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SOME ISSUES OF BIG DATA APPLICATION IN MODELING BUSINESS PROCESSES OF E-BUSINESS SYSTEMS

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Abstract. Big data is a collection of huge useful information that cannot be read using standard computing structures. Big data is not just data, it has already become a whole area that includes a set of tools, contexts, and structures. It uses complex data sets to select direction, course, and direct management within organizations. By improving and performing calculations, important structures can be obtained that are necessary for an accurate and deep understanding of the results obtained through the study of the organization's data. In this study, we examined different types of data and their use for business processes in e-business, and specific methods for securing and developing business processes for use in complex organizations. In addition, we looked at big data issues related to the Internet and how to use it in e- business.

Keywords: business process, web analytics, predictive analytics, personalization, dynamic analysis, sentiment analysis, Big Data, e-commerce, e-business.

Introduction.

The interaction of systems is never equal, since each company has its own specific requirements for automation parameters. In some cases, content management dominates, while in others, business process management (BP) plays the leading role.

Business Process Modeling is a goal-oriented representation of business processes, developed according to a certain taxonomy and form of presentation. The structure of the model reflects essentially a logical and temporal sequence of functions, considered within a certain process. Common characteristics of a model serve as the basis for documentation, analysis, organization, automated processing and support of processes, as well as for their support and communication. The goals of BP modeling are as follows:

1) Documenting the enterprise BP in order to: obtain data in a timely manner; represent the actual situation in the enterprise organizational unit; move the BP to other units; regulate work processes and methods through an external management mechanism; fulfill responsibilities to business partners or the business community (e.g., enterprise certification); meet applicable legal regulations; train employees or induction; avoid loss of knowledge (e.g., when an employee is terminated); support the management

2) To prepare / carry out optimization of the BP: to introduce new organizational structures, to change the tasks of the enterprise when market conditions change, to rearrange or improve the processes of the enterprise

3) Preparation of automation and implementation of information technology.

4) Setting process indicators and performance monitoring.

5) Carrying out benchmarking between departments of the enterprise, partners and competitors.

6) Finding Best Practice (best practices in the company, region, industry).

7) Support of organizational changes as: sale or partial sale; additional purchase and integration of the enterprise or enterprise slopes; implementation (entry) or change (switch) of IT systems or organizational structures.

The general trend of modern organization and modeling of BP in the enterprise is the transition from a function-oriented to process-oriented model. Modeling of BPs involves consideration not only of their typology, but also consideration of the level. Representation of BP implies the use of appropriate tools: symbols, indicators, graphs, charts, graphs, forms, as well as solutions such as special software.

Big Data is a continually progressing term. It is a great deal of sort out amorphous data that can be excavated for information. These educational accumulations are immense and complex that standard data getting ready isn't fit to process them. Enormous Data is being used in various sectors. We will see the effect of Big Data Analytics in changing the E-Commerce business, with the objective that the company surveyed as these E-exchange can benefit the most customers in the relationship from using Big Data because there will be information of the data accumulated on regular bases.

Various gigantic retailers regard this present data's information and cause them for predicting the customer interests and give their customers relative and charming looks when they shop on their site, with the objective that they pull in the customer by providing the required and relevant journeys of things or things. These tendencies are inside and out-delivered from the Big Data examination. Huge Data contains two sorts of data one are composed, and the other one is unstructured.

Materials and methods. Business engineering is at the core of enterprise management during the transition from the industrial stage of economic development to the information society. The concept proceeds from the fact that together with the changes in the environment (markets, customers, capital, etc.) for enterprises the possibilities of new innovative solutions in the field of information and communication technologies are created. It connects scientific and economic and information technology knowledge together and links them to different aspects of transformation: process representation tools, business modeling, enterprise culture, social policy. Business engineering is a holistic concept for managing and implementing transformation. Specific tasks of conducting transformations are considered at the strategic level, process level and the level of the working system.

Analysis of domestic enterprises in Uzbekistan revealed the following positive and negative factors to consider when choosing methods of modeling BP enterprise.

