ONLINE TEXTILE SHOPPING CART

Mrs.P.Savitha¹, D.Dhakshin Prasath², K.Bhuvaneswaran³, P.Kamesh⁴, S.Mohammed Thoufik⁵

¹Assistant Professor, Department of Computer Science and Engineering, Nandha Engineering College(Autonomous), Erode, Tamil Nadu, India.

2,3,4,5 UG Student, Department of Computer Science and Engineering, Nandha Engineering College(Autonomous), Erode, Tamil Nadu, India.

Abstract: A website that lets users browse and buy products online is known as an online shopping platform. Most of the time, the platform is made up of several modules that work together to give customers a smooth shopping experience. The platform's home page provides access to featured products, promotions, and various product category navigation options. The products that can be viewed and purchased are categorized into main collections by the categories module. The dashboard module furnishes clients with a customized part of the site where they can deal with their record data, request history, and inclinations. Users can search for specific products using keywords, attributes, or filters with the help of the search box module.Users can add selected products to their virtual shopping cart using the add to cart module, which displays the product's name, quantity, and total cost. Users can enter their payment and shipping information, select a payment method, and confirm their purchase on a secure page provided by the payment page module. Last but not least, the confirmation page module displays the order summary, confirms that the order was completed successfully, and provides information regarding the estimated delivery time and order tracking. An online shopping platform may include additional modules to further enhance the shopping experience. For instance, design stores might incorporate a size diagram or a virtual take a stab at instrument, while home stylistic layout stores might incorporate a room organizer or a 3D model watcher. In general, an online shopping platform is a comprehensive tool that makes it easy for customers to browse and buy products online while also making shopping a breeze. The various modules collaborate to simplify the shopping experience and guarantee customer satisfaction.

Keywords: online shopping platform, textile, shopingcart, payment.

1. INTRODUCTION

Online shopping has become an essential part of modern life in today's fast-paced world. Customers can now shop for goods from the convenience of their own homes through an online platform that has gained popularity in recent years. Most of the time, an online shopping platform is made up of several modules that work together to give customers a smooth shopping experience. The home page, categories, dashboard, search box, add to cart, payment page, and confirmation page are all examples of these modules. Extra modules might be incorporated to upgrade the shopping experience further, contingent upon the idea of the items sold. Businesses can sell their products to customers all over the world thanks to online shopping platforms, which give them the chance to go beyond traditional brick-and-mortar stores. Additionally, they give customers the ability to shop from any location and at any time without having to leave their homes. Be that as it may, the progress of an internet shopping stage relies upon a few variables, including the nature of the items offered, the ease of use of the stage, and the productivity of the buying system. By integrating the vital modules and guaranteeing their usefulness, organizations can make an internet shopping stage that furnishes clients with a charming and bother free shopping experience. In conclusion, platforms for online shopping have changed the way we shop and are now an essential part of modern life. Businesses can create a successful platform that meets customers' needs and expectations by utilizing the necessary modules. This will ultimately result in increased sales and customer loyalty.

1.1 ONLINE SHOPPING PLATFORM

A website or application known as an "online shopping platform" lets customers browse and buy goods and services online. Most of the time, online shopping platforms offer a wide range of products from a variety of sellers or vendors and a simplified shopping experience that makes it easy for customers to find and buy what they want. Amazon, eBay, Walmart, Etsy, and a lot of other platforms are popular for online shopping. Search and filtering tools, user ratings and reviews, payment processing, and shipping and delivery options are all common features on these platforms. Convenience is one of the main benefits of online shopping platforms. Without having to physically visit a store, customers can browse and buy products from the convenience of their own homes. Additionally, compared to traditional brick-and-mortar stores, online shopping platforms frequently offer access to a significantly broader selection of products. However, online shopping platforms may also have some potential drawbacks, such as concerns regarding product quality, privacy and security issues, and the possibility of fraud or scams. As a result, customers need to do thorough research on the platforms and sellers they use and take the necessary precautions to safeguard their financial and personal information.

1.3 TEXTILE

Non-woven fabrics, knitted or woven materials, and fabrics made from fibers or varn are all examples of textiles. Materials can be produced using various normal and engineered filaments, including cotton, fleece, silk, polyester, and nylon. There are a number of steps involved in the production of textiles, such as spinning, weaving, knitting, and finishing. These procedures can be carried out by hand using conventional methods or by machine using cutting-edge manufacturing techniques. Textiles are utilized in clothing, home furnishings, industrial materials, medical supplies, and a wide range of other applications. The kind of material utilized for a specific application will rely upon its ideal properties, like strength, breathability, and water obstruction. New materials and manufacturing processes that can reduce waste and increase efficiency, as well as sustainable and environmentally friendly textiles, have piqued interest in recent years. Organic cotton, bamboo, and recycled polyester are a few examples of sustainable textiles.

