Research Article

Enterprise E-Commerce Management Strategies Based on Lightweight Deep Learning Model in the Context of New Retail

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The advancement of information technology has changed traditional manufacturing and business methods, resulting in the emergence of a new business mode known as electronic commerce (E-Commerce). Owing to its obvious benefits, E-Commerce has been extensively employed in a short time, creating a group of E-Commerce enterprises. Establishing financial management strategies that are appropriate for E-Commerce enterprises is critical since it not only aids executors in formulating better financial policies but also benefits enterprises’ administration and market competitiveness. Most of the retail stores in the technological environment are taking different dimensions in their performance through this enterprise E-Commerce. In this study, an E-Commerce system is implemented for retail marketing using lightweight deep learning technology. The deep Lagrangian multiplier approach is used to promote the user’s purchase behavior and to determine whether the estimated optimal transaction quantity is achieved. The user can utilize the mobile application with the internetworking facility to place the order for required products. The proposed system showed the highest performance achieving 98.78% accuracy as compared to the existing system with 92.46% accuracy.

1. Introduction

E-Commerce refers to the use of the Internet and modern communication technology for any form of business operation management or information exchange. The base of E-Commerce is a business model based on electronic equipment and network technology [1]. E-Commerce automates all business processes, including not only externally oriented business processes such as network marketing, logistics, electronic payment, and distribution but also internal business processes such as enterprise resource planning supply chain management, customer relationship management, management information system, and human resource management. Electronic data interchange, Internet, extranet, intranet, e-mail, database, and web development technologies are the major technical foundations of E-Commerce [2].

The essence of E-Commerce is to lower the cost of information, which includes sales, procurement, and a variety of other factors. It has affected the conventional economy by shortening and modifying the traditional industrial chain, as well as redefining trading regulations and procedures [3]. Electronically trade has a big impact on the global economy. Access, item costing, customer behavior, and transportation strategy have all changed dramatically in the last few years as a result of the way business is conducted online [4]. E-Commerce is a modern business model with a network as a platform and modern information technology as a means, focusing on economic efficiency. Its ultimate purpose is to achieve activity networking, automation, and intelligence of business activities. The advent of E-Commerce has altered company philosophy, management systems, and payment methods, as well as brought significant changes to other sectors of society [5].

E-Commerce has made significant progress in recent years. While consumers enjoy the convenience that E-Commerce provides, they also have more and higher expectations for it. Big data and artificial intelligence have had a significant impact on the traditional retail industry’s reliance on prior experience in purchasing and managerial practices [6]. Big data from consumer terminals can be used to
digitally transform different application scenarios from the front-end through the back-end and give customers targeted products and services that can swiftly integrate into the business community [7]. Despite the advancements in image recognition and artificial intelligence, the use of mobile payments is fast increasing. This has resulted in a wide range of consumption situations in certain places, as well as making them more enjoyable [8].

E-Commerce can assist small and medium enterprises in overcoming some barriers, allowing them to access worldwide markets [9]. Clarifying the structure of E-Commerce and understanding entrepreneurs’ attitudes about it are two ways to encourage small and medium businesses to use it. According to Sin et al. [10], the usage of some electronic tools such as electronic mail and websites used solely for marketing does not correspond to the idea of E-Commerce. Nisar and Prabhakar [11] pointed out four major differences between E-Commerce and traditional business practices. The first is location since clients select the nearest store in conventional commerce; however, with E-Commerce, every store is available globally and at all times. The absence of physical shops is the second differentiator, which allows E-Commerce enterprises to respond fast to external developments. The third difference is the inability to evaluate items before transactions. The last distinction is that E-Commerce procedures differ in terms of presale, sale, and postsale features. E-Commerce allows companies to acquire sources of new competitive advantages by reducing costs, improving product quality, reaching more clients and suppliers, and innovating in the ways they sell their products or services. By lowering costs, enhancing product quality, reaching more clients and suppliers, and innovating in how they offer their products or services, E-Commerce helps businesses to gain new competitive advantages [12]. According to Savrul et al. [13], businesses are operationalized by their owners, who are given responsibility for making decisions at all levels of the company. Internal processes can run more quickly as a result of this centralization, and depending on the owners’ perspective, an excessively complicated organizational structure can be eliminated.

