordinating and leading, emotional control, and adjusting. There are three characteristics of these conceptions.

First, we emphasize a specific applicative background. Following the idea of Bar-On et al., we show the extrinsic factor—a specific social relationship, i.e., an e-commerce virtual network trading environment—which is different from the real environment.

Second, we illustrate interaction and integrity. In the intrinsic view of Salovey and Mayer [2], emotion can be “perceived,” “appraised,” “expressed,” and so on. The interaction of the emotion, or the act of interacting with others, is emphasized in the authors’ conception. Additionally, team emotional intelligence [4] is also adopted as a characteristic of integrity.

Third, we introduce the input-output systemic procedure. Based on Salovey and Mayer’s [2] model, the “perceiving” emotion, “generating” emotion, and so on seem to be process

products/resources. Thus, the abilities here are presented in a systemic way, the first two abilities are considered input and output, and the last two abilities are considered inside emotional interaction between the clerk and the customer.

In Figure 1, we propose a framework for emotional intelligence for small retail network e-commerce firms.

There are two roles depicted in the framework: small retail network firms and customers, who connect through e-commerce. The procedure for an e-commerce transaction includes commodity trading and the transfer of emotions. Emotional intelligence is the ability to manage those emotions. For example, the emotions of dissatisfied customers can be transferred to others through comments on review websites; the emotions of tired clerks may be transferred to others through their comments or customer service behaviors, and the apathy of clerks might also be transferred to customers who might abandon a purchase no matter how strong their purchase intention. Thus, emotional intelligence has a great impact on a firm’s performance, as Goleman [4] concluded.

Specifically, emotional intelligence abilities of retail network e-commerce firms include emotional perceiving and analyzing (input), emotional generalizing and expression (output), emotional coordination and leadership (systemic interaction), and emotional controlling and adjustment (systemic interaction).

For example, although a firm clerk cannot see the customer face to face, the clerk can perceive and analyze the emotions of the customer to some extent and perceive emotions such as urgency and seriousness. The clerk can also use probing techniques to gauge the mood of the customer such as analyzing the speed of typing or the tone of a sentence. The clerk can use information to respond appropriately to the e-commerce customer (*perceiving and analyzing*) and employ some “emotional tactics” such as gifts, vouchers, and pleasant conversation. The clerk should also be aware

TABLE 1: Investigation of emotional intelligence in e-commerce.

Emotional perceiving and analyzing:
(i) The emotion of the customer can be perceived in the virtual network
(ii) How long that emotion is perceived, or whether the emotion is perceived in time
(iii) To what extent emotions are captured only through the keyboard
(iv) The clerk actively connects with the customer
(v) The clerk carefully analyzes the reasons behind the customer's emotions
(vi) Emotional reason is realized as an important part of e-commerce business
Emotional generalizing and expression:
(i) Realizing the importance of emotional exchange in the retail network firm
(ii) The clerk know his emotion statue
(iii) The e-commerce network is appealing to the customer
(iv) Strategies such as gifts and special offers are designed to please the customer
(v) The clerk is familiar with right words that should be used in the network
(vi) Emotions are expressed appropriately
Emotional coordination and leadership:
(i) There is positive communication between the clerk and the e-commerce customer
(ii) The clerk uses methods to ensure the customer is satisfied
(iii) The clerk does not consider the customer unreasonable and does not feel tired
(iv) The clerk grasps the customers' expectations
(v) The clerk understands the customer's emotions
(vi) The clerk can manipulate the customer's emotions
Emotional control and adjustment:
(i) The clerk remains in control regardless of what the customer has done in the network
(ii) The clerk has ways to mitigate the customer's anger
(iii) The clerk can find the common interest between him and the customer.
(iv) The clerk exhibits frustration when a deal is unsuccessful
(v) The clerk maintains a positive attitude and shows confidence, optimism, and enthusiasm
(vi) The clerk can quickly adjust a sense of frustration to a proactive mindset

of his own mood and state of mind and make adjustments to convey friendliness, honesty, and generosity (*generalizing and expression*). Within the network, positive impressions are enhanced step by step. The customer, with the appropriate treatment, starts to feel better and is assuaged enough to buy the commodity. In some cases, a deal may not be completed, but a positive impression has been made, and a transaction may be successful next time (*coordinating and leadership*). E-commerce transactions are not always perfect. Customers may be unhappy, and the clerk may have to control and adjust both sides' temperaments to avoid losing a customer or the posting of negative comments on an e-commerce website (*controlling and adjustment*).