Positive factors, the most developed segments of the IT infrastructure of enterprises in Uzbekistan are: a subsystem of production management, network connectivity of participants in the production process and access to production services are provided, there are internal mechanisms of data exchange, subsystems of accounting and personnel accounting.

Negative factors:

Corporate network of the Company: there is no basic service, which is a unified corporate data transmission network (CDN), there are no technical and organizational mechanisms to develop and operate data transmission networks,

Corporate communication environment: corporate mail of the enterprise is served by external network resources, there are no internal mail services. employees of the enterprise operate non-corporate mailboxes, low level of use of mail services, the bulk of correspondence is carried out in external messengers, the maturity level of the IT-infrastructure of the enterprises of Uzbekistan.

The level of maturity of IT infrastructure was evaluated according to the criteria of Infrastructure Optimization Model by Microsoft. The analysis revealed insufficient objective characteristics of the infrastructure to meet the assessment criteria. In order to fix the state of infrastructure within the framework of this study, the level of maturity of IT infrastructure of the enterprises of Uzbekistan is categorized as "Basic".

Starting late, China's cross-edge e-business has been creating rapidly. In the year 2017, the gross volume of China conveys online business accomplished 6.3 trillion Chinese Yuan with a yearly advancement rate of 14.5%. In China exchange the web-based business, B2B speaks to 80.9% while B2C and C2C speak to simply 19.1%. B2B is so far a standard exhibit anyway B2C is required to increase

speedier. The principal products of China conveys online business 3C electronic products(20.8%), clothes(9.5%), house and home items(6.5%), outdoors products(5.4%). In the year 2017, the essential objective countries of China's cross border web business are the USA(15%), France(11.4%),England(8.7%)and Brazil(6.5%) which exhibits that the USA and some made countries in Europe are up 'til now the objective rule countries, while the as of late creating business division in America, Middle Europe is growing fast [1].

Big Data, similarly as dispersed registering, have been associated in electronic business for a period, which has helped web-based business stages to recommend things even more correctly and rapidly, improve customer web shopping information, streamline collaboration structure and distortion security measure, and so forth. Starting late, a square chain begins to be associated in the web-based business, brings lower trade costs and progressively active portion. Likewise, non-modifying features diminish business distortion and assurance buyer astounding organization. Later on, with the more significant and progressively broad application, enormous information will pass on new a motivating force to cross-edge internet business.
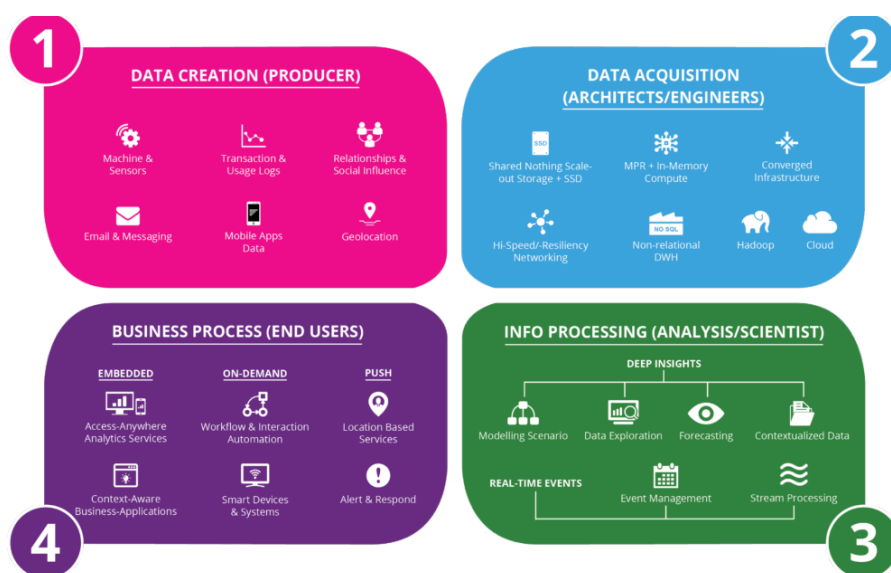