2. LITERATURE SURVEY

WAREHOUSE MANAGEMENT IMPROVEMENT FOR A TEXTILE MANUFACTURER

This study, according to Thanichkarn Phupattarakit et al., aims to improve the ineffective warehouse management of a Thai textile manufacturer that has struggled with inadequate space utilization and seasonal demand. A few hours of downtime were common throughout the day, directly affecting production and causing the weekly shipment to arrive late. In 2018, only 83% of shipments were delivered on time, which falls short of the goal of 95%. One of the main causes was unorganized inventory management, which made it take longer to locate materials. In order to reduce the amount of downtime and increase the amount of space utilized in the warehouse, the inventory management and warehouse management systems were examined and a number of solutions were introduced. Before removing unused or slowmoving items from the warehouse, inventories were categorized. Second, the ABC analysis was performed on the active ones. The warehouse's layout was changed and a new operations system was developed.

The outcome demonstrates that inactive items occupied the majority of the warehouse space, or 1,342 pallets. The warehouse also received brand-new material handling equipment to simplify its operations. Due to fierce competition for better service and lower costs, the fashion industry is currently putting a lot of pressure on warehouse management and inventory control, making supply chains more complicated. According to the observational review, a wasteful approach to adapting to request vulnerability could result in higher managerial expenses, such as hold costs, request costs, transportation costs, or activity costs, caused by poor space use in the distribution center and ignoring stock levels. The layout of the warehouse, which has a direct impact on inventory management, is one of the most crucial aspects of warehouse management. Due to an ineffective method of managing raw materials and an excessive number of inactive SKUs, the plant ran out of storage space. It was therefore unable to timely supply the production line with materials. According to one of the key indicators in the shipment report, the plant has not been able to meet the weekly goal of 95% since the beginning of the year. [1]

IMPLEMENTATION OF LEAN PRINCIPLES TO IMPROVE THE OPERATIONS OF A SALES WAREHOUSE IN THE MANUFACTURING INDUSTRY

B. Bibin, N. Prasanth et.al has proposed The application of lean methods in a manufacturing sales warehouse is the subject of this paper. Utilizing lean tools like a value stream map (VSM), it highlights efforts to improve warehouse operations by eliminating waste. Waste in an existing system is revealed by a current state VSM. The warehouse is inefficient due to its slow order picking time, improper storage, delayed vehicle loading, and inefficient use of space. The warehouse's order picking time, vehicle loading time, and space utilization all improve when a U-shaped flow layout is used. A future state VSM shows the new condition of tasks before execution. Vehicle loading, space utilization, and storage all saw significant improvements following the implementation of lean. As a result, warehouse operations become more efficient, allowing for quicker responses to customer demands.

According to the literature, implementing lean principles improves productivity and greatly assists in meeting customer demands. However, the author is aware that very little research has been done on how to apply lean principles to warehouse operations. As a result, using lean principles, this work aims to improve sales warehouse operations to meet customer demands as quickly as possible. Stockrooms are significant regions while managing client requests (Bortolini et al., 2015). According to van den Berg &Zijm (1999), they are material handling stations that are devoted to the receiving, storage, order picking, dispatching, docking, and shipping of goods. In receiving, the package of the product is scanned and entered into a database, whereas in storage, the product is stored in the desired arrangement. Items are picked in light of client orders, put away in a specific region to anticipate conveyance, and afterward filtered in the dispatching region prior to transportation. There are generally three types of warehouses: warehouses for production, distribution, and contracts (Dotoli et al., 2015). Transportation, inventory, waiting, delay, space, movement, overproduction, and defect wastes are the categories that have been identified as wastes in these warehouses. Layout modifications, proper working rules, visual management tools, and the 5S (sort, set in order, shine, standardize, sustain) are typically used to eliminate transportation, waiting, delay, space, defect, and movement wastes. Using appropriate inventory models like ABC analysis can improve inventory efficiency. The sales warehouse is viewed in this paper as a symbol for a number of issues related to the distribution of products to customers..[2]

A STUDY ON INVENTORY MANAGEMENT SYSTEM IN FAYWALK FASHIONS AT TUTICORIN

SharmilaAnjumara K* and Wilson M et.al has proposed The primary objective of this study is to examine the current inventory system's performance and control methods at "Faywalk Fashions" in Tuticorin. It also aims to learn about the company's inventory turnover and stock positions. Knowing how long it takes to move the product from the warehouse to other sources is helpful. The primary goals of the study are to (i) learn about the company's inventory turnover and stock positions, (ii) learn about stock maintenance practices, and (iii) offer suggestions for improving the company's inventory management system. The ABC analysis, the inventory turnover ratio, and the economic order quantity are some of the most important tools utilized in this study. The organization's stock positions are also revealed in the inventory management system study's findings, suggestions, and conclusions. In almost all kinds of businesses, inventory management is more important than ever. An organization's primary financial objective is to maximize its value.