If a clerk succeeds in managing the emotions of both parties, that clerk exhibits high emotional intelligence. If most clerks in that retail network firm behave similarly, the emotional intelligence of the team or firm is high. Intangible emotions always flow with tangible commodities and, thus, emotional intelligence is required for business success, particularly for small businesses. Retail network firms with high emotional intelligence may not be certain of e-commerce success, but those with low emotional intelligence will most certainly have a low likelihood of success in the current fiercely competitive e-commerce retail market.

3.2. Measuring Emotional Intelligence in E-Commerce. According to the above framework, we investigate emotional intelligence for small retail network firms based on the four stated aspects. We use an expert scoring method. The scores

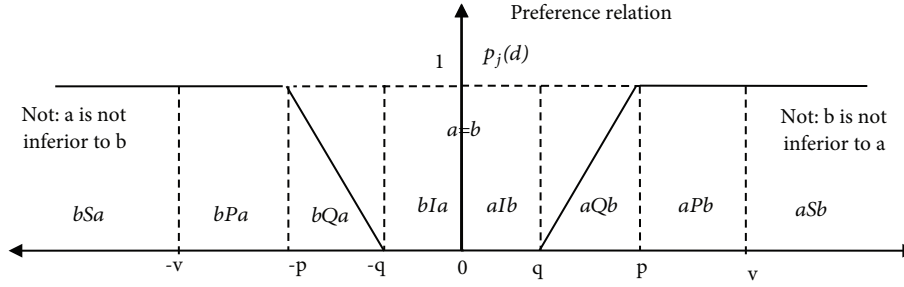
range from 1 to 10. The higher the score, the higher the level of emotional intelligence.

We investigate the type of team emotional intelligence. Thus, the main investigation object is the clerk in the small retail network firm. Through the experience of e-commerce trade exports, some factors are scored according to the four aspects. For example, "The emotion of the customer can be perceived in that virtual network" indicates the ability to emotionally perceive and analyze to some degree; "The clerk can control their temper no matter what the customer has done in the network" indicates the ability to control and adjust emotions to some extent; and the individual sum of scores in each different branch measures the four emotional intelligence abilities in e-commerce, which is shown in Table 1.

4. Algorithm

ELECTRE III is a well-established multiple-criteria decision-aiding method that has a history of successful real-world applications [13–18]. We adopt the ELECTRE III method to analyze the emotional intelligence of retail network e-commerce firms because the method has been widely used in various types of decision-making situations with inaccurate, imprecise, or uncertain data.

Additionally, because competition among retail network firms is involved, we compare the four aspects of emotional intelligence abilities among competitors. Thus, ELECTRE III's preferring attributes comparison is an appropriate way



- *P* is the strong preference relation; that is, *aPb* denotes the relation “*a* is strongly preferred over *b*.”
- *I* is the indifference relation; that is, *aIb* denotes the relation “*a* is indifferent to *b*.”
- *Q* is the weak preference relation; that is, *aQb* denotes the relation “*a* is weakly preferred over *b*,” which means hesitation between indifference and preference.
- *S* is the outranking relation; that is, *aSb* denotes that “*a* is at least as good as *b*.”

FIGURE 2: The Preference Relationship Between a and b Based on Pseudo-Criteria *j*.

to evaluate the emotional intelligence of retail network e-commerce firms. We use pseudo-criteria in this method for which indifference (*q*), preference (*p*), and veto (*v*) are the thresholds that produce outranking relations with an allowance for data uncertainty, where $v_j \geq q_j \geq p_j, j=1, \dots, n$, mean criteria indices *j*, as shown in Figure 2.

The ELECTRE III method is described in the following subsections.

4.1. Concordance Index. The concordance index, $C(a, b)$, estimates the extent of support for the statement “alternative *a* is not worse than alternative *b*” for each pair of criteria in *a* and *b* with a general weighted comparison for all. The concordance index ranges from 0 to 1; a value of 0 indicates that alternative *a* is worse than alternative *b* for all criteria, which is shown in

$$c(a, b) = \sum_{j=1}^n \bar{w}_j c_j(a, b), \quad (1)$$

where $\bar{w}_j = w_j / \sum_{j=1}^n w_j$.