Figure 1. Big data ecosystem

Straightforwardly, there is no headed together a definition for the articulation "Big Data", regardless, the most, for the most part, recognized the significance of Big Data is similar to 3 characteristics, volume, speed, and combination moreover implied as 3 V's – Variety insinuates the heterogeneous nature, Velocity outlines the rate at which data is gotten, and Volume suggests the proportion of data. Due to these qualities, it is hard to direct and examination gigantic data using regular databases effectively. Nevertheless, using modern gadgets and progressions, Big data feasibly regulated. Also, when different data mining estimation, (for instance, machine learning and gathering count) are familiar with the extensive data insightful framework, one can get learning from the data (Fig.1.).

With the real objective of this examination, we will limit the investigation of the significant data examination to three classes as seeks after:

1. Web-Based Analytics: Refers to a review of a large volume of data made from internet organizing applications/areas.

2. Farsighted Analytics: Refers to the use of evident data to figure on buyer direct and designs.

3. Flexible Analytics: This implies the examination of an enormous volume of data made from mobiles, tablets and convenient contraptions.

A possible instance of such E-exchange business is Amazon.com – by utilizing exceptional programming to separate treats and click stream on customer programs, Company can perceive plans in

buyers' shopping penchant and therefore can give revamp/democratized offers, advancements, and points of confinement to such client [2].

Internet business implies the online trades: moving stock and adventures on the web, either in one trade (e.g., Amazon, Zappos, eBay, Expedia) or through a constant trade (e.g., Netflix, Match.com, LinkedIn, etc.). Web-based business firms going from Amazon to Netflix get distinctive sorts of data (e.g., orders, containers, visits, customers, suggesting joins, catchphrases, inventories examining), which can be broadly portrayed into four orders:

- Exchange action information analytics.
- Click-Stream information.
- Video Information.
- Voice Information.

In E-Commerce, information is the best approach to pursue buyer purchasing behavior to tweak provide, which are accumulated after some time using the customer examining and esteem based core interests. This fragment discusses different sorts of Big Data close by their proposals for web business (Fig.2.).

The Internet-based life Analytics (SMA) incorporates the social affair of data from electronic life goals/applications, (for instance, Wikipedia, Twitter, Facebook, GooglePlus, online diaries, etc.) and surveying such data to get encounters/learning. Web-based life data can be named big data as it bears the 3V properties. (For instance, every day there is around 35 million notifications and more than 100,000 tweets for every minute on Twitter). Online life goals are frameworks of catenated people, yet virtual system, where people team up, exchange information and offer suppositions. These pursuits is prepared for affecting the buyer's acknowledgment of a particular brand [3].

Fundamentally there are two basic methods for investigating the internet based life information; they include Text Mining and Sentimental Analysis.

Text Mining is exceedingly subject to the usage of substance based substance from sites and electronic life regions to make the judgment on the significance of an issue. The E-commerce sponsor makes once-over of watchwords identifying with the thing being checked. These watchwords can be used to perceive suspicions around an idea.
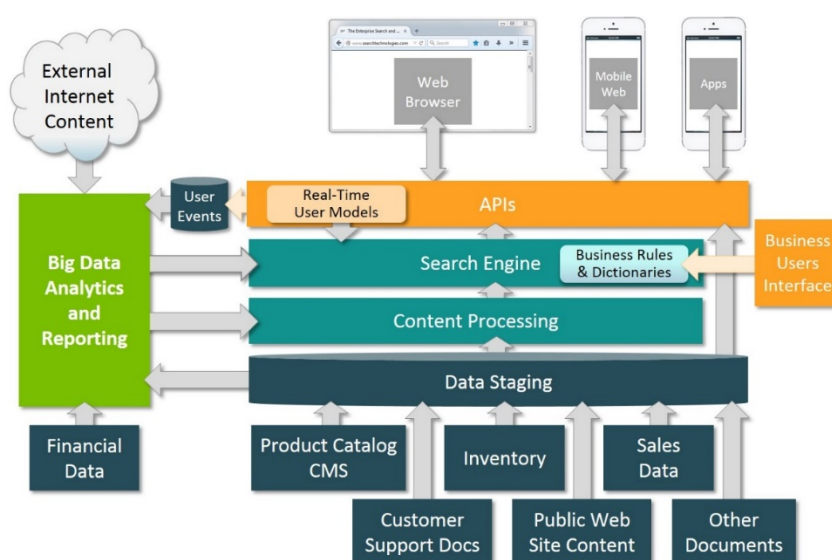

