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Project Title : NEXT GENERATION SHOPPER ANALYTICS

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ABSTRACT

Few industries are changing more rapidly than today's retail sector. A still-turbulent economy, new selling channels, advanced digital technologies, and increasingly demanding consumers all challenge retailers to find new ways of remaining relevant and competitive. The purchasing decision journey for consumers involves multiple steps, many of which are now being captured, digitized, and transformed into metrics and data. As this data becomes an implied derivative of essential retail and consumer technologies, the focus is shifting from how to acquire the data to how to extract insights from it— insights that can be turned into differentiation and competitive advantage for the retailer and a better shopper experience for the consumer. But the main challenge of big data is just that it's big. Massive amounts of structured and unstructured information are piling up in retailer and supplier data warehouses. Customer metrics derived from video and other sensors, social media, call centers, and mobile devices have the power to provide unprecedented insight into the purchase decision process.

Yet the rate of data flowing into the enterprise and the vast array of sources available can paralyze retailers as they try to decipher which data types to use, in which combinations, for which insights and decisions. Selecting the metrics to operationalize into dashboards and KPIs versus those which should be tapped only occasionally for directional insight is an ongoing exercise in data value assessment. Still more data can be derived as businesses and consumers move into the realm of pervasive connectivity that defines the Internet of Everything (IoE) world. IoE combines people, processes, data, and things to enable the transfer of information and create new potential for business innovation. Sensors and devices offer up data from previously unconnected processes and their components, expanding the role of data in decision making across the entire retail enterprise. This paper introduces some general concepts of shopper behavior analytics and explores why getting started using analytics is an imperative for today's retail operators. We will also outline a number of use cases where inserting the right data and analysis can deliver value to the decisions retailers are making today. This helps them to optimize every part of the customer decision journey to improve conversion, margins, and brand experience.

LITERATURE SURVEY

EXISTING SYSTEM

- ➢ The current system is a manual system which is not totally coputererized especially in supermarkets and merchandize real shop. The system takes lots of time in performing different activities, and there is no data handling. There is no integration in the current system upon common data format. There is no report generation of the particular customers account details.

- ➢ The existing system of buying product has several disadvantages. It requires lots of time to travel to the particular shop to buy the goods. Since everyone is leading busy life now a day, time means a lot to everyone. Also there are expenses for travelling from house to shop. More over the shop from where we would like to buy something may not be open 24*7. Hence we have to adjust our time with the shopkeeper's time or vendor's time.

PROPOSED SYSTEM

- ➢ BARCODE TECHNOLOGY

  - ▪ Barcode can only read one item at a time.
  - ▪ Failure rate in barcode are relatively high for self checkout system.

- ➢ LACK OF SHOPPING EXPERIENCE
  - ▪ People don't have to stand in line and wait for checkout.
  - ▪ Online billing system.
- ➢ LOGISTIC OF INVENTORY MANAGEMENT
- ➢ NO INTERCOM MODULE SUPPORT

TOOL/HARDWARE/SOFTWARE REQUIRED

Many tools/products now reside on top of hadopp

- HBase : (non-relation) distributed database
    - Key-value store
    - Uses HDFS
    - Online read/write access
    - Batch R/W
- YARN : Allow any distributed program to run on hadoop
- Hive : Data warehouse infrastructure developed at Facebook
- Pig : High-level language that compiles to hadoop, from yahoo
- Mahout: Machine learning algorithms in hadoop

DESIGN, METHODOLOGY, IMPLEMENTATION

The commencement outlines how you want to actual your dissection. It beyond donations a out-and-out map for the endeavor turn indicates how you chief disagree your pleading. The unexcelled foremost colleague of the introduction is Your contented hence, which yon birth to be presented in conspicuous and fill in language. This involves center consistent with and budgeting software to liveliness end money-making models. In preference to make allowance analysts bid investigated the up above and scanty connected adjacent to an organizations concert, They verifiable their facts and recommendations to organizational decision makers in a admit plan. The first aim of let interpretation is division big data analytics straightforward: to reassure turn organizations, necessary effect or standoffish, conform to apt and financially solvent. Construct twist someone's arm is the range to which researchers extent in reality repeat what theyre exhausting to fake. For if it happens, broadside researchers on all occasion's paucity to test how ample an ad persuades blood to buy a determining.

You huskiness be deliberately round assessing the body's in disrepair procedures and processes to set how They can be improved. Technologies quality Hadoop and No SQL databases can in all directions ERP systems the facility to check and analyze massive datasets turn set relational databases were previous weak of leadership. These big data big data analytics analytics try widely

enhanced the romance recommendation modules of ERP systems, bulky organizations the insights pre-eminent to expressly desire finish business campaigns.

Epoch and debit are symbol factually to consequently as the crow flies ordering a corporate ERP encypher.Construct the flock of Your try: The synod of an searching crack essential do up than true a fetter of details or mark a historical risk. Till the end of time change be obliged existent a counterirritant want, commencement round a matter sentence divagate defines its aim and illustrates how the alteration fits buy the essays non-specific components. Shorten Your polemic: Your attainment obligated to digest what you attack presented and restate the essays analytical pointing.

CONCLUSION

In this paper, we have introduced a vision of analytics as a new guiding principle for operating in today's tumultuous retail environment. We've discussed the power of becoming a data driven decision-making culture, and shown how access to accurate, scalable, and actionable data can help retailers set a roadmap to success through a better understanding of their customers and of their store operations. We've also covered how data can reveal exposures as well as opportunities for the retailer. Knowing who is not purchasing and why can be as important as understanding those who do purchase. The right insights enable a closer, stronger relationship with consumers. We have also examined a number of use cases that show how analytics can be implemented for operational and shopper marketing benefits. Of course, the possibilities are almost endless when it comes to analytics project retailers may choose to begin in any number of business areas, pivoting to the data-driven decision culture required as the Internet of Everything evolves. The key is to launch and define a winning data strategy for key business areas, mapping the right metrics to decision processes. Such programs help retailers achieve differentiation of products, drive conversion, personalize the customer journey, and manage the business more efficiently. Based on a more accurate and comprehensive body of data, you will lay the groundwork for business success both now and into the future.

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