The separate comparison indices $c_j(a, b)$ for each criteria are calculated as shown in

$$c_j(a, b) = \begin{cases} 1 & f_j(a) - f_j(b) \geq -q_j \\ 0 & f_j(a) - f_j(b) < -p_j \\ \frac{f_j(a) - f_j(b) + p_j}{p_j - q_j} & -p_j \leq f_j(a) - f_j(b) < -q_j \end{cases} \quad (2)$$

where $\{f_1, f_2, f_3, \dots, f_n\}$ is the set or family of criteria.

4.2. Discordance Index. The discordance index, $d_j(a, b)$, estimates the extent that “alternative *a* is worse than alternative *b*” for some criteria *j*. This implies that the alternative may be

worse if some criteria are too bad to care goodness of other criteria. The discordance index ranges from 0 to 1; a value of 1 indicates that alternative *a* is worse than alternative *b* for some criteria *j*, which is shown in

$$d_j(a, b) = \begin{cases} 1 & f_j(b) > f_j(a) + v_j \\ 0 & f_j(b) \leq f_j(a) + p_j \\ \frac{f_j(b) - f_j(a) - p_j}{v_j - p_j} & \text{otherwise} \end{cases} \quad (3)$$

4.3. Credibility Score. The credibility score, $S(a, b)$, compares alternative *a* and alternative *b* overall. The degree of outranking credibility is calculated based on the concordance and discordance indices. It represents the degree of outranking considering the extent of both support and opposition comprehensively. If there is no discordant criterion or no veto threshold, the degree of outranking is equal to the concordance index. In contrast, the degree of outranking is equal to concordance with a reduction as the level of discordance increases above a threshold value, which is shown in

$$S(a, b) = \begin{cases} c(a, b) & \text{if } \forall j d_j(b) \leq c(a, b) \\ c(a, b) \prod_{j \in J(a, b)} \frac{1 - d_j(a, b)}{1 - c(a, b)} & \text{else} \end{cases} \quad (4)$$

where $J(a, b)$ is the set in which $d_j(a, b) > c(a, b)$.

4.4. Distillation Procedure. Based on the above credibility score, the distillation procedure gains preorders in two ways: descending distillation and ascending distillation. The first preorder is obtained in a descending manner by selecting the

TABLE 2: Emotional intelligence for retail e-commerce firms.

	Perceiving & Analyzing	Generalizing & Expressing	Coordinating & Leading	Controlling & Adjusting
Firm 1	0.77	0.75	0.73	0.77
Firm 2	0.87	0.77	0.82	0.82
Firm 3	0.65	0.73	0.82	0.85
Firm 4	0.67	0.68	0.7	0.65
Firm 5	0.65	0.78	0.73	0.77
Firm 6	0.63	0.73	0.73	0.67
Firm 7	0.65	0.73	0.63	0.6

best-rated alternatives initially and finishing with the worst-rated alternatives. The second ascending distillation is just on the contrary. The ascending distillation is as follows [Steps 1~5].

Step 1. λ_0 equals the maximum value of $S(a, b)$ in credibility matrix (A) as per

$$\lambda_0 = \max_{a,b \in A} S(a, b) \quad (5)$$

Step 2. A cut-off level of outranking λ_1 is defined as the largest outranking score, which is just less than the maximum outranking score minus the discrimination threshold as per

$$\lambda_1 = \max_{s(a,b) < \lambda_0 - s(\lambda_0)} S(a, b) \quad (6)$$

where $s(\lambda_0)$ is the discrimination threshold at the maximum level of outranking λ_0 . At the initial cut-off level, a outranks b if $S(a, b)$ is greater than the cut-off level and $S(a, b)$ exceeds $S(b, a)$ by more than the discrimination threshold (see (7)) satisfying the condition given in (8).

$$s(\lambda) = 0.3 - 0.5\lambda \quad (7)$$

$$\begin{aligned} & aSb \text{ iff } S(a, b) > \lambda \\ & \text{and } S(a, b) - S(b, a) > s(\lambda) \times S(a, b) \end{aligned} \quad (8)$$

Step 3. Every time a outranks b, a is given a score of +1 (strength) and b is given a score of -1 (weakness). For each alternative, the strengths and weaknesses are added together to give a final qualification score.