Figure 2. Big Data architecture for e-business search platform

Predictive analysis alludes to the distinguishing proof of occasions before they happen using big data. The use of predictive analysis relies on strong information mining. In this unique situation, CEO of Caesar's Entertainment, expressed that: "[t]he most ideal approach to participate in data-driven

publicizing is to amass progressively increasingly express information about customer tendencies, run preliminaries and examinations on new data, and choose techniques for connecting with [casino game] players' interests. We understood that the data in our database, combined with choice science apparatus that empowered us to foresee Singular client's possible incentive to us, would enable us to make advertising mediation that gainfully tended to players' interesting inclinations." Therefore, cautious examination encourages firms to set up their income spending plans. The readiness of these financial plans helps e-commerce firms to perceive future deals design from past deals information (e.g., annually or quarterly). It, thus, causes firms to all the more likely conjecture and decide stock prerequisites, along these lines prompting the shirking of item stock out and lost clients.

Right when customers put in demand on an online stage, it is sound for them to foresee that associations would give the organization of following the demand while the stock are in movement. Kopp (2013) cleared up that customers envision key information, for instance, the cautious openness, current status, and zone of the solicitations. E-Commerce organizations normally face an inconvenience in watching out for these wants from customers as different pariahs, for instance, warehousing and transportation are related with the store arrange a process. Big Data Analysis (BDA) expect a key occupation in this setting by the social affair diverse information from various get togethers on various things, and thusly precisely prompts the ordinary transport date to customers.

Another key zone in which web business firms can use Big Data is a customer organization. Customer grumblings bestowed by strategies for contact shapes in online stores together with tweeting enable internet business firms to make customers feel regarded when they call the organization center realizing a short organization movement. So additionally, Miller cleared up that, by offering proactive upkeep (i.e., taking preventive measures beforehand a failure happens or is even distinguished) using tremendous information obtained from sensors built up in things, online business firms can offer innovations after arranging organization.

A Clustering Algorithm system toils by recognizing social occasions of customers that have near tendencies. These customers are then packed into a single assembling and are given a unique identifier.

New customer cluster are anticipated by finding out the typical similarities of the individual people in that gathering. Customer is mostly an individual from more than one gathering depending of the largeness of the customer typical appraisal in this case.

The vital utilization of web-based information for e-commerce firms is the course of action of a tweaked organization or changed things. Studies have fought that customers consistently like to buy with a comparable retailer using distinctive channels and that large data from these different coordinates can be modified ceaselessly. Persistent data examination enables firms to offer tweaked organizations including one of a kind substance and headway to customers. Similarly, these altered organizations help firms to detach reliable customer from a new customer and to make limited time offers as necessities are. As shown by Liebowitz, personalization can manufacture bargains by 10% or high and offer five numerous occasions the ROI on advancing utilization. Bloom spot, in such way, explored customer charge card data to pursue the spending records of the most immovable customers and to offer them rewards [4].

Take eBay, the B2C goliath, for instance. eBay is the biggest internet exchanging site on the planet. Purchasers conveyed more than 190 nations around the globe, more than 25 million dynamic vendors, 157 million dynamic purchasers, and 800 million dynamic items. In such a substantial number of clients and exchanges, information turns into the best need of eBay. eBay's Big Data the stage comprises of three layers: (1) Information mix layer: which is in charge of information ETL including information, obtaining, handling and cleaning, involving the group and continuous preparing abilities, related business items, and open origin items; (2) Information stage layer: which is primarily made out of the conventional undertaking information stockroom (EDW) with all-out limit surpassing 10PB, the Singularity putting away semi-organized and profound organized information with all-out limit 36PB and Hadoop bunches with an all-out limit exceeding 100PB; (3) Information get to layer: which can get to and break down

information for business clients and examiners through different apparatus and stages, for example, MapReduce, Spark, Hive, HBase, which can give wealthy data getting ready and progression capacities.