Compared with traditional trade, E-Commerce can be regarded as an emerging mode. Cao and his colleagues [14] developed a customer transfer behavior model from online to mobile channels based on the differences in technology and value between perceived mobile commerce and Internet-based E-Commerce. They conducted a logistic regression analysis on a sample of 323 respondents. They discovered that technically discernible changes, or perceived differences in end-user devices and communication networks, had a considerable beneficial influence on the conversion of the internet to mobile usage. Mauro et al.’s [15] team proposed that cloud computing is an emerging paradigm that delivers computer resources as a service across a network. Many cloud application service solutions have communication resources as a constraint. As a result, bringing data closer to data users is thought to be a promising solution. Li and Zhang [7] proposed an enterprise E-Commerce marketing system based on big data. They adopted the SSH framework HBase database, and the front end combines with Web2.0 technology for the interaction of interface display and operation. A performance analysis was performed on this system when the amount of data reaches 4,000, and the speed of HBase was 10.486 s compared to the query time of MySQL at 50.184 s. It was reported that the HBase database query speed was much faster than the MySQL database query speed. The manufacturing sector has traditionally played a key role in the development of China’s national economy. The existing industrial structure of the manufacturing company for super light deep learning technique and improvement mode is undergoing a significant shift. This study aims to investigate the challenges that occur in the management of manufacturing firms in today’s world. In this study, a lightweight deep learning system is used to create an E-Commerce system for retail marketing. The deep Lagrangian multiplier strategy is used to encourage the user to buy and see whether the expected optimal transaction quantity is achieved. The method displays the mean value for multiple sales management innovations indexes in the context of new retail marketing management. This study employs a lightweight deep learning technique to provide a conceptual framework for promoting manufacturing organizations’ competitiveness and economic growth, as well as a beneficial reference for obtaining production enterprises’ owners and management retail ability.

The rest of the manuscript is structured as follows: in Section 2 a detailed disruption of the proposed method is presented. The results are illustrated in Section 3, and the conclusion is presented in Section 4.

2. Materials and Method

In this study, an enterprise inventory dataset was used for evaluating the performance of the lightweight deep learning model. The enterprise inventory dataset was comprised of 2,125 records. This dataset includes inventory maintenance statistics, sensitivity levels, and classification details, including investment management details.

2.1. Proposed Architectural Model. In the traditional marketing system, the users have to go to the retail store in person for purchase. Only by then will they get the information regarding the offers and other required details. Also, they have to make arrangements before carrying the products they purchase [16, 17]. This process will not be suitable for all the circumstances. These marketing and purchase of products has taken a different dimension with the support of specific technologies such as artificial intelligence, wireless sensor networks, enterprise E-Commerce management, and data mining techniques. Figure 1 depicts the architecture of the proposed E-Commerce management model. Each outer circle represents the node where the specified tasks are performed. These processes are assumed to be working in wireless networking mode. These nodes can be mobile applications, laptops, or personal computers connected through an internet facility. We assumed that all the nodes are provided with enough networking facilities. The user will
place the order, and a bill is generated. The corresponding user will acquire the payment options through an intelligent system. Once a payment mode is chosen, the intelligent system retains that option as default settings for that specific customer. After these two processes, the retail store confirms the payment placed by the customer. The intelligent system then updates all the information in the database. Later, if the customer faces any issue regarding the product purchase, the customer can approach smart customer service for further actions. Then the replacement or delivery of the product will be made, and the details will be issued to the customer by the intelligent system, which also provides smart tracking of the product.

It is believed that there is still a retail shop that offers a single product to clients across a fixed time surface. In other terms, the shop sells products at \( n \) distinct supply prices at around the same time as

\[
R = \int_{i=1}^{n} \sqrt{\sum_{j=1}^{m} \frac{2 \times A \times V_i}{Y_j \times d} + \sqrt{\sum_{i=1}^{n} \frac{2 \times A \times V_i}{V_x}}} \times Y_j, \quad (1)
\]