Step 4. For descending distillation, the alternative with the highest qualification score is assigned a rank and removed from the procedure, and the process is repeated for all remaining options.

Step 5. Within ascending distillation, the alternative with the lowest qualification score is assigned a rank and removed from the procedure, and the process is repeated for all remaining options.

4.5. Complete Ranking. The results of the two procedures (descending distillation and ascending distillation) are combined to form a complete ranking that is consistent with the two procedures.

5. A Case Study

We investigate some small network-firms in the TAOBAO e-commerce network for whom many factors are the same, such as the commodity, the brand, and the area to compare their emotional intelligence. These firms are ranked on sales amounts in descending order {firm1, firm2, ..., firm7}. Table 1 shows that each sum of scores in the branch evaluates the emotional intelligence of the retail network firms, which is shown in Table 2.

The means of the four emotional intelligence abilities are 0.6986, 0.7386, 0.7371, and 0.7329; the standard deviations are 0.0886, 0.0329, 0.0668, and 0.0936. The normal level of the ability to emotionally perceive and analyze, which is a difficult task in the network, is relatively low. Moreover, the standard deviation of emotional control and adjustment is the highest; that is, there are some differences among the firms, such as problem solving to reduce a customer's anger.

According to the above ELECTRE III method, the emotional intelligence of retail network firms is evaluated according to the following multicriteria: indifference threshold $q = 0.05$, preference threshold $p = 0.10$, and veto threshold $v = 0.15$. In addition, we consider the weight of multicriteria $W = \{0.15, 0.15, 0.30, 0.40\}$. Based on preorders in two ways (descending distillation and ascending distillation), we identify the comprehensive rank of the firms' emotional intelligence, which is shown in Figure 3.

Because the firms were ranked from 1 to 7 according to sales amounts, they have a new ranking based on emotional intelligence. The correlation coefficient equation is used to obtain the relationship between emotional intelligence and the sales amounts in the network environment, which is shown in

$$\rho = \frac{\text{Cov}(X, Y)}{\sqrt{DX} \cdot \sqrt{DY}} = \frac{E(X - EX)(Y - EY)}{\sqrt{DX} \cdot \sqrt{DY}} \quad (9)$$

where $X = [1, 2, 3, 3, 4, 5, 6]$ (ranking location);

$Y = [2, 3, 1, 5, 6, 4, 7]$ (firm's indices)

EX or EY is the mean of X or Y

DX or DY is the variance of X or Y

$\text{Cov}(X, Y)$ is the covariance between X and Y

The correlation coefficient is 0.7184. This implies that there is a strong correlation between emotional intelligence and e-commerce sales amounts.