The productivity of information use decay with time, the higher usage rate, the more up to date the information, the lower the entrance recurrence, the more established the info. In eBay's Hadoop, HDFS underpins various leveled stockpiling of different freshness information. HOT information is put away on a quick plate; WARM information is placed elsewhere in a quick circle and chronicled stockpiling. COLD and Frozen information is set away in a documenting, holding available to the above application. Putting away information with various freshness by stratification guarantees the pace of information preparing, and that the data which is at present in low esteem, however, may create new an incentive, later on, won't be erased. Of course, as the data scale creates with the extension of the customers' social occasion, to guarantee that the customer can get to and explore the tremendous scale enlightening accumulation set away on Hadoop with the most insignificant deferral and that the data obtainment, taking care of and examination in the Hadoop gathering can aggregate meanwhile, the eBay China Research and Development Department center started the OLAP around Hadoop adventure. The endeavor made metadata by the modeler by portraying the related estimations, and fabricated the metadata-based engine to normally create related Hive questions, MapReduce errands, and HBase exercises, so the data is examined out and pre-decided from HIVE, and the results are secured in HBase to give a natural request capacity of PB or even TB level, enlightening lists for front-end business customers and agents with only second measurement or even sub-second measurements delay.

A few shoppers are ending up progressively mindful of value segregation in Amazon.com. For example, CNN announced that a few clients of the Amazon are bothered over value separation on the cost of a specific DVD. One the purchasers revealed that the cost of a DVD in the wake of erasing treats on his PC, varied by $2.50 edge. Another occasion, CNN detailed that the Amazon made utilization of dynamic estimating calculation while moving an item whoop "Jewel Rio MP3 Player" for $51 not as much as its unique value.

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The central products of China exchanges internet business are 3C electronic products (20.8%), house and home items (6.5%). outside products (5.4%). Clothes (9.5%). In the year 2017, the standard objective countries of China cross online border business are the USA (15%), Russia (12.5%), France (11.4%), England (8.7%) and Brazil (6.5%) which demonstrates that the USA and some made countries in Europe are so far the essential objective countries while the as of late creating business part in countries like Latin America, Middle, and East Europe are growing quick [5].

A Positive element of implementing the Big Data examination request incorporates offering data look, a suggestion framework, a dynamic evaluating and client administration to collaborate with the network part. By gathering characteristic information in the Big Data period, for example, geographic circulation, enthusiastic propensities, client conduct on shopping just as the social association, side interests, organizations can accomplish request introduction, biased introduction, a relationship introduction, and different approaches to fulfill clients.

Informative search shows that data standard and looking management quality. Data quality is a proportion of significant worth seen by yield given by a site. Data properties, for example, refresh, valuable, nitty-gritty, exact, and finish has been recognized as essential segments of data quality.

Suggestion System incorporates an association amongst e-dealers and buyers whereby the buyers give their information, for instance, relaxation exercises and tendencies, while the seller offers a proposition fitting their prerequisites, like this benefiting both. Nuances are given on key measures behind

proposal systems: a customer based significant strain which used likeness in customer rankings to envision their interests and thing based network strain as centers in the space of words.

Giving a unique customer organization is the primary key to keep customers happy. Big Data engages you in improving your organizations. Using significant data analytics, you can overhaul your customer organization achieving progressively upbeat customers. A couple of customers may not simply protest of things or organizations through the official channels offered by the website, but may moreover go social about their get-together. You need data of such customers and exercise other alarm with the objective that grumblings of such customers are watched out for twofold quick. Enormous Data is secondhand to improve business shapes. Retailers can update their stock reliant on desires from web look designs, customer direct and atmosphere measures. One different application for the business procedure is the examination underway system or movement course. In light of scenery position and radio repeat recognition, the stimulus is used to pursue items or moving vehicles. This system enables customers to continue their solicitations. From that, customer organizations can be improved and increase shopper devotion [6].

