### Effective Governance through Big Data: Computerized Revolution of Open Agencies

Rashmi G.B<sup>1\*</sup>, Malatesh S.H<sup>2</sup>

<sup>1,2</sup>Dept. of Computer Science and Engineering, M.S. Engineering College, Bengaluru, India

DOI: https://doi.org/10.26438/ijcse/v7i4.119127 | Available online at: www.ijcseonline.org

#### Accepted: 14Apr/2019, Published: 30/Apr/2019

*Abstract-* Big Data is field that get ways examine, efficiently extricate data from, or generally manage informational index that are excessively vast or complex. There are along discussion and exchange on the utilization of huge information for the change of customary open organization to current and keen open organization in the academician, scientists and strategy producers. Writing demonstrates that various models have been created to clarify shrewd administration nut deliberate research on the reasonableness and pertinence huge information for savvy administration of open offices is as yet missing for information security. The discoveries recommend that each open part office ought to be brought under shrewd administration which ought to be a completely advanced under huge information advances for simple access, straightforward and responsible and bother free open offices yet absence of security for the information. In proposed successful administration has a huge job in convenient ,mistake free, proper, and savvy administration conveyance to natives which prompts the reasonable monetary advancement of a nation and which ought to be a completely advanced under enormous information innovations for simple access ,straightforward and responsible and bother free open offices by utilizing MapReduce calculation. Essentially giving security of information utilizing a few calculations like encryption and decoding on information .In this proposed framework information will be encode and show for client .For encryption and unscrambling we are utilizing ECC calculation. We are sending details to client by means of email.

Keywords- Hadoop, Big data, MapReduce, Security. Encryption, ECC.

#### I. INTRODUCTION

Sharp association may be a direct instrument for aide invigorating government that may be a sensible criticalness for the twenty first century. Improvement is that the key mainstay of quick affiliation. Open affiliation amendment is right hand inventive structure to set itself up with obliging, favoring day and repeated development. These days it's unreasonable for anyone to shield the centrality from ligature down sensible alliance that is the new kind of the political framework, connection and open association . [1]The social occasion of the electronic method inside the political framework and certified structure connect with egovernment. Sharp government is that the blended kind of egovernment. The affiliation structure occupations headway for its issues from most current couple of years. The more essential a bit of the made nations are utilizing favoring day improvement for wash running their open collusion. There's an imperative perspective among the union specialists, academicians, analysts, and supervisors to utilize the pushed improvement for association structure clear to everyone collusion. 2 or 3 changes start at ideal at present have been finished a shade at some emotional moment with movement

task. These days massive data awards to make up every area of state up to test through apparent utilizing a general component of learning. it's not simply fitting to open relationship despite by uncommon parts. The instance of utilizing data correspondingly, learning update customary strategy that blessings to make up another model. "Sharp" is nowadays all around gotten a handle on inside the field of progress, condition and pushed change . it's to a widely appealing degree a sketchy articulation of amazing, loveable and lively and new assembling of e-government and open government. inside the field of affiliation, it proposes a pointy structures association a dash of the structure. it's known with the online that accomplices people to data and pulls in people to yield plainly to the structure even from coming to and considering from remote spots. The sharp systems organization interfaces real virtual challenges through a passed on structure for higher correspondence to 1 another. In any case, it's not impulse data since it can't take a decision with a near individual's data. It in a general sense embellishments people to the information concentrated from dependably makes progress toward taking decision and arrange future. In all actuality hand, created shrewd cutoff proceeds with undo sort of an individual.

These days, a persistent live of data is circumnavigated every half in constantly by reasonableness of use new revived application and contraptions for reliably endeavors. The inspectors and framework producers of various divisions are utilizing the wellspring of epic data that unremarkably conveyed using remote purchasers, long change social correspondence zones, amazing government and individual territories, business programming, all around referenced family unit contraptions and absolutely sudden quick gadgets. clear makes of affiliations have gotten focal concentrations by utilizing goliath data degrees of progress. Some staggering business and a cash related extra alliance like Amazon, Walmart, Sears and Morgan Stanley licitly gotten a handle on tremendous data updates and takes a goose at the getting rapid of purchasers and giving relationship as showed up by research exposures. several structures alliance targets like Facebook, Google, Twitter, eBay are utilizing goliath data examination and build up an entertainment compose of advancement by estimation the guest's lead, propensities and issue raise. Enormous data moves are especially potential for open work environments building up their sensibility, limit, for utmost, straightforwardness, and responsibility. It conjointly interfaces with the fastest and bumble free procedure making through data really solid framework. It may be gone review as a possible instrument for clearing in advance line social mechanical party for government change at any rate some examination still has request concerning the predetermination of the degrees of movement. Some expert raised the absence of insurance to the hassles and dangers of utilizing mammoth data for open part affiliations. Some made nations starting at explicitly comprehended enormous data movements for puzzling affiliation customarily. Regardless break, open relationship of a liberal piece of the nations are not set up to utilize immense data pushes in an exceedingly full fledge. Since it needs a basic speculation for execution the degrees of progress comprehensively to supply prelude to the experts and customary data creation, accumulating, and preparing. Once in an exceedingly while, truly sorted out utilization of goliath information could welcome burdens and dangers once all is guaranteed in done society zones.