A company's stockpile of products, which also includes the components that make the product, is referred to as inventory. However, inventory management estimates the impact of changes in the company's decisions in order to strike a balance between reducing inventory costs and reducing risk. The fundamental issue in corporate financial management is this one. The goal of financial inventory management is to keep inventory costs at a minimum that is acceptable. Using capital to finance inventory is referred to as holding inventory in inventory management, and it is linked to inventory storage, insurance, transportation, obsolescence, and costs associated with waste and spoilage. However, maintaining a low inventory level can result in additional issues when it comes to meeting demand for supplies. The raw materials, work-inprocess (semi-finished goods), and finished goods are all part of an organization's inventory management system. [3]

PRODUCTION MANAGEMENT AND DECISION SYSTEM ORIENTED TO THE TEXTILE ENTERPRISE BASED ON MULTI-AGENT

lingfeng Shao! , Zhanyi Zhao, et.al has proposed To understand the organization and informationization the executives of creation information, and the speedy response of choice investigation, as well as to fabricate a data sharing stage for the material endeavor, the genuine existing deficiency of creation the board framework was examined, and the genuine prerequisites of the informationization development of the material venture were broke down. Utilizing the multi-Agent technology, relationship model, decision theory, and expert system, a production management structure model based on multi-Agent is first proposed in accordance with the actual requirements of the textile industry. The advantages of the current information management system are also reflected in the comparison, and the system's functional structure model is optimized. Thirdly, a multi-Agent-based production management and decision system and a flexible, dynamic, and effective platform for collaboration management are developed. Production management and decision model based on multi-Agent meets the requirements of production management, intelligent decision, and personalized service, as demonstrated by real-world application; production

management system based on multi-Agent realizes heterogeneous integration among the various databases; and promotes the informationization development of textile enterprise production management. As information technology continues to advance, more and more textile businesses are accelerating the pace of technological advancement and information innovation. Numerous highlevel executives would like to use cutting-edge information technology to advance information technology. Regarding this, some companies have invested a significant amount of material, human resources, and financial resources in order to carry out the technological transformation, raise the level of production management within the company, and strengthen the management of the production process. Additionally, their ultimate objective is to reduce production costs, increase the utilization of equipment, increase core competitiveness significantly more than the current systems are capable of, and create a unified management platform for the textile industry. Hence, as far as we might be concerned, how to plan a data the executives mode, and to make the framework understand the organization of creation the board, yet additionally accomplish commonly the sharing of creation information, as well as how to foster a creation the executives framework, which is helpful for the prerequisites of the decision-production for the factory level forerunners later on. Therefore, it is a trend that the textile industry's production management is becoming more informational. [4]

A DETAILED REVIEW OF ARTIFICIAL INTELLIGENCE APPLIED IN THE FASHION AND APPAREL INDUSTRY

CHANDADEVI GIRI , SHEENAM JAIN et.al has proposed In recent decades, the fashion and apparel industry has undergone significant transformation as a result of artificial intelligence's enormous impact. However, the research in this area is dispersed and primarily addresses one of the supply chain stages. Because of this, it is challenging to comprehend the specific work done in the fashion and apparel industry. As a result, the purpose of this paper is to investigate the significance and impact of artificial intelligence throughout the supply chain in the fashion and apparel industry over the past few decades. Following this goal, we played out an orderly writing survey of examination articles (diary and gathering) related with computerized reasoning in the design and clothing industry. The article screening process consisted of five phases, with 149 articles selected from two well-known databases-Scopus and Web of Science.

Article categorization, which was based on the proposed taxonomy and completed in two steps, came next. First, the research articles were sorted by the artificial intelligence techniques used, such as image recognition and computer vision, optimization, machine learning, expert systems, decision support systems, and machine learning. Second, the articles were grouped according to the stages of the supply chain that were targeted, such as design, production of fabrics, production of apparel, and distribution. Moreover, the production network stages were additionally ordered in light of business-to-business (B2B) and business-to-customer (B2C) to give a more extensive standpoint of the business. From a business (B2B/B2C) perspective, research gaps in the applications of AI techniques were identified as a result of the categorizations. In view of these holes, what's in store possibilities of the computer based intelligence in this space are talked about. These can help the scientists in scholastics and modern specialists working in the space of the design and attire industry. **[5]**

