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**EXAMINATION SCRIPT COVER PAGE**

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**Question2: Global Supply Chain Management**

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The sole purpose of the supply chain, which has been around for many centuries, is to increase speed and maximize efficiency throughout, which can help businesses raise standards, provide better customer service, and lower risks. Thus, the management of the flow of goods and information about products from their source (the acquisition of raw materials) to their final destination is the simplest definition of the supply chain. SCM is described as follows by The **Chartered Institute of Procurement and Supply (CIPS)**:

**Logo, company name

Description automatically generated“The handling of the flow of goods and services from the raw manufacturing of the product through to the consumption by the consumer.”**

**Figure 1: Components of SCM**

The supply chain management contains the following components,

1. **Planning:** Planning is the first and most important phase in SCM, which includes setting inventory levels and forecasting demand in order to align supply and demand with customer needs. In order to determine the quantity of materials, resources, and equipment needed throughout the entire cycle, the enterprises use this stage to develop a production plan by analyzing historical data and current trends. With the help of this phase, suppliers and customers may work together more effectively, and all of the data collected can be used for predictive analysis to increase cash flow.
2. **Sourcing:** For effective supply chain management, it is essential to choose the proper vendor and preserve good relationships because choosing an ineffective supplier will harm the entire supply chain and the company's brand. The fundamental goal of sourcing is to collaborate with suppliers to provide raw materials throughout the production process, where the supplier must be able to meet the customer's needs and quality standards. This can be done by routinely checking and assessing the vendors' performance.
3. **Manufacturing:** Following on the heels of the first 2 steps, step three involves using both labour and machinery to transform the raw materials into useable goods. In this process, the major objectives are supervising the assembly, testing, inspection, or packing, keeping an eye on quality, and maximizing productivity. When creating the finished product, this process also concentrates on other potential sources of deviation and goes back to the earlier steps to fix them.
4. **Delivering:** The distribution of finished goods to customers is the next crucial element of SCM and it plays an essential part in developing and sustaining the brand and reputation of the company. Order management is involved in this stage to collect and process client orders, send the orders through a dependable and consistent channel, handle discrepancies and logistical problems, and provide customer service to address complaints and track orders.
5. **Returning:** The supply chain management process ends with managing the return of products. It is also called as **"Reverse Logistics"**. Customers have the option to return things on occasion for a variety of reasons, thus in those circumstances the business should have the capacity to accept returned goods and properly assign refunds for returns received. This process enables us to determine if the returned item may be recycled or remade.

Adopting the elements of supply chain management is necessary to pave the way for a transformative future because it is essential when creating business strategies. Companies are adopting new technology and numerous digital efforts in order to stay in control and be one step ahead of the competition as the need for dependable products rises daily.

**Role of Technology in Providing Strategic Advantage of Supply Chain:**

The supply chain is essential for a company’s success and the introduction of new technologies is a game changer making real-time tracking of products, automation process, and fast and accurate delivery possible. Below are some ways in which technologies provide a strategic advantage in SCM,

1. **Increased Visibility:** Product, manufacturing, and distribution can be a complex process but using real-time information can improve the efficiency of the entire process. Technologies like tracking and GPS provides more real-time information and visibility about the location of the product and the estimated delivery time from the source to the destination. This provides a solid platform for the customers to track their shipments providing real-time updates at the same time reducing customer service representatives saving the company money and resources.
2. **Increased Communication and Collaboration:** Effective communication and cooperation between suppliers, customers, and partners are crucial to a supply chain's success. The manufacturers may work successfully with their important partners to settle any differences and disagreements with the use of the internet, phones, and real-time information during the mid-process of distribution. In addition, the technologies also give visibility into the distribution process. All of this can help with increased responsiveness and efficiency when making critical business decisions and projecting future demands for partners and suppliers.
3. **Enhanced Inventory Management:** Production and distribution of supplies are dependent on demand, which can fluctuate from time to time depending on necessity. Insufficient supply can result in problems with demand and lost client sales, while oversupply can result in wastage and higher costs. Businesses utilize a variety of analytics tools to analyze data and create predictive models that can be flexible enough to manage diverse demand scenarios.