Cautious alliance offers a game-plan to make open, participatory, and sharp government by utilizing goliath data upgrades. nowadays governments over the world are going toward such unending that rot, beyond what many would consider possible, and favored angle in their affiliation framework. Huge information driven progression likely could be a surprising reaction for these issues, loads, and dangers . notwithstanding the trail that there are 2 rotate social affairs of bosses, policymakers, and academician WHO displays thei120r positive and negative request concerning the veritable inclinations of quietness of giant data enhancements for sharp connection[2]. For adding to the present trade, this bit of consider is comprehended to deal with the examination questions: (a) what are the pieces of sharp intrigue and by what system will it get colossal data pushes? Also, (b) notwithstanding do the customary open working environments get profited by epic data degrees of advancement and change into sharp open affiliations? The article delineates the setting of the usage of immense data pushes for the capable government as making survey in its second district. Next, it offers the structure and estimation, opportunity and key drivers of beast data in its third and fourth piece uninhibitedly. The fifth piece depicts the key drivers, estimations, burdens and possible outcomes of sharp relationship underneath mammoth data movements. The last space finishes the article with various recommendations.

The instructive gathering endlessly with Government affiliations is influence both for the nation and the affiliation. This data which is a potential wellspring of chance passes on with itself distinctive bothers and the affiliation affiliations like diverse undeniable endeavors should obviously get the open entry this colossal data shows and use it to make structures sand pass on relationship to nearby individuals. In this paper the makers have endeavored to fuse the open entryways appeared to government bodies in association with the usage of beast data and some other gaining instruments and sorts of ground which empower better valuation for what this dumbfounding yet unutilized information can tell us what's more the potential perils it might appear.

The paper examinations e-government advance in China. It gives a short layout of benchmarking considers and their evaluation of China, in spite of a sensible examination of egovernment rehearses in China and of the changing master position found in the past two decades. On this reason, it considers the enormity of contemporary e-government development for Chinese affiliation. The dispute is that egovernment is at present having near an obliged impact on the Chinese open division. In any case, there are strong purpose for affirmation about future improvement.

The rest of the piece of this paper is organized as pursues: Section II contains the audit of writing. Segment III depicts the technique used to do this related work. Segment IV dimensions, opportunity, and key driver of huge information. Segment V depicts the results and discussions. Area VI portrays the finish of the framework.

#### **II. REVIEW OF LITERATURE**

Yueqian Xu proposed the article analyses e-government progress in China. It provides a brief overview of benchmarking studies and their evaluation of China, plus a contextual analysis of e-government initiatives in China and of the changing official position witnessed in the past two decades. On this basis, it considers the significance of contemporary e-government activity for Chinese governance. The argument is that e-government is currently having no more than a limited impact on the Chinese public sector. However, there are strong grounds for optimism about future development.[1]

R D. Pathak, Gurmeet Singh referenced that governance and corruption in ethopia. This study was conducted with the objective to investigate the potential of e-Governance applications in the Ethiopian public sector in terms of both policies and processes to curb corruption and increase efficiency, responsiveness, accountability and transparency. Pathak et al. proposed that e-association can help not just in getting out debasement yet moreover in setting up a solid relationship among government and nearby. Singh et al. referenced that open working environments can improve their benefits particularly in the thriving, framework, social security and other related parts by getting a handle on monster information degrees of progress. They besides propose that e-association works out can make essential obligations to improving open associations. The occupants' e-openness is security from due to change, the nonattendance of chances for e-interest and e-talk, and nonappearance of consideration. The study used the following research hypotheses formulated from the analysis set out above: Hypothesis 1: e-Governance is positively related to the government-citizen relationship and corruption reduction. Hypothesis 2: Government-citizen relationship accounts for more corruption reduction as compared to other variables [2].

Alfredo Cuzzocrea discussed about Privacy-Preserving Big Data Stream Mining: Opportunities, Challenges, Directions. This explores recent achievements and novel challenges of the annoying privacy –preserving big data stream mining problems, which consists in applying mining algorithms to big data streams while ensuring the privacy of data. This follows the so-depicted research trend.[3].

Huai Jinmei proposed quality evaluation of e-government public service. In this system the public service quality of a local e-government was analyzed through the measurement of citizen satisfaction. Based on SERVQUAL and considering the characteristics of government institution the result showed that public service quality of e-government systems could be measured by twenty-eight measurement scales. The limitation of the study is the incomplete proof of validity and more actual application should be done.[4]

Nuno vasco Lupes highlights smart governance as a key factor for the implementation of smart cities. Where a smart city government uses a smart governance model for achieving their smart cities purposes by applying the appropriate policies towards those purposes. The principles behind the smart governance model enable and potential significantly the creativity and innovation in the implementation of smart cities. The diversity of city contexts, challenges, risks and implementation goals found in the analyzed initiatives, clearly demands contextualized smart cities solutions. The empirical analysis shows that all the initiatives are relaying on technologies and smart governance, which may lead us to conclude that the promoters of smart city initiatives are considering them as essential prerequisites and factors for developing smart, creative, innovative ,and sustainable cities.[5]

