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# DATA ANALYTICS IN RETAIL STORE STOCK INVENTORY ANALYTICS.

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LITERATURE SURVEY-1



## TEAM MEMBERS

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<i>S.no.</i>	<i>Title</i>	<i>Author</i>	<i>Year of publication.</i>	<i>Problem identification</i>	<i>Drawbacks</i>
1.	Literature review and current trends	Jorge Andrés Espinoza Aguirre Industrial Engineering, Faculty of Chemical Sciences University of Cuenca Cuenca, Ecuador 0000-0001-5685-2681	February 2015	One of the most important retail industry trends is investment in Omnichannel retail strategies. Research shows that the average digital consumer owns 3.64 connected devices and tends to consult these devices prior to making a purchase.	<b>Inadequate capital</b> is always a big problem to their trade. No room for expansion due to lack of enough capital. Inability to enjoy economies of scale
2.	Research methodology	Cinthya Vanessa Muñoz Macas Industrial Engineering, Faculty of Chemical Sciences University of Cuenca Cuenca, Ecuador 0000-0001-9820-0331	March 2017	Market research, in other words, is <b>research about the world of your retail business</b> . Among other essential details, it will provide you with data on your target shopper's buying power, shopping preferences, and relationship	<ul style="list-style-type: none"> <li>• Marketing research (MR) is a costly affair.</li> <li>• It is also lengthy and time-consuming.</li> <li>• It has a limited scope.</li> </ul>

				with competitors	
3.	Content Analysis	Rodrigo Arcentales-Carrión Research Group in Accounting, Finance, and Taxation, Faculty of Economics and	March 2022	Solving Your Out-of-Stock Problem Once and for All. ...	<ul style="list-style-type: none"> <li>• Can be extremely time consuming.</li> <li>• Is subject to increased error, particularly when relational analysis.</li> </ul>
4.	Metadata Analysis	Mario Peña Research Department (DIUC) University of Cuenca Cuenca, Ecuador 0000-0002-3986-7707	Between the years 2015 and 2019	embedded or hidden in other data. It is sometimes called "data about data." A problem with metadata <b>arise s when one sends an email or a document unwittingly disclosing confidential information.</b>	Data sets can gain unwanted attention from hackers and important information can be leaked to competitors.
5.	Product reordering or replenishment	Mario Peña Research Department (DIUC) University of Cuenca Cuenca, Ecuador 0000-0002-3986-7707	February 2021	A reorder point (ROP) is <b>a specific level at which your stock needs to be replenished.</b> In other words, it tells you when to place an order so you won't run out of stock.	The two factors that determine the appropriate order point are the delivery time stock which is the Inventory needed during the lead time
6.	Concept and Objective	Siddharth sai	2020	<ul style="list-style-type: none"> <li>• Lack of visibility . ...</li> <li>• Disconnected store teams.</li> </ul>	Inconsistence, Warehouse efficiency etc..

7.	Sales Data, and Inventory Balance	Rodrigo Arcentales-Carrion University of Cuenca	Early 2021	The problem faced by the company is <b>they do not have any systematic system to record and keep their inventory data</b> . It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized.	Sales Data, and Inventory Balance
8.	Systems, methodologies, and tools focused on inventory records and localization	Mario Pena University of Cuenca	Starts in 2019	The problem faced by the company is <b>they do not have any systematic system to record and keep their inventory data</b> . It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized	The limitations of a perpetual inventory system include a <b>false sense of reliability and dependence on human entry</b> .

9.	Predictive Analysis of Big Data in Retail Industry	<u>Hamza Belarbi</u>	November 2016	Predictive analytics is a <b>branch of advanced analytics that makes predictions about future outcomes using historical data combined with statistical modeling, data mining techniques and machine learning.</b>	Even if a company has sufficient data, critics argue that <b>computers and algorithms fail to consider variables</b>
10.	Inventory management in retail industry - Application of big data analytics	Hien vu	December 2018	Big data analytics in retail enables companies to create customer recommendations based on their purchase history, resulting in personalized shopping experiences and improved customer service.	One of the best applications of Big data in inventory management comes from <b>helping businesses forecast their demands.</b>
11.	<b>Retailing and retailing research in the age of big data analytics</b>	Marnik G. Dekimpe	2019	Big data analytics in retail not only has the potential to <b>improve the operating margins of companies by 60% but revolutionize all areas of retail.</b>	In the retail industry, big data analytics <b>helps companies collect and analyze customer purchase history and preference data.</b>

12.	IMPACT OF BIG DATA ON THE RETAIL INDUSTRY	A. Seetharaman	2011	The variables considered in this study are based on the current state of data analysis in the retail sector.	The final recommendation is to research and analyse the company's performance in terms of the financial and operating benefits that companies can achieve with data analysis.
13.	Inventory Management in Retail Store	Rohan Agawal	2015	It is difficult for the admin to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized	The two factors that determine the appropriate order point are the delivery time stock which is the Inventory needed during the lead time
14.	Retailing Sector and Business Retailing Types	Kujtim Hameli	2009	The economic factors that most affect the demand for consumer goods are <b>employment, wages, prices/inflation, interest rates, and consumer confidence.</b>	The biggest problem with retail business is that <b>profit margins of this business is fixed</b> which ranges from 5 to 20 percent depending upon the brand of the product which retailer is selling and also unlike wholesaler who can expand business .

15.	PT.Abaisat Raya	Rahmayanti & Fauzan	2016	The total price required, and how much available space inventory in the warehouse	The financial and operating benefits that companies can achieve with data analysis.
16.	PT.ABC (Construction Company)	Candra	2019	To get the number of safety stock and to determine the maximum inventory.	Is subject to increased error, particularly when relational analysis.
17.	Ciputra	Budiharji & Hadikumiawati	2020	To get the number of forecast sales in the coming year.	Inability to enjoy economies of scale
18.	Amigo Group	Kartikasari & Suhartono	2013	Forecasting product sales in seven stores using the hierarchical time series forecasting method.	Order point are the delivery time stock which is the Inventory needed during the lead time
19.	Berkah Swalayan (SME Market)	Al-Husaini et al.	2018	Information system of business and forecasting on sales, low-cost purchases, and minimize inventory.	Thus, a conducive business environment would need to be further enhanced to foster innovative and creative SMEs that would become competitive amidst the challenges of the global market.

20.	an analysis of influencing factors	Nripendra P. Rana	2022	significant factors include past experiences, a variety of cognitive biases, an escalation of commitment and sunk outcomes, individual differences, including age and socioeconomic status, and a belief in personal relevance.	Influencing factors can be used as control variables to determine the key influencing factors of an object
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