In practice, various lightweight retail gains are prevalent. Consumers regularly discover that the same product is being sold at different lightweight retail prices at the very same time, either locally or online, as part of the retailer’s sales promotion. In equation (1), the \( R \) represents the target (optimal) order quantity, and \( U \) is the annual demand for optimal inventories, where \( i \) represents the cost of inventory generation and \( V_x \) represents the inventory upkepp running costs. \( Y_j \) is the percentage rate at which inventory preservation production costs are calculated based on the lightweight deep learning technology. The fraction of reserves maintained is driven by \( (D/2) + S_j \) of the fact that the expenses of preserving reserve funds now have risen in proportion to the amount of reserve in the enterprise. It appears to be the combination of the following proportions including the assets: alternative, stockpiling, transportation, domestic transportation within financial stability manufacturing, workers’ compensation, and deterioration. The complete cost can be represented as

\[
AS = \sum_{i=1}^{n} \frac{A}{D} \times V_i + \left( \frac{D}{2} + S_j \right) \times d \times Y_j, \quad (2)
\]

where \( AS \) denotes order to provide a complete cost, \( D \) the amplitude of a delivery component, and \( S_j \) the execution of safety factor.

To encourage purchase behavior, retailers now employ the various retail pricing structure for lightweight deep learning technology, which entails selling products at various prices at the same time represented by

\[
R = \sum_{i=1}^{n} \frac{\sum_{j=1}^{m} (1 - F) \times V_i \times A}{d \times (v + Y \times (1 - F))} + \frac{D}{2} + S_j, \quad (3)
\]

where \( v \) shows an innovative cost. In \( d \times (v + Y \times (1 - F)) \), terms of enhancing enterprise value, \( R \) represents the optimal amplitude of a small transaction using the deep learning technology.

To solve the issue, the \( \sum_{i=1}^{n} (1 - F) \times V_i \times A \) Lagrangian multiplier method is used [18, 19], but also an algorithm for determining the estimated optimal total transaction quantity is planned. The Lagrangian multiplier method is a strategy for finding the local maxima and minima of a function subject to equality constraints. The basic idea is to convert a constrained problem into a form such that the derivative test of an unconstrained problem can still be applied. It also reveals that when the number of orders is limited, the retailer must restrict the number of the retail cost. The effective rate of lightweight stock manufacturing costs,
Table 1: Quantitative results of supplier management enterprises retail quality of the product.

<table>
<thead>
<tr>
<th>Measurement (weight)</th>
<th>Quality assessment</th>
<th>Board</th>
<th>Organizational office</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of product</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>4.6</td>
</tr>
<tr>
<td>Qualified products</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2.9</td>
</tr>
<tr>
<td>Price competitiveness</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5.3</td>
</tr>
<tr>
<td>Logistics cost</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3.1</td>
</tr>
</tbody>
</table>

represented by equation (4), is specified by $Y$.

$$AS = \sum_{i=1}^{n} A \times V_{i} + \left(\frac{D}{2} + S_{i}\right) \times d \times Y. \quad (4)$$

Within the absence of a reordering constraint, the quantity limitation $\sum_{t} [(1 - F) \times V^{\#} + V^{\ast}] \times A$ for lightweight deep learning technology results. It also demonstrates different retail pricing $\sum d \times (v + Y^{\ast} \times Y^{\ast} \times (1 - F))$ retail pricing also are influenced by the discounting coefficient, though not by instability which is presented in equation (5)

$$R = \int \sqrt{\frac{2 \times (1 - F) \times V^{\#} + V^{\ast}}{\sum_{d} d \times (v + Y^{\ast} \times Y^{\ast} \times (1 - F))} + \int V^{\#} + \frac{A}{D} \times V^{\ast},} \quad (5)$$

where $V^{\#}$ signifies the income cost of producing inventory levels, $V^{\ast}$ denotes the semicosts of evolving inventories, and $Y^{\ast}$ denotes the probability of tax-deductible ready and willing to operate the lightweight costs of maintaining inventories. $Y^{\ast}$ denotes the efficient technique of semi-inventory maintenance operational costs. To investigate the issues that arise in the management of manufacturing enterprises in the era of wireless sensor networks, supplier management appears to be the top priority of production enterprise management. The above-mentioned process can be represented using

$$AS = \sum_{i=1}^{n} A \times V^{\#} + \frac{A}{D} \times V^{\ast} + \left(\frac{D}{2} + S_{i}\right) \times d \times Y^{\ast} + \int \left(\frac{D}{2} + S_{i}\right) \times d \times Y^{\ast}. \quad (6)$$