**Example: Walmart Supply Chain Case Study**

Walmart remains at the top of Fortune's Global 500 list with over $570 million in revenue and $32 billion in inventory. Walmart's success largely relies on behavior forecasting to anticipate future trends and invest in and create new technology. It also maintains open lines of communication with distributors, manufacturers, and online retailers in order to sustain long-term relationships. This aids in obtaining affordable costs, superior raw materials, and reliable production levels. Technologies and ideas created by Walmart are currently considered industry standards,

* **Electronic Data Exchange (EDI):** The term describes paperless interactions between retailers and logistical services. Walmart uses EDI to transmit information to its suppliers thanks to strong partnerships, open lines of communication, and collaborative efforts. This aids in activity coordination, lowers the cost of external transactions, and prevents misunderstandings. The relationship between **Proctor and Gamble (P&G)** and Walmart is a great example of how to leverage data sharing to create effectiveness where Walmart uses an automatic reordering system on satellite communication to inform about the item in need and P&G then sends the item to the distribution center.
* **Retail Link:** It is the reporting software or link which provides complete information on sales, up-to-date information on stocks, and access to sales reports, and forecast. This technology is also accessible by the supplier, which enables them to can take care of the inventory levels, and also all new initiatives and expectations will be posted in the link/dashboard.
* **Predictive Analysis:** Almost all businesses and merchants utilize predictive analysis to anticipate sales, identify patterns, and predict consumer behavior. Wi-Fi, RFID, and point-of-sale data are all crucial for creating machine learning models. These historical data are used by Walmart to create predictive models that identify trends and patterns in order to set prices, make offers on items, and make marketing and business decisions that will increase sales and customer satisfaction.

**Question3: Customer Relationship Management**

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CRM is a strategy and a collection of tools that companies use to organize and examine client interactions. CRM combines customer data from many channels with the aim of using data to create strong customer relationships, increase customer happiness, and aid in client retention, all of which support increased sales. The following essential elements are crucial to CRM's success:

1. **Strategy:** The organization's business plan for creating and managing a strong relationship with existing and future consumers
2. **Technology:** The tools a business uses to track, catalogue, and analyze consumer interactions in order to better understand their requirements and preferences.
3. **Process:** The actions and protocols used to control and enforce customer relations and retention

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**Figure 2: Main components of CRM**

The CRM software keeps track of client data from several channels, including email, phone, social network profile, demographics, and purchase history. This information is finally stored in a centralized database where the data is analyzed to figure out any shopping patterns and trends in customer behavior. Based on the purchase history and demographics, customer segmentation is also possible which can be useful for gaining business insights in developing marketing strategies, determining client preferences, and managing customer relationships. CRM proves to be a holistic approach that focuses on the customer and company process while taking technology into account. **Hence it is Strategic Business Initiative.**

**Main Components of CRM:**

**1. Operational CRM**

Operational CRM is primarily utilized to improve business process efficiencies like sales and marketing and provide automation services within enterprises. It offers comprehensive details about customer communications with the business that may be used when interacting with customers and upholding relationships. Using the operational CRM, which converts stored data into leads, converts the leads into customers for communication, and lastly, services throughout the customer's lifecycle, can help with communication and client retention.

**Features and benefits of Operational CRM**

* **Sales Force Automation:** It aids in the development and streamlining of the organization's sales process. It offers data that organizations can use to more effectively and efficiently meet client needs and boost sales. It mostly focuses on attracting more new clients and keeping current ones.
* **Enterprise Marketing Management:** It focuses on streamlining the marketing procedure to assist the business in effectively promoting its goods in order to boost sales, provide the best products, and reach out to potential clients. Campaign management (email or internet advertisements) is mostly seen as a crucial part of the marketing process.
* **Customer Service and Support:** This procedure aids firms in providing services to clients in order to meet their demands and respond to their inquiries. An essential component of this procedure is customer call management, which includes taking incoming calls and keeping track of the level of service.

**2. Analytical CRM**

The primary focus of analytical CRM is on the use of real customer data in analysis to produce business-related insights. To examine the behavior and preferences of the client, data is gathered, saved, organized, and used for data analysis. The data analysis report aids decision-making for the leaders by giving them a complete picture of the cash flow.

**Features and Benefits of Analytical CRM**

* **Data Warehouses and Mining:** The procedure aids in keeping the data in a centralized database organized in a table structure for each access and query. Historical, current, and incremental data are all included in the data warehouse in a structured format. Utilizing a visualization to compare historical and present data, data mining is done to look for patterns in the data. This statistical analysis provides a clear pattern, trend, and clear picture of the analytical lifecycle that can be used for customer profiling.
* **Business Intelligence:** Making data-driven decisions requires having insights into the customer's present preferences, habits, and likely future behavior, which the analytical CRM offers. A competitive edge is provided by the BI platform's useful KPIs for determining resource allocation, areas of opportunity, and gap identification.

**3. Collaborative CRM**

Collaborative CRM focuses on facilitating collaboration between various entities/departments in an organization in order to unite all the groups to achieve one goal which is to provide and improve customer service and satisfaction to retain current customers and to gain new customers. Although streamlining workflows and processes across several divisions in a business may seem simple, friction and resistance can arise. For instance, it is crucial that the marketing team give the sales team information about potential consumers, and it is equally important that the support team give the sales team information about customer feedback.