MULTI-AGENT BASED RECONFIGURABLE MANUFACTURING EXECUTION SYSTEM

Min Yu1, Weimin Zhang, Peter Klemm et.al has proposedCompanies and manufacturing systems are compelled to dynamically arrange manufacturing resources in response to market perturbations by fierce competition. The manufacturing execution system (MES), which serves as the link between the control level and the shop floor, ought to be adaptable, reusable, and extensible. To meet these prerequisites, a two-overlay cross breed multi-specialist control design, which takes benefits of disseminated and decentralized control engineering, and the elements of every specialist are presented. Two ideas work together to create reconfigurable MES (RMES) in this paper: blackboard architecture and a manufacturing cell that can be changed. In order to make it possible for manufacturing resources to be reconfigured dynamically, RMC has some of the characteristics and functions of RMC. The configuration agent, which serves as the RMES's core agent, makes use of the blackboard architecture, which has a number of appealing characteristics, including explicit control, modularity, and structured interaction. The RMES reconfiguration procedure is established in order to put the framework into practice. There are three perspectives on the idea of reconfiguration in relation to the MES: organization and technology reconfiguration, as well as machine reconfiguration. Machine reconfiguration, for example, reconfigurable machine plan and modularized regulator configuration, is worried about changing capabilities and designs of machine as indicated by the necessities of creation errands to deftly follow through with numerous sorts of responsibilities. The dynamic configuration and integration of physical resources in order to optimize order fulfillment is the focus of organization reconfiguration, which includes job shop scheduling, layout planning and optimization, and stitching material flow technology.

The source of the information is an expert at resolving particular aspects of the problem as a whole. It is free to proceed without the assistance of any other knowledge sources as soon as it locates the necessary information on the blackboard. Task decomposing, problem-solving, and cooperative knowledge are all included in the source of knowledge. The knowledge of task decomposing is used to break down a task and define the order in which it is carried out. How an agent completes its tasks is described by the procedural knowledge or problem-solving knowledge. The negotiation mechanisms and protocols that agents use to coordinate their activities are included in the co-operative knowledge. It is possible to create, alter, and answer hypotheses with knowledge. **[6]**

SERVICE DESCRIPTION FOR PERVASIVE SERVICE DISCOVERY

Michael S. Thompson, Scott F. Midkiff et.al has proposed Service discovery is different from traditional computing in pervasive computing environments. Contrary to traditional services, pervasive services include everything from environmental controls to computation resources. The term "pervasive computing" refers to a wide range of devices, from lightweight, low-resource LCD projectors to powerful desktop and server systems. Methods for service discovery must take into account the new dimensions of location and time as the application space shifts from the virtual to the physical world. This information cannot be taken into account by the current service discovery mechanisms, so they do not provide the best service discovery. The mechanisms that process service descriptions in pervasive computing service discovery are the subject of our investigation in this paper. Our interests are the precision of area and preservation of assets.Service discovery is different in pervasive computing environments from traditional environments. Physical-domain issues, service populations, and location flexibility are the three categories of differences. The transfer of services from the virtual domain into the physical domain is one of the requirements of pervasive computing. In the past, computers didn't know about physicaldomain concepts like location, time, or state. To find useful pervasive computing services in the real world, the infrastructure and services need to know what the users can't do. A user on the other side of the world can still use a nameserver that is on one coast of a country. However, a salesperson giving a presentation in a board room probably won't use a LCD projector 300 miles away.

The tree's non-leaf nodes indicate a level of specialization. Leaf hubs address administrations. A node is said to be related if it shares a parent at some level. Connections becomes more vulnerable as the quantity of guardians between the two hubs increments. All hubs in a tree are connected on, at any rate, a significant level. Strong relationships exist between nodes that have the same parent. The presence of services in as many trees as possible is possible and encouraged. Service descriptions include a list of tree memberships. An organization can create and utilize additional trees in this manner. There are three types of information in templates and subtemplates: mandatory, optional, and additional. The information that is needed must be there. Information that is defined in a standard, is understood by all devices that implement the service, and is not required to be included in a description is considered optional information. Lastly, the device manufacturer or service provider may define and include additional information. Any party unfamiliar with additional information is to make it simple to add application-specific extensions to standard descriptions...[7]

DESIGN AND IMPLEMENTATION OF E-COMMERCE SITE FOR ONLINE SHOPPING

Sidhartha Reddy Vatrapu et.al has proposed Being able to meet the needs of customers in the most efficient and timely manner is critical in today's fast-paced business environment. if your clients want to see your business online and be able to buy your products or services right away. Online Shopping is a lifestyle e-commerce website that sells clothing and accessories (at the moment, Men's Wear). This project lets registered users see a variety of products that are available. Registered users can use the PayPal payment processor (Instant Pay) to buy the products they want right away and can also order using the Cash on Delivery (Pay Later) option. This venture gives a simple admittance to Heads and Directors to see orders set utilizing Pay Later and Moment Pay choices. A number of technologies need to be investigated and comprehended in order to construct an e-commerce website. Multi-tiered architecture, server- and client-side scripting, implementation technologies like ASP.NET, programming languages like C#, and relational databases are all examples of these. The goal of this project is to learn about the technologies used to create a basic website with a shopping cart application for customers and create a basic website.