Variations in time $A^2$ deliveries have a significant effect on $A \times V_{ij}$; various stages of safety devices necessary by distributors are represented by

$$S_{j} = \sum_{i=1}^{n} \sqrt{2 \times A^{2} \times \int \frac{V \times D \times A \times d \times \sqrt{2\pi}}{A \times V_{ij}}}, \quad (7)$$

where $A$ denotes the confidence, $\int((V \times D \times A \times d \times \sqrt{2\pi}) / A \times V_{ij})$ is the interval of exchange utilization and $V_{ij}$ denotes the cost of not having inventory assets to clear the

$$N_{ij} = \sum_{i=1}^{n} A_{i} \times (K_{i} + K)^{2} \times \int \frac{V \times D \times A \times d \times \sqrt{2\pi}}{A \times V_{ij}}. \quad (8)$$

Survey questions are used to collect data from large manufacturing organizations for the enterprise sales management innovation under the new retail management. The analytic for lightweight deep learning technology in the hierarchy process is used to analyze the performance evaluation organization of manufacturing enterprises, and an enterprise management evaluation method is established as

$$A_{ij} = \sum_{i=0}^{j} \sqrt{X} = \sqrt{\int A_{i} \times (K_{i} + K)^{2}.} \quad (9)$$

According to the findings, the mean value of four enterprise sales management innovation indexes under the new retail services marketing is $\prod (A/K) + \sum_{i=1}^{n} (K_{i} + K)^{2}$. Based on statistics, the $A_{i}$ represents the approximate likelihood of occurrence of the specific scenario. The difference coefficient can be determined in response to the data about just what possible benefits will decide to introduce by equation (10) supplying financing to the marketing decision.

$$V = \prod \frac{A}{K} + \sum_{i=1}^{n} (K_{i} + K)^{2} + \left(\frac{D}{2} + S_{i}\right). \quad (10)$$

The equation establishes a relationship between the $\sum_{i=1}^{n} A_{i} \times (K_{i} + K) \times (K_{2i} + K)$, the economic advantages of
purchasing from a particular supplier, and the benefits of purchasing from many other distributors in the following equation (11). To evaluate such a correlation, correlation testing is frequently used.

\[ \partial_{ij} = \sum_{j=1}^{N} A_i (K_{1j} + K_1) \times (K_{2j} + K_2) + \left( \frac{D}{2} + S_j \right), \]

(11)

where \( \partial_{ij} \) is the coefficient of determination between both the benefits of lightweight deep learning technology making purchases with the two suppliers, \( K_{1j} \) represents the appropriate price of economic benefit from having purchased from the first supplier, \( K_{2j} \) represents the appropriate amount of economic benefit from buying from the second supplier, and \( A \) is the coefficient of determination for the first supplier. The statistical power for the second provider is denoted by \( A_2 \). \( K_{1j} \) seems to be the possibility of obtaining retail price of economic advantages from products purchased with the first supplier; \( K_{2j} \) is the possibility of obtaining and putting a price of benefits from products purchased as from the second supplier, and \( \partial_{ij} \) is the probability of prospective rates of \( S^2_N + S^2_M \) economic advantages from suppliers to the second wireless carrier which is

\[ S_A = \sum_{N=1}^{M} \sqrt{S^2_N + S^2_M} + \sqrt{2 \times S_N \times S_M \times \partial_{N&M}}, \]

(12)

where \( S_A \) is the total measure of the spread, \( S_N \) shows the point difference of the first way to solve, \( S_M \) is the measure of the spread of the second suggestion, and \( N&M \) is the coefficient vectors during the first and second multidimensional data. Equation (13) will be described to affect measures for such enhancement and development of lightweight deep learning technology and an integrated information system once more. A limited \( \prod \sqrt{N} = \prod\{N_i\} \) and purchased a set of factor representation which is

\[ S_i = \prod \sqrt{N} = \prod\{N_i\}, i = 1, 2, \ldots, n. \]

(13)

According to the findings, the \( N_1 < N_2 < \cdots \cdots < N_n \) mean value of four enterprise sales management innovation indexes under the new retail services marketing using the deep learning technology. It means ensuring the policy’s efficacy which shows that lightweight deep learning technology and its collection is a very well sequential relationship defined as

\[ S_i = \prod \sqrt{N} = \sum_{N=1}^{n} N_1 < N_2 < \cdots < N_n, \]

(14)

where \( N_1 \) comes within a week of \( N_2 \), \( N_2 \) comes before actually\( N_3 \), and so on. The order obligation in a set \( N \) will be a quantitative set of strength time to train \( A \) of factor