**Features and Benefits of Collaborative CRM**

* **Interaction Management:** In order to satisfy all requirements, a central access point will be provided to access all the customer data. The process records and maintains information about interactions between the business and the customer because not all departments will have direct contact with the customer.
* **Channel Management:** Channel management is the practice of keeping track of the way customers communicate with the business (through email, phone, or chat). Tracking the form of communication is essential since it enables the business to offer a reverse way of communication.

To summarize, all three elements are the cornerstones of a CRM's success. They make a crucial contribution to the business strategy of an organization in a number of ways, as was previously described. The operational CRM has a strong emphasis on sales, marketing, and customer service, all of which contribute to a rise in client volume, satisfaction, and retention. Analytical CRM places a strong emphasis on data analysis and storage, which can be used to create predictive models that offer business insights and, in turn, a competitive edge. Finally, Collaborative CRM serves as a team-building communication channel for the entire organization.

**Case Study Example:**

The American multinational online retailer and web service provider **Amazon** is one of the best examples. The successful deployment of CRM, which is used extensively to engage with customers, deliver world-class customer service, and manage customer-related current and historical data, is one of the key elements in its success.

All of a customer's information, including contact details, and purchase history, is stored in his Amazon customer account and database. An automatic email is sent to the customer with the order details and a tracking URL to provide real-time updates. Additionally, Amazon offers seven-day returns and customer assistance that is available 24/7. These services often refer to **Operational CRM**, which is employed to increase client retention and satisfaction.

The CRM database stores all purchase orders and communications with customer service representatives for inquiries or complaints, which is essential for developing predictive models to identify client shopping trends, provide offers, personalization, and make future suggestions. This usually refers to **Analytical CRM**, which stores and analyzes customer data to produce future insights.

Each product and service offered by Amazon has a feedback mechanism, which aids in fostering communication between customers and various organizational departments. The customer review system enables customers to rate the goods they have purchased. This platform serves as an interface for communication between various departments so they can cooperatively work to raise the bar, which is generally referred to as **Collaborative CRM**.

**References:**

[1] The Five Components of Supply Chain Management (Aug 10, 2021) available at -<https://blog.procureport.com/components-of-supply-chain-management/> [Accessed 04/20/2023]

[2] Jason Fernando (July 07, 2022), Supply Chain Management (SCM): How It Works and Why It Is Important available at - <https://www.investopedia.com/terms/s/scm.asp#:~:text=Supply%20chain%20management%20has%20five,requirements%20for%20executing%20that%20plan>. [Accessed 04/20/2023]

[3] Basic Components of Supply Chain Management available at - https://www.wisys.com/basic-components-of-supply-chain-management/ [Accessed 04/20/2023]

[4] EDI in the Supply Chain available at - <https://www.edibasics.com/edi-by-industry/edi-supply-chain/#:~:text=EDI%20in%20the%20supply%20chain%20standardizes%20transactions%20with%20suppliers%20reducing,suppliers%20within%20their%20supply%20chain>. [Accessed 04/23/2023]

[5] Meredith Flora (August 19, 2022), Walmart Supply Chain: What Makes It (Still) So Successful available at - <https://www.shipbob.com/blog/walmart-supply-chain/> [Accessed 04/23/2023]

[6] WALMART's SUPPLY CHAIN CASE STUDY available at - <https://www.youtube.com/watch?v=sWdmGcaTras&ab_channel=5MinutesLearning> [Accessed 04/23/2023]

[7] What is CRM available at <https://www.salesforce.com/eu/learning-centre/crm/what-is-crm/#crm> [Accessed 04/26/2023]

[8] Wesley Chai, CRM (customer relationship management) available at - <https://www.techtarget.com/searchcustomerexperience/definition/CRM-customer-relationship-management> [Accessed 04/26/2023]

[9] Atul Chakrawarty (December 13, 2017), AMAZON’S CUSTOMER RELATIONSHIP MANAGEMENT STRATEGY available at - <https://www.linkedin.com/pulse/amazons-customer-relationship-management-strategy-atul-chakrawarty/> [Accessed 05/01/2023]

[10] FOLIO3 MICROSOFT DYNAMICS PARTNER (DECEMBER 8, 2021), Amazon CRM – How to Master the E-Commerce CRM Strategy? Available at - <https://dynamics.folio3.com/blog/amazon-crm/> [Accessed 05/01/2023]

[11] Manogna Chandrika Matta, Types of CRM Software Systems: Comparing Features and Benefits available at - <https://www.selecthub.com/customer-relationship-management/5-types-specialized-crm/> [Accessed 05/04/2023]