E-commerce is becoming increasingly popular as a business model. Increasingly more business houses are carrying out sites giving usefulness to performing business exchanges over the web. It is reasonable to assert that online shopping is becoming increasingly common. The development of a general-purpose e-commerce store where consumers can purchase goods like clothes from the convenience of their own homes via the Internet is the goal of this project. However, for purposes of implementation, this paper will focus on clothes shopping online. A web-based store is a virtual store on the Web where clients can peruse the inventory and select results of interest. A shopping cart can be used to collect the selected items. The items in the shopping cart will be displayed in order at checkout. To complete the transaction, additional information will be required at that point. Typically, the customer will be asked to fill out or choose a shipping address, a billing address, a shipping option, and information about their payment, like their credit card number. When an order is placed, the customer receives an email notification. Anyone can view the Online Shopping portal and the products that are available, but in order to buy or order products, they must log in using their username and password. Members who have not registered can do so by going to the registration page. Roles can only be changed by admin, and developers can only be "Admin" by default. The user's default role will be "User" once he registers on the site..**[8]**

SMART TROLLEY WITH AUTOMATIC BILLING SYSTEM USING ARUDINO

Shishir R Patil et.al has proposed With significant technological advancement, shopping malls (also known as supermarkets) are almost fully developed today. A shopping mall is a place where we can find a wide range of goods, including toys, kitchen sets, groceries, decorative items, and glassware. Discounts, home delivery, and other perks entice a lot of people to shop. On weekends, especially, people have to wait in long lines, and customers have to wait patiently for their turn. Due to people's busy schedules, this process wastes time, makes them feel bored, and the services provided at the billing counter do not satisfy them. To stay away from these issues we have presented a viable and exceptionally advance framework which additionally helps us during Coronavirus period: an efficient method for social isolation. The proposed system, called a "Smart Trolley," is designed to address this particular issue for customers, particularly in billing. When items are placed, they are automatically scanned, and the amount of each purchased item is automatically displayed parallel on an LCD. It uses RFID technology, which can scan a large number of items and saves customers and the shopping mall valuable time.

People flock to shopping malls in metropolitan cities to acquire their daily necessities. As the market is becoming greater step by step with assortment of items and purchaser taste has changed[1-3] .shopping centers are focus of fascination on account of limits in items, credit only exchange, assortment of items like family, embellishing, kitchen ,sports, training, writing supplies which are accessible under one rooftop.

The store management unit also provides real-time information on the records, and the exaggerated shopping trolley system helps customers cut down on the significant amount of time they used to spend shopping. A key can be used by customers who want to remove a product from their shopping cart. The total amount will be shown on the LCD once the purchase is complete, and a QR code can be used to bill. Consignment inspection and merchandise packing can be done at the exit point. Various plans were made for clever shopping trolleys to make shopping less difficult for people in malls and stores. We have adopted a new method that does not require a server and does not have any issues with connectivity or communication beyond 1.8 kilometers.

The ideas presented in this paper are based on the use of RFID (Radio Frequency Identification) Technology, which necessitates creative solutions to these issues. An RFID reader that is attached to a trolley is used to scan each product that has an RFID tag attached to it. The customer buys various items and places them in the trolley. The names and prices of all of the items will be shown on an LCD (liquid crystal display) screen that is also attached to a trolley. In this study, we successfully implemented a feasible RFID-based technology to assist numerous customers and save precious time, particularly in billing, a tedious task that waits for our turn. Even though RFID can scan a lot of items at once, every item needs to be tagged. A trolley becomes smart because it has built-in features for tags and readers that don't take up much space, making it very appealing to customers...[9]

ONLINE SHOPPING SYSTEM

Sai paulet.has proposed With significant technological advancement, shopping malls (also known as supermarkets) are almost fully developed today. A shopping mall is a place where we can find a wide range of goods, including toys, kitchen sets, groceries, decorative items, and glassware. Discounts, home delivery, and other perks entice a lot of people to shop. On weekends, especially, people have to wait in long lines, and customers have to wait patiently for their turn. Due to people's busy schedules, this process wastes time, makes them feel bored, and the services provided at the billing counter do not satisfy them. To stay away from these issues we have presented a viable and exceptionally advance framework which additionally helps us during Coronavirus period: an efficient method for social isolation. The proposed system, called a "Smart Trolley," is designed to address this particular issue for customers, particularly in billing. When items are placed, they are automatically scanned, and the amount of each purchased item is automatically displayed parallel on an LCD. It uses RFID technology, which can scan a large number of items and saves customers and the shopping mall valuable time.

People flock to shopping malls in metropolitan cities to acquire their daily necessities. As the market is becoming greater step by step with assortment of items and purchaser taste has changed[1-3] .shopping centers are focus of fascination on account of limits in items, credit only exchange, assortment of items like family, embellishing, kitchen ,sports, training, writing supplies which are accessible under one rooftop.

The store management unit also provides real-time information on the records, and the exaggerated shopping trolley system helps customers cut down on the significant amount of time they used to spend shopping. A key can be used by customers who want to remove a product from their shopping cart. The total amount will be shown on the LCD once the purchase is complete, and a QR code can be used to bill. Consignment inspection and merchandise packing can be done at the exit point. Various plans were made for clever shopping trolleys to make shopping less difficult for people in malls and stores. We have adopted a new method that does not require a server and does not have any issues with connectivity or communication beyond 1.8 kilometers.