Shopping habit is continuous and under perceived social dependence. Conduct compulsion is people's inability to see the quality of post-fixation longings and a failure to control want. For shopping addicts, shopping ends up uncontrolled, and they did not just purchase things they need, or they like, yet also genuinely spend their cash and are on edge to pass up on a decent chance to buy something. These items may is not utilized after buy. Utilizing the uses of Big Data investigation, the site can prescribe clients different things as a substitute or complementary pieces. This application is precious for clients with questions they need to purchase yet this is likewise unsafe for clients. They should invest more energy to audit more things to settle on a choice. It additionally suggests another correlative piece which the client feels they have to buy to build the obtained details. For instance, a client has purchased an exceptionally great pink dress, and the site prescribes her applicable sacks or shoes that are appropriate with the dress. They are wanted to consolidate together to give consumer loyalty. The client needs to invest energy and cash to purchase these corresponding items due to a decent chance to get them, even with less money. Shopping addictions are found to appear under two necessary measurements: propensity to spend and post-buy feeling.

The security of Big Data is another tremendous concern and one that increments with regards to Big Data. Because of the unmistakable attributes of Big Data in thee-trade environment, it can identify with protection and security concern. The high volume and convergence of information makes an all the more engaging focus for programmers. Moreover, higher information volume builds the likelihood that the information files and reports may contain characteristically important and touchy data. Information with the end goal of Big Data examination are along these lines a potential goldmine for digital culprits. As of late, ponders demonstrated that there is an expanding shopper worry over protection with regards to constant social publicizing and attaching advances, for example, treats. The Internet publicizing firms Double Click and Avenue A, product firm Intuit and others have confronted claims for utilizing treats to target promoting. A high assorted variety of Big data lead to associations coming up short on the capacity to oversee and understand these information, and outsiders have chances to get to information. They may not conform to information insurance directions [7].

Results. In recent years, big data has become more popular as businesses of all sizes have discovered how to tap into it when it comes to making crucial decisions. Big data has assisted in finding and fixing problems, tracking business progress, and justifying causes for action. Although there is still much more that we can do when it comes to fully understanding big data, learning more means that we are able to utilize it to an even larger extent. And, many professionals believe that big data is the future of ecommerce, opening several doors for online businesses including analyzing sales, efficient transaction tracking, forecasting demand and supply, planning out expansion, and much more. So, how can big data help your ecommerce site?

1. Provide a Personalized User Experience

The ecommerce experience was once severely lacking in any personal touch, which prevented shoppers from building a connection with the business. Buyers had to go through all the products with no option for highlighting the ones that they were interested in. Thanks to big data analytics, today's ecommerce owners are able to recommend items that their users are actually looking for. You can use big data to track the products that shoppers are interested in, allowing you to send personalized recommendations to the user that really mean something for them.

2. Price More Competitively

Your ecommerce store's pricing strategy is one of the key determinants as to whether a shopper chooses your store or one of your competitors and it should be a vital part of your marketing strategy plan. It's easy for your users to check other ecommerce sites in order to find the best deal, which is why offering competitive prices is so important. To customers, it makes no sense to pay more for an item that they can get for less on another site. However, manually checking your competitor's sites on a regular basis would be a tedious task. Thanks to big data analytics, you have the ability to check how your competitors have priced their products, allowing you to respond accordingly.

3. Turn Visitors into Buyers

When it comes to putting time, effort and resources into understanding big data, your ultimate goal should be attaining a higher conversion rate or turning visitors into actual buyers. Big data allows you to get a clearer picture of why visitors are leaving a site without making a purchase, whether it's down to on-site issues such as load speed or shopper concerns such as lack of site security, high prices or inadequate logistics solutions. This allows you to make more informed improvement decisions, such as switching e-commerce platforms or providing better shipping options. If you want to convert customers into buyers it helps to treat your website like a shopfloor, build trust with your visitors and ensure your website is responsive. You can then evaluate the data before and after implementing these changes to measure what works best for your brand.