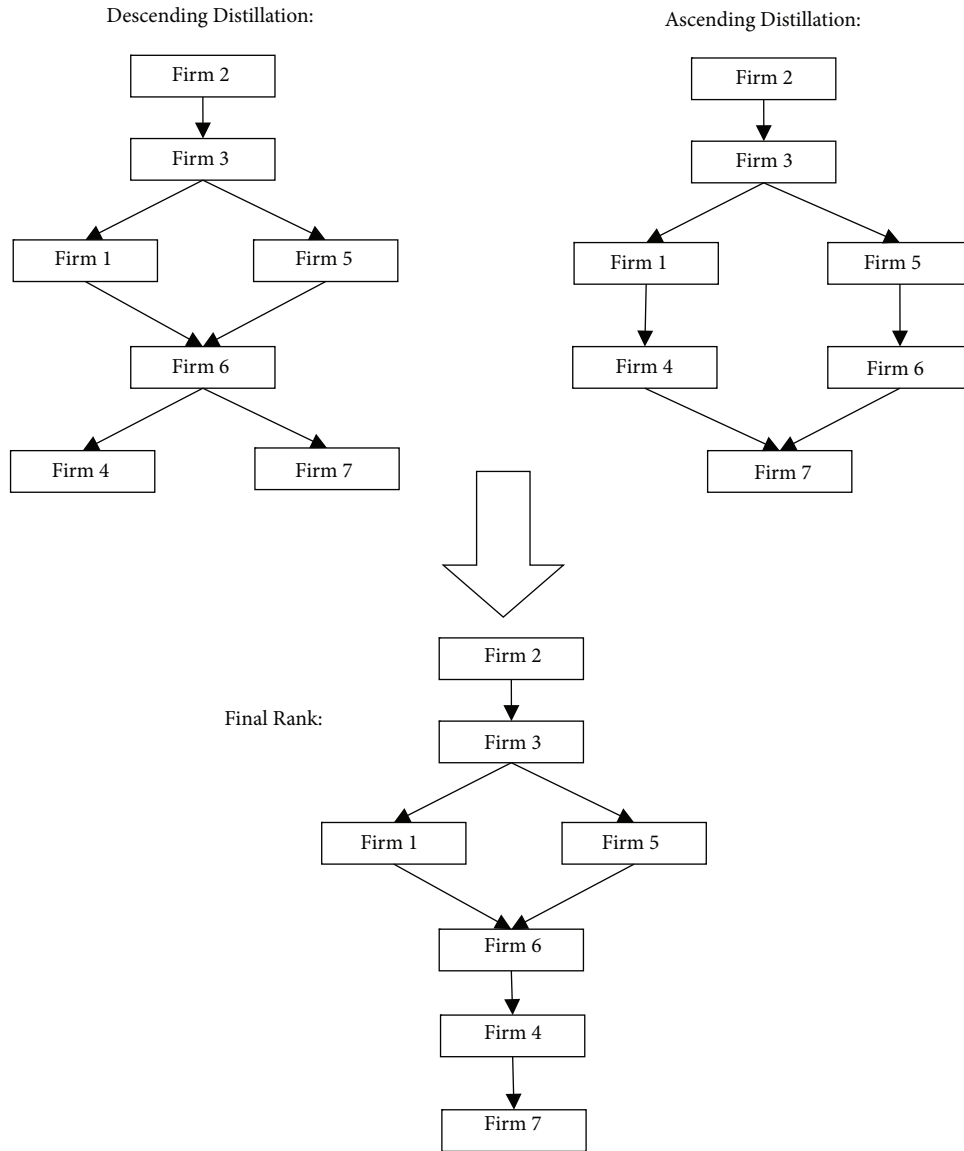


FIGURE 3: The evaluation of emotional intelligence for retail network firms.

6. Discussion and Conclusions

E-commerce is evolving at unimaginable speed. There is an extensive and growing range of commodities available online for customers, and they can easily obtain information that allows them to compare prices, brands, and other factors that may affect their purchase actions. Thus, retail network firms face fierce competition as they strive to succeed.

Because customers are more willing to choose firms who can make themselves happy though good services if merchandises are similar, some retail network firms use emotional tactics to attract and retain customers, and the emotional intelligence abilities of these firms play an important role. Therefore, this article introduces the concept of virtual emotional intelligence and proposes a framework for the analysis of the emotional intelligence abilities of retail network e-commerce firms. Using the framework,

retail network firms can evaluate their emotional intelligence abilities and attempt to improve those abilities. The results of improvements in firm emotional intelligence are increased customer satisfaction, competitive advantage gains, and more e-commerce sales.

Our findings show that emotional intelligence is linked to firm performance by a strong correlation coefficient. The reason may be that service attitude is important for small retail network firms who are in a highly competitive environment. Service attitude is mostly shaped by the emotional intelligence of those providing the service. Therefore, the emotional intelligence of small firms has a substantial impact on their performance.

The article contributes to the existing research in the following ways: (1) we introduce the concept of virtual network emotional intelligence in e-commerce following the mainstream research; (2) we show the components of that

emotional intelligence including the ability to emotionally perceive and analyze, emotional generalizing and expression, emotional coordination and leading, emotional control, and adjustment; (3) we develop a multiple-criteria decision-aiding method to evaluate emotional intelligence; (4) we show proof using actual small retail network firms that there is a strong correlation between emotional intelligence and the performance of e-commerce firms, which also proves the availability of an evaluative result in this article.

Although we adopted the ELECTRE III multicriteria evaluation method to evaluate the emotional intelligence of some small retail network firms on the TAOBAO e-commerce website, we proved that a strong correlation exists between emotional intelligence and sales in real cases. In some cases, there are limitations in practice. Retail network firms should determine their competitors' emotional intelligence abilities by posing as customers in the network. In addition, if most retail network competitors enhance their services or maintain much higher levels of service, a retail network firm may not see a significant increase in sales by improving its emotional intelligence because their competitors are doing the same.