<table>
<thead>
<tr>
<th>Manufacturing industries</th>
<th>Questionnaire</th>
<th>Statistical result (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EM—equipment innovative manufacturing</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>MM—material retail manufacturing</td>
<td>20</td>
<td>56</td>
</tr>
<tr>
<td>EP—electrical of products</td>
<td>30</td>
<td>22</td>
</tr>
<tr>
<td>AP—agricultural of products</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>CI—chemical process industry</td>
<td>50</td>
<td>14</td>
</tr>
<tr>
<td>BM—biological of medicine</td>
<td>60</td>
<td>23</td>
</tr>
</tbody>
</table>

Table 2: Result analysis of statistical ratio for manufacturing industries in questionnaire.

![Statistical results analysis for educational background in the online (WSN) questionnaire.](image-url)
initiatives \( N_i \) such that it is represented as

\[
A = \sum_{i=1}^{n} A_i, \quad i = 1, 2, 3, \ldots, n. \tag{15}
\]

Equation (15) provides a conceptual foundation for achieving management innovation retail capability in manufacturing enterprises, as well as a valuable reference for increasing manufacturing enterprises’ \( A_1 < A_2 < , \ldots < A_n \) competitiveness in the global market, in which \( A_i \) is an applicable production that satisfies the structural divisions as defined by lightweight deep learning technology to determine the equation (16).

\[
A = \sum_{i=1}^{n} \{A_i\} + \int (A_1 < A_2 < , \ldots < A_n). \tag{16}
\]

The \( A_1 N_1 + A_2 N_2 + \cdots + A_n N_n \) aggregated scheme efficiency measurement could be represented as a difficult and complicated effectiveness \( A_1 N_1 \) measure in the form of a mathematical model as determined as

\[
K = \sum_{i=0}^{n} A_i N_1 + A_2 N_2 + \cdots + A_n N_n = \sum_{i=1}^{n} A_i N_i. \tag{17}
\]

The efficiency of the policy is simply a function \( K \) that includes \( n \) efficiency variables that are sequential to its performance metrics \( N_i \).

3. Results and Discussion

The statistical results for gender ratio and manufacturing industries are shown in Figure 2. This shows that men are responsible for 55.67% of the dataset and women report for 44.33% in purchasing through E-Commerce. The research object is the management innovation capability of the domestic conventional manufacturing industry.

Some theoretical parameters such as the ability to manufacture enterprises, methods, and techniques are consolidated to improve intelligent wireless retail innovation management. This process aids in communicating the theoretical background of retail innovation management. Initially, a comprehensive evaluation framework of production-related enterprise management innovation capabilities is structured based on these theoretical incorporations but also manufacturing enterprise qualities.

Through the ABC classifier, the evaluation indicators are categorized into three: A, B, and C. The three stages are used to assess the single most factor that significantly affects the results and the additional factors that have less impact on the desired target. The statistical results are shown in Table 1 which indicates that factor has been chosen as the measurement (weight). The 0 means that it has not been determined. Various models are used to quantify and calculate a quality assessment index. The significance of their distributors is based on the production process status of establishments.

To solve the issue, the \((\sum 2 \times (1 - F) \times V_1 \times A)\) Lagrangian multiplier method is used, but also an algorithm for determining the estimated optimal total transaction quantity
is planned. It also reveals that when the number of orders is limited, the retailer must restrict the number of the retail cost. The letter \( v \) stands for an innovative cost. In \( d \times (v + Y \times (1 - F)) \) terms of enhancing enterprise value, \( R \) represents the optimal amplitude of a small transaction using the deep learning technology which is represented in Figure 3.

Where EM specifies for equipment innovative manufacturing, MM is material manufacturing, EP shows electrical products, AP represents agricultural products, CI stands for the chemical process industry, and BM is biological medicine. Figure 3 depicts the statistics of the survey: manufacturing enterprises are responsible for 22.36% of all enterprises, biomedical enterprises account for 19.67%, chemical organizations for 16.54%, material manufacturing enterprises account for 16.37%, electronic and electrical enterprises account for 22.47%, but also agricultural and blindside product lines enterprises accounts for 17.62%.

Statistical analysis is required to test the measurement model’s validity and reliability. Initially, an element analysis is performed with the first index of an evaluation process of manufacturing organizations’ transformation leader’s ability. The ultimate evaluation system is again assessed and analyzed as shown in Table 2.