The ideas presented in this paper are based on the use of RFID (Radio Frequency Identification) Technology, which necessitates creative solutions to these issues. An RFID reader that is attached to a trolley is used to scan each product that has an RFID tag attached to it. The customer buys various items and places them in the trolley. The names and prices of all of the items will be shown on an LCD (liquid crystal display) screen that is also attached to a trolley. In this study, we successfully implemented a feasible RFID-based technology to assist numerous customers and save precious time, particularly in billing, a tedious task that waits for our turn. Even though RFID can scan a lot of items at once, every item needs to be tagged. A trolley becomes smart because it has built-in features for tags and readers that don't take up much space, making it very appealing to customers. **[10].**

3. MODULE DESCRIPTION

3.1 HOME PAGE:

Customers' first point of contact with an online shopping platform is the homepage, which sets the tone for their shopping experience. Customers should be able to quickly and easily navigate the website's home page, which should also be visually appealing. Most of the time, there is a lot of content on the home page, like new products, promotions, and featured products. A search box, shopping cart, and links to various product categories are also possible. Customers can be enticed to continue exploring the website by making use of appealing graphics, clear call-to-action buttons, and high-quality images. The company's values and personality should be reflected in the home page's design, which should be consistent with the brand. It should also be optimized for a variety of devices, such as desktops, tablets, and mobile phones, to guarantee that customers will be able to use the website on any device. In general, an online shopping platform's home page plays a crucial role in attracting and retaining customers. It should accurately represent the company and its products, be

optimized for various devices, and offer an experience that is both visually appealing and user-friendly.

3.2 CATEGORIES:

An essential component of an online shopping platform is the categories module, which divides the products that can be viewed and purchased into main collections or categories. Customers can quickly access the relevant sections of the website and easily locate the products they are looking for by categorizing them into distinct categories. The categories module ought to be easily accessible from any other page on the website and ought to be prominently displayed on the home page. The module ought to be clear and concise category names that accurately represent the products that are available, and it ought to be intuitive and simple to use. A thumbnail image and a brief description of the products in each category ought to be included. Subcategories can also be used to further classify the products and offer customers more specialized options. When developing categories for the online shopping platform, it is crucial to take into account the requirements and preferences of the intended audience. Products may be categorized by gender, style, or occasion in a clothing store, while those in a grocery store may be categorized by type, brand, or dietary requirements. In general, the categories module of an online shopping platform is an important tool that makes it easy for customers to find the products they want. Businesses can give their customers a smooth and enjoyable shopping experience by organizing their products into categories that are easy to understand and understand.

3.3 DASHBOARD

An online shopping platform's backend feature called the dashboard module lets businesses effectively manage and monitor their operations. Businesses are able to keep track of important metrics like sales, inventory, customer data, and more thanks to the dashboard's real-time data and analytics. Sales reports, inventory management, order tracking, customer analytics, and marketing campaign analysis are all common tools found on the dashboard. Decisions based on data can be made with the help of this information, and areas where improvements can be made to boost sales and customer satisfaction can be found. Businesses can also manage their products and services, update pricing, and change product descriptions with the dashboard module. This feature is especially useful for controlling the amount of inventory and making sure that products are listed accurately and recently. The dashboard module can be tailored to a company's specific requirements, and it may include tools for customer relationship management, email marketing, and social media management. Password protection can be used to secure the dashboard, which can only be accessed by authorized personnel. In general, businesses can't manage their online shopping platform effectively without the dashboard module.

Businesses can boost sales, customer satisfaction, and profitability by streamlining their operations and making wellinformed decisions with real-time data and analytics.

3.4 SEARCH BOX

An essential component of an online shopping platform is the search box module, which enables customers to quickly and easily search for specific products or keywords. The search box can be accessed from any page on the website and is typically prominently displayed on the home page. The search box module ought to be made so that it is simple to understand and use, and it ought to come with clear instructions on how to use it effectively. Customers will be able to locate the products they are looking for with minimal effort if it is optimized to quickly provide accurate and relevant search results. Customers may be able to refine their search queries and locate the products that are most relevant to them by using advanced features like predictive text, autocorrect, and suggestions in the search box. A wide range of search queries, including product names, keywords, categories, and even misspelled words, ought to be supported by the search box module. Businesses can use search box analytics to improve their website's content and product offerings to meet customer demand and gain valuable insight into the most used search terms. In general, the search box module is a crucial component of an online shopping platform that enables customers to find the products they want quickly and easily. Businesses can increase sales and improve customer satisfaction by providing relevant and accurate search results.