4. Better Manage Your Inventory

In addition to the above, you can also use big data to better manage your inventory. It allows you to automatically detect products that have been through the sales process successfully, in addition to tracking products that are returned. Big data analysis can also be used to track demand, allowing you to ensure that you get the right amount of inventory. Using this, you can determine the right number of products that are needed for certain periods, allowing you to stop wasting money on having too much or losing out on sales due to being out of stock.

5. Predict Trends

Every online retailer wants to know about the next bestselling product before their competitors. Utilizing big data is a strategy that you must not miss out on when it comes to predicting trends in the market. Trend forecasting algorithms allow retailers to eliminate the guesswork when it comes to the next big products, combing data from social media posts and user web browsing habits to determine which products are causing a buzz. Sentiment analysis is another big data strategy that retailers can use to determine the context in which products are being talked about online. Are conversations positive or negative? The data collected can be used to accurately predict the next popular products in various categories.

6. Optimize Customer Service

Last but not least, the customer service is a vital component of your ecommerce store and without it, you're going to lose out to your competition very quickly. In addition to competitive prices, popular products, and a personalized customer experience, your customers want to feel that they are truly valued and understood by your brand. Exceptional customer service is crucial for both customer satisfaction and retention in the retail industry, both online and offline. Big data allows you to better determine the service strategies that work well for your customers, in addition to those that don't have a great effect. As a result, you will be able to optimize your customer service strategies and provide an enhanced customer experience, allowing you to gain an edge over your competition.[8]

There are always beneficial ways to use big data to improve your ecommerce business, no matter what point you are in your company's growth. It's an especially exciting time to be a business owner. Do you use big data to improve your ecommerce store? We'd love to hear from you in the comments.

BP is based on a set of links between objects, which transmit to each other in some order of the key task. A step-by-step planned task or formed goal turns into a final result - a product or service.

New technologies of organization of administrative processes, which should provide the creation of really working formal mechanisms, require as the first step the creation of organizational and functional model of the enterprise. When forming the organizational-functional scheme of e-commerce enterprise the process approach of business structures formation was used. Using a business model to make all management decisions is a fundamental difference of the business-engineering approach. It represents a formal, accurate, complete and comprehensive description of the company. It allows, neglecting unnecessary details, to see the full picture of the problem from the most different angles, with the accuracy necessary for the solution of a specific management problem. [9]

At the stage of organizational design, a "vertical" systemic-targeted description of the company is made. At the same time, the processes occurring in the company are identified, classified and fixed in a convoluted form (as functions) according to the management hierarchy.

Static description of the company, the main purpose of which is to define: the business potential (the list and structure of commercial activities); company functionality (the list and hierarchy of functions reproduced on a regular basis); zones of responsibility of the personnel.

Features of typical organizational structure are as follows: final product of the company is focused on B2B segment, and the product of other manufactures is focused on B2C market segment, partial centralized planning of sales, absence of complete centralized key functions. [10]

Prices and plans are set by the management link, the production link adjusts them according to seasonality and equipment availability. The study of the organizational structure of the enterprise revealed the following problems:

1. The manager's focus shifts from more important decisions to operational issues, which can worsen the quality of strategic decisions.
2. Decentralized TB and OS (Safety and Environment).
3. Reputational risks in capital markets, insufficient speed of independent development of TB and OS culture in the enterprise.
4. Decentralized electronic procurement.
5. Possible overpricing, overstocking or understocking.
6. Decentralized electronic accounting (different approaches to accounting of counterparties, accounting objects, nomenclature groups).
7. Suboptimal management decisions, supply failures, duplication of inventory, delays in servicing customer requests
8. Duplication in planning.
9. Duplication in human resource development management.
10. Market service disruptions, equipment downtime, contract breakdowns.
11. Staff turnover, increased cost of FOT (Payroll Fund). [11]

Conclusion.