However, if a retail network firm ceases to meet the needs of customers because of a low level of emotional intelligence, it will lose ground to competitors. Thus, it is crucial that a retail network firm evaluate its emotional intelligence abilities, identify shortcomings, and improve those abilities. In the long term, if a harmonious relationship with customers can be established, the retail network firm will gain persistent profits in a fiercely competitive market.

Data Availability

The numerical data used to support the findings of this study are included within the article.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References

- [1] P. Salovey and J. D. Mayer, "Emotional intelligence," *Imagination, Cognition and Personality*, vol. 9, no. 3, pp. 185–211, 1989.
- [2] P. Salovey and J. D. Mayer, "What is emotional intelligence?" in *Emotional Development and Emotional Intelligence, Educational Implications*, J. D. Mayer and P. Salovey, Eds., pp. 3–31, Educational Implications, Basic Books, New York, NY, USA, 1997.
- [3] D. Goleman, *Working with Emotional Intelligence*, Bantam Books, New York, NY, USA, 1998.
- [4] D. Goleman, "What makes a leader?" *Harvard Business Review*, vol. 76, no. 6, pp. 93–102, 1998.
- [5] R. Bar-On, J. M. Brown, B. D. Kirkcaldy, and E. P. Thomé, "Emotional expression and implications for occupational stress; an application of the emotional quotient inventory (EQ-I)," *Personality and Individual Differences*, vol. 28, no. 6, pp. 1107–1118, 2000.
- [6] V. U. Druskat and S. B. Wolff, "Building the emotional intelligence of groups," *Harvard Business Review*, vol. 79, no. 3, pp. 80–164, 2001.
- [7] J. D. Mayer, P. Salovey, D. R. Caruso, and G. Sitarenios, *Test manual for the MSCEIT version 2.0*, Multi-Health Systems, Toronto, Canada, 2000.
- [8] C. MacCann and R. D. Roberts, "New paradigms for assessing emotional intelligence: theory and data," *Emotion*, vol. 8, no. 4, pp. 540–551, 2008.
- [9] J. Warwick, T. Nettelbeck, and L. Ward, "AEIM: A new measure and method of scoring abilities-based emotional intelligence," *Personality and Individual Differences*, vol. 48, no. 1, pp. 66–71, 2010.
- [10] D. V. Day, "Leadership development: a review in context," *The Leadership Quarterly Yearly Review of Leadership*, vol. 11, no. 4, pp. 581–614, 2000.
- [11] J. K. Edward and K. Natalija, "Importance of emotional intelligence in negotiation and mediation," *International Comparative Jurisprudence*, vol. 2, no. 1, pp. 55–60, 2016.
- [12] A. H. Ansari and S. Malik, "Ability-based emotional intelligence and knowledge sharing: The moderating role of trust in co-workers," *VINE Journal of Information and Knowledge Management Systems*, vol. 47, no. 2, pp. 211–227, 2017.
- [13] T. Thiel, "Determination of the relative importance of criteria when the number of people judging is a small sample," *Technological and Economic Development of Economy*, vol. 14, no. 4, pp. 566–577, 2008.
- [14] S. Ulubeyli and A. Kazaz, "A multiple criteria decision-making approach to the selection of concrete pumps," *Journal of Civil Engineering and Management*, vol. 15, no. 4, pp. 369–376, 2009.
- [15] G. A. Montazer, H. Q. Saremi, and M. Ramezani, "Design a new mixed expert decision aiding system using fuzzy ELECTRE III method for vendor selection," *Expert Systems with Applications*, vol. 36, no. 8, pp. 10837–10847, 2009.
- [16] E. Radziszewska-Zielina, "Methods for selecting the best partner construction enterprise in terms of partnering relations," *Journal of Civil Engineering and Management*, vol. 16, no. 4, pp. 510–520, 2010.
- [17] E. Radziszewska-Zielina, "The application of multi-criteria analysis in the evaluation of partnering relations and the selection of a construction company for the purposes of cooperation," *Archives of Civil Engineering*, vol. LXII, no. 2, pp. 167–182, 2016.
- [18] M. M. Marzouk, "ELECTRE III model for value engineering applications," *Automation in Construction*, vol. 20, no. 5, pp. 596–600, 2011.



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