Figure 4 depicts pieces of training conducted in an online questionnaire using WSN and analysis for statistical results. According to the data analyses of an education stage for the online questionnaire, there seem to be 60 people with a college degree, adequately accounted for 12.3%; 160 people contributed for 75%; 40 people with postgraduate degrees, compensating for 18.7%; and two individuals a doctorate, paying for 2%. Individual’s gathered information contains the participants’ years of experience within the manufacturing industry as well as the stances they hold.

The reliability results of the analysis are depicted in Figure 5. The corresponding represents the significance value, and also the ordinate represents the degree of association for organizational management. The attributes of items 1, 2, and 3 for level A are 0.9, 0.83, and 0.99, respectively. B represents the level of creativity of organization retail management, with reliability and validity of items 1, 2, and 3 of 0.7, 0.98, and 0.89; C represents the organizational retail management’s results demonstrated, with reliability and validity of items 1, 2, and 3 of 0.95, 0.9, and 0.64, respectively.

Figure 6 depicts the enterprise retail management ability analysis results. With the performance assessment standard, the overall average of every first quality evaluation measure is obtained. The estimate is 4.8438 of the overall average result received. The entrepreneurship organization retail management value is less than 4.8438, suggesting that its retail management effectiveness of huge manufacturing enterprises is more substantial. Still, the organization management innovation is relatively low. There seems to be a lot of scope for innovation in entrepreneurship sales and distribution. The estimated cost of a four enterprise of retail marketing management, retail entrepreneurship support, retail organization performance accomplish group, and enterprise retail production innovation indicators are greater than 4.841. This indicator denotes that huge manufacturing enterprises strongly support retail marketing and product innovation. According to the findings of the statistical questionnaire analysis, the average identity of the person in response to an enterprise seems to be older, and the educational qualification is primarily undergraduate.

The major strength in existing methods is to concentrate on enterprise ability study and explore the entrepreneurship production management solution, enterprise organization, and cooperation ability. However, they lack information innovation and technology level from the standpoint of enterprise business ability. Due to such high failure rates, there are still a few gaps within the investigation on the performance and management innovation ability, especially in the following two areas. First, the attribute system’s descriptive and analytical metrics are insufficient and should be improved at a later point in time. Second, the amount of data gathered is limited. Compared to many retail manufacturing enterprises, most of the manufacturing retail enterprise data was included in this study for comparative evaluation. When the data of the same questionnaire was applied to the existing introduction detection method, the accuracy achieved is 92.46%; however, when the same data was used in the deep Lagrangian method, the overall accuracy of 98.78% was reported which shows the high performance of the proposed method as compared to the existing introduction detection method. The comparative results are shown in Table 3.

### Table 3: Analysis for existing enterprise E-Commerce management strategies in retail.

<table>
<thead>
<tr>
<th>Algorithm</th>
<th>Training (%)</th>
<th>Testing (%)</th>
<th>Questionnaire in WSN</th>
<th>Accuracy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction detection method</td>
<td>91.12</td>
<td>93.98</td>
<td>60</td>
<td>92.46</td>
</tr>
<tr>
<td>Deep Lagrangian multiplier method</td>
<td>97.32</td>
<td>98.23</td>
<td>60</td>
<td>98.78</td>
</tr>
</tbody>
</table>

4. Conclusion

The increased use of information technology in enterprise operations has resulted in many new business models, including electronic commerce. The development of new intelligent wireless networking has made new E-Commerce strategies of a retail market. Retailers are highly upgrading themselves with trending technical innovations in the current trending world. In this study, an enterprise E-Commerce model is proposed for users and retailers to utilize enterprise E-Commerce applications for sales and purchase of products, respectively. The user and the retailers can utilize the Internet as the medium of their communication through specific web applications. An alert system is
enclosed with the server at the retailer’s location to update the user about the offers, tracking of products, or purchase history. The proposed system is based on the deep Lagrangian multiplier method to accomplish these functions. The method is compared with the existing introduction detection method, and the results show that the proposed system provides a 6.32% increase in accuracy than the exiting method.

Data Availability

The data that supported the findings of this study are available on reasonable request from the corresponding author.

Conflicts of Interest

The authors have no conflicts of interest to declare.

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