As the Big Data is used in various parts, it extensively smashes E-Commerce benefits and expects a vital activity in business choosing. The use of colossal data has significantly created in E-Commerce. Different gigantic retailer regards this present data's information and roots them for envisioning customer interests and give their customers similar and captivated looks for when they shop on their site. The objective that they attract the customer by providing the necessary and critical endeavors of things or things. Using the related information from this paper, the examiners can come up with vital and testing systems to expanding the upsides of Big data apply toward online business for both the customers similarly as the retailers. In this engaged and brisk condition customers generally, keep running with the online notification or through web crawlers by decreasing the inefficiency of the continuous markets.

Our paper helps to perceive the various use of extensive data into web business so we can know the criticalness of astronomical data, it improves understanding of Usage of significant data and its fragments.

We similarly talk about by the survey made on the issues related to E-Commerce if huge data isn't compared to that, so pros can tackle the problems associated to Big data and extend their work on that. An authoritative trial of Big Data examination is to make business regard from their impact of significant data. We also have analyzed the genuine troubles related to reliable data, so we expand our investigation in finding a response to one of the challenges identified with that. Researchers can get information about the issues concerning large data and critical troubles identified with that. So they can get concise information about colossal data which supports them in expanding their examination tackle extensive data related to online business.

Thus, the construction of the organizational-functional model of the enterprise should be provided with effective information technologies that integrate organizational structures, BP, functions and document management. Of course, in this case an effective technology of regular updating both the business model itself and all its elements should be functioning.

With regard to the design of the tactical component of the model the following design recommendations can be made. In its essence BP is aimed at obtaining certain outputs. All evaluations of BP quality, as well as planned changes to improve its characteristics, should be projected onto the output results in one way or another. For this reason it is necessary to clearly establish and formalize what direct or indirect influence processes, subprocesses and procedures have on outputs of the appropriate level. To do this, the model was designed to form a specific environment and attributes of the outputs, which can be used to establish: which processes, subprocesses and procedures are used to deliver specific outputs; what resources (organizational, informational and technological) are required to deliver them; what generalized time and cost estimates of outputs; what output structure, i.e. what composition of intermediate results it includes; what outputs are part of; what outputs are to be delivered and how they are delivered?

As for output documents it is reasonable to use the following categorization as they move along the process chain: template, new document, changed (in development), agreed (approved), approved, registered, archived.

Each status indicates the current state of the document in the BP. Change of the document status occurs at fulfillment of certain actions with the document and characterizes the passage of this document of a certain stage of document circulation.

In any case, a concrete list of output document statuses and their meaning is defined when solving the concrete task. When working with the contract the document can have such additional statuses as "partially executed", "executed"; when working with payment documents via Internet-client system the use of additional statuses such as "sent to the bank", "received by the bank", "rejected by the bank" and so on is possible.

Distribution of functionality into logical layers is one of the most effective methods of structuring a complex system, which ensures reduction of connectivity of its components.

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НЕКОТОРЫЕ ВОПРОСЫ ПРИМЕНЕНИЯ BIG DATA ПРИ МОДЕЛИРОВАНИЯ БИЗНЕС-ПРОЦЕССОВ СИСТЕМЫ ЭЛЕКТРОННОГО БИЗНЕСА

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Аннотация. Большие данные – набор огромной полезной информации, которая не может быть прочитана с помощью стандартных вычислительных структур. Большие данные – это не только данные, они уже стали целой областью, которая включает набор инструментов, контекстов и структур. Она использует сложные наборы данных для выбора направления, курса и проведения непосредственного управления внутри организаций. С помощью усовершенствования и выполнения вычислений могут быть получены важные структуры, необходимые для точного и глубокого понимания полученных результатов через исследование данных организации. В этом исследовании мы изучили разные типы данных и их использование для бизнес-процессов электронного бизнеса, и особые методы для обеспечения безопасности и развития данных для использования в сложных организациях. Кроме того, мы рассмотрели вопросы больших данных, касающихся интернета, и пути их использования в электронном бизнесе.

Ключевые слова: бизнес-процесс, веб-аналитика, прогнозируемая аналитика, персонализация, динамический анализ, анализ тональности, большие данные, электронная торговля, электронный бизнес.