3.5 ADD TO CART

An essential component of an online shopping platform is the "Add to Cart" module, which enables customers to add products to their shopping cart prior to making a purchase. Customers can typically add a product to their cart by clicking on a button or icon in the module. To encourage customers to make a purchase, the "Add to Cart" module ought to be prominently displayed and be simple to access from the product page. Additionally, it should be simple to use and intuitive, with clear instructions for adding products to the cart. The ability to change the quantity of products in the cart, add multiple products to the cart, or remove products from the cart are examples of additional features that may be included in the "Add to Cart" module. It ought to likewise give ongoing criticism to clients, for example, showing the complete expense of their request and the quantity of items in their truck. An essential component of any online shopping platform is the "Add to Cart" module, which enables customers to browse and select products before adding them to their shopping cart for checkout. It makes it easier for customers to make purchases and ensures that they can finish them quickly and easily. Overall, the "Add to Cart" module is a crucial part of an online shopping platform that makes it easier for customers to make

purchases and makes their shopping experience easy and enjoyable. Businesses have the potential to boost sales and improve customer satisfaction by offering an intuitive "Add to Cart" module.

3.6 PAYMENT PAGE

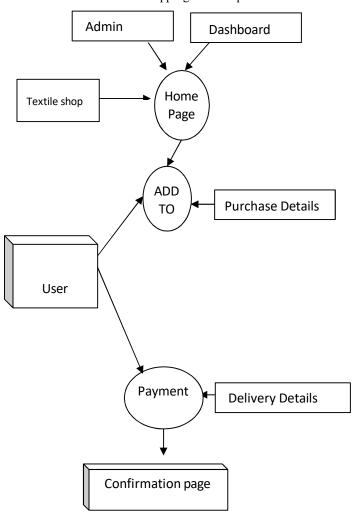
The installment page module is a pivotal part of an internet shopping stage that permits clients to safely and helpfully make installments for their buys. Customers typically proceed to the checkout page after adding items to their cart and navigating to the payment page. The payment page module ought to have clear instructions on how to finish the payment process and be designed to be simple to use. Additionally, it should be optimized to provide a secure and dependable payment gateway that safeguards customer data and expedites payment processing. Credit cards, debit cards, net banking, mobile wallets, and other payment gateways might be included in the payment page module. Customers should also be able to get real-time feedback on their payment transaction's status, including confirmation of payment receipt. The installment page module ought to be gotten with encryption innovation and other safety efforts to forestall unapproved access and guarantee the security of client information. In order to guarantee the highest level of security and compliance, it should also adhere to relevant regulations and guidelines, such as PCI-DSS. An essential component of an online shopping platform is the payment page module because it enables customers to complete their transactions quickly and easily, thereby increasing sales and customer satisfaction. Businesses can win the trust of their customers and build a loyal customer base by offering a payment page module that is safe and reliable. In general, the payment page module is a crucial part of an online shopping platform. It makes sure that customers have a safe and easy way to pay, which can increase sales and customer loyalty.

3.7 CONFIRMATION PAGE

An essential component of an online shopping platform is the confirmation page module, which provides customers with an order confirmation after they have made their purchase. The confirmation page is used to give customers important information about their purchase and typically appears after the payment has been processed. With clear instructions on how to proceed, the confirmation page module ought to be designed to be intuitive and simple to comprehend. It should also give customers the order number, details about their purchase, shipping address, and estimated delivery date, among other things. The affirmation page module may likewise incorporate extra highlights, for example, the capacity to print or save the affirmation page for future reference, track the situation with their request, and contact client care if vital. The confirmation page module is an essential component of an online shopping platform because it gives customers confidence in the website's dependability and reassures them that their purchase was successful. Additionally, it can assist in reducing the number of inquiries made to customer support and provide valuable feedback to businesses regarding the efficiency of their checkout procedures. In general, the confirmation page module is an essential component of an online shopping platform that fosters customer satisfaction and trust. Businesses can build customer loyalty, reduce support inquiries, and improve customer satisfaction by providing an efficient and dependable confirmation page module.

4. SYSTEM DESIGN

In order to create a platform that is both streamlined and efficient for the management of textiles, the system design of an online textile shopping cart requires the creation and



integration of a number of modules. A database management module that stores and manages data about product inventory, sales, and customer information is included in the design of the system. The database should be built to handle a lot of data and keep it safe and accurate. Another important part of the system design is the user interface design module, which aims to make it easy for customers to browse products, add them to their shopping carts, and pay for them. Customers will be able to access the platform from a variety of devices and screen sizes thanks to the responsive design. Customers can search and filter products based on specific criteria using the categories module's textile product categorization system. Businesses should be able to easily create new categories using the module's customizable design. The inquiry box module empowers clients to look for explicit items by watchword or item name, and the module ought to give continuous outcomes and ideas for the client's hunt question. The add to cart module should provide real-time feedback on the total cost and quantity of products in the cart before customers complete their purchase. Customers can complete their transactions by using the payment page module, which provides them with a safe and dependable payment gateway. The confirmation page module, on the other hand, provides them with confirmation of their order as well as essential information about their purchase. To simplify the entire textile management process, modules for inventory management, shipping, and customer relationship management should be included in the system design. To ensure a smooth and effective workflow, the modules ought to be designed to seamlessly integrate with one another. To create a comprehensive and efficient textile management platform, the system design of an online textile shopping cart entails the development and integration of a number of modules. Businesses can increase sales, improve customer satisfaction, and streamline their operations by designing a platform that is simple to use.

5. DATA FLOW DIAGRAM

6. METHODOLOGY

In order to guarantee the platform's successful development and deployment, the method for implementing an online textile shopping cart consists of several steps. Gathering of requirements: Gathering requirements from stakeholders like customers, business owners, and IT teams is the first step. This step includes characterizing the extent of the task, distinguishing key elements and functionalities, and illustrating the specialized prerequisites. Development and design: The development team can begin the design and development process after defining the requirements. Wireframes, UI/UX designs, and the coding of the platform's various modules and functionalities are all part of this step. Testing: After development is finished, the platform needs to go through a lot of testing to make sure it works right and

meets all the requirements. Unit testing, integration testing, and user acceptance testing are all part of this step. Deployment: The platform can be transferred to a production environment once the testing phase is finished. Hosting, server configuration, and platform code deployment are all part of this step. Assistance and upkeep: The development team must provide ongoing support and maintenance after deployment to ensure that the platform continues to function effectively. Monitoring the platform's performance, fixing bugs, and providing customer support are all part of this step. In order to ensure the platform's successful development and deployment, a team of developers, designers, and project managers must collaborate on the methodology for implementing an online textile shopping cart. To ensure that the platform meets all requirements, is delivered on time, and stays within budget, stakeholders and the development team must communicate and work together. Businesses can create a comprehensive and efficient platform for textile management that increases sales, improves customer satisfaction, and streamlines operations by following this method.

7. CONCLUSION

In conclusion, textile companies looking to streamline their operations and increase customer satisfaction need a platform

REFERENCES

- 1. Thanichkarn Phupattarakit; Warehouse Management Improvement for a Textile Manufacturer, **Date of Conference:** 12-15 April 2022, **DOI:** 10.1109/IEA.2019.8714853, **Conference Location:** Tokyo, Japan, Publisher: IEEE
- 2. B. Bibin, N. Prasanth and D. S. Jebadurai1: Implementation of Lean Principles to Improve the Operations of a Sales Warehouse in the Manufacturing Industry. International Journal of Technology. Vol. 1, p. 46-54 (2022)..
- 3. K. Sharmila Anjumara and M. Wilson: A Study on Inventory Management System in Faywalk Fashions at Tuticorin. Journal of Chemical and Pharmaceutical Sciences. Vol. 9 (4) (2022).
- Jingfeng Shao; Zhanyi Zhao; Production management and decision system oriented to the textile enterprise based on multi-Agent, Date of Conference: 25-27 June 2022, Date Added to IEEE Xplore: 09 August 2010 Electronic ISBN:978-1-4244-7164-5 DOI: 10.1109/ICCDA.2010.5541499.2022
- 5. CHANDADEVI GIRI, " A Detailed Review of Artificial Intelligence Applied in the Fashion and Apparel Industry ",Cotton Textile Technology(in Chinese), vol.36,no. 1 ,2022,pp.2-4.
- H. Yang, J. Y. Zhu, and N. Zhou, "Multi-agent based distributed manufacturing execution system model", Transactions of Nanjing University of Aeronautics & Astronautic, vol.22, no.1, 2005, pp. 16-22.2022
- 7. M. S. Thompson and S. F. Midkiff, "Service description for pervasive service discovery," Proc. 25th IEEE InrI Conf Distributed Computing Systems Workshops, Washington D.C., USA, pp. 273- 279, 2022.
- 8. Sidhartha Reddy Vatrapu Design and Implementation of E-Commerce Site for Online Shopping, Vatrapu, Sidhartha Reddy, "Design and Implementation of E-Commerce Site for Online Shopping" (2022).

that includes an online shopping cart. Businesses can boost performance, profitability, and customer satisfaction by implementing a comprehensive platform with modules for inventory management, sales, and customer relationship management. An online textile shopping cart's implementation process involves a number of steps, including gathering requirements, designing and developing the product, testing it, deploying it, and providing support and maintenance. Businesses can guarantee the platform's successful development and deployment by following this method. Overall, businesses in the textile sector can benefit greatly from investing in an online textile shopping cart because it provides them with a powerful tool for managing their operations more effectively and efficiently. Businesses can develop a streamlined and user-friendly platform that enhances their performance and assists them in maintaining a competitive edge by utilizing the appropriate modules, features, and functionalities.

SV [ISSN 2349-7122] VOLUME 15 ISSUE 2 2025

- 9. <u>Shishir R Patil</u> Smart Trolley with Automatic Billing System using Arudino February 2022 IAES International Journal of Artificial Intelligence (IJ-AI) 2(2):2268 DOI:10.29294/IJASE.8.3.2022.2268-2273 Project: KLE Institute of Technology Dept.Physics
- 10. Sai paul, Software Requirement Specification(SRS) for Online Shopping System(OSS) Springer report on 2021.