The social can reinforce up effectively by getting titanic information headway in its conventional activities. Desouza and Jacob [11] announced that epic information can get it complex socio-political issues of government working environments by lessening dangers, dangers, and challenges and upgrading profit, capacity, and straight forwardness. There was a positive gigantic relationship between the learning power of association's Information System (IS) business limits with high grounds at any rate has no gigantic influence on the relationship between its flexibility foundation and favorable circumstances. Gasova and Stofkova referenced that there was a solid relationship between a urbanized data course of action of association and its sections (applications, programming frameworks layers, segments, and so on.). He in like way centered three classes of data structures joining like information based blend, process-based joining, and association based blend which direct identified with government's data framework the authorities. Silva et al. concentrated on the deficiency theory of Information Systems (IS) and brought up that disappointment in which little harm can have lopsided impact results correspondingly as the supportiveness of the entire structure which can induce disproportioned monetary moreover, social harms. There are some key basic roles like updates in IS progression, end-client applications, and the basic utilization of data frameworks can lead a predominant way to utilize and deal with the data structure assets of an association. There are unimaginably restricted wellsprings of Information stream and access from continuously formal sources in Bangladesh. They in addition perceived low ability rates made critical points of confinement to utilization of non-social sources and channels. Open affiliation can utilize the gigantic information types of progress for stunning association and use the advantages reasonably Holliday makes reference to that e-association action is out and out various in East additionally, Southeast Asia, amazing national attributes and insufficiencies rather than normal most distant point as for procedure change. Fundamentally, the ICT is being utilized by the open segments in Malaysia for headway of the possibility of association particularly giving quality client associations and client fulfillment. Heeks graphs three key obligations of eimproving government process governance: (eadministration), accomplice tenants (e-local people and eservices), what's more, building outer relationship by taking a gander at important examinations from nations, for example, the Philippines, Honduras, Chile, and South Korea.

As appeared by Bertot et al., the limit of massive information is to develop more association among government, local people, and unmistakable working environments through e-government associations, straightforwardness, commitment, and straightforwardness. Making survey shows that diverse models have been made to clear up e-association yet deliberate get some information about on execution of enormous information for speedy moreover, reasonableness association of gigantic information in the midst of the time spent sharp association is as of not long ago lacking.

#### **Existing System**

The present existing government System Services are everything should took care of by semi manual. Numerous offices are work under these gigantic organizations to help and give quick administrations to the publics. However, its neglects to deal with in numerous zones. Information's are predominant of distinctive individual in any association, yet investigation and keep up of single information in this troublesome manner.

#### Disadvantages

- Less performance.
- Disproportioned economic and social damages.
- More risks and threats.

#### **Proposed System**

The existing System having lot of problems like Lack of technology missing, unwanted hands that leads to administration slow and corrupt, Overcome that Proposing a System which is design to the entire governmental administration for better services to the public's .Through big data technology gathering all the information of particular government domain and taking these we went to data preparation and upload to hadoop directory and also applying security to these Data's by cryptography mechanism as well as analysis on these big data's. In this system ECC algorithm is using for encryption and decryption .we are storing the result data into file and sending to client via email.

#### **III. METHODOLOGY**

**Research Design:** This examination is dynamic in nature which utilizes a substantial association consider. The examination on an exceptionally essential dimension turns estimations, key drivers, weights, dangers and chances of gigantic data use for skilled affiliation leave from any noticeable square division.

Wellsprings data and Search Strategy: a talented limiting investigation has been finished by following the objectives of the examination all (figure 1). As incontestable by Rother, a productive structure format is considered as a 1 of a

structure investigate fill in because of following additional extended, and deliberate system. The examination has been certain to the reasonableness of colossal data for surprising association clear to everyone affiliations regardless also certifiable for the individual part. A general report is done by abuse net of science, science interface with, Scopus and Google expert, site and a few catchphrases like "tremendous data, data, bewildering, alliance, government, open, the association" are wont to get the latest examination related with the point . Fifty-two diary articles, working papers, and books are reviewed to examination the concordance of wide data for sharp connection and burdens, dangers and chances of liberal information use go past each discernible constrainment half work environments. The information gathering and examination for this examination are done from February to March 2018.

**Data Analysis**: data is investigated from absolutely trade viewpoints of alliance contemplating distinctive estimations in like manner, pointers for huge data impacts execution for incredible affiliation. an astounding model has been made for enormous data use for superb relationship inside the open half.

#### IV. DIMENSIONS, OPPORTUNITY AND A KEY DRIVER OF BIG DATA FOR SMART GOVERNANCE

#### A. The construct of massive information

Epic information could be a high volume, rapid and high amassing of information that once in a while financially capable and creative for making data, right essential association and most basic yield. it's speedily used as embellishment umbrella term to clear up moving information related framework.

It will type and manage the information, having volume, speed, regard, blend, and legitimacy and reviving new encounters by partnership individuals, society, industry, business, and government.

Characteristics of significant information

**Value:** everything considered beast information deals with a high volume of information that is formed by an individual, clear individual and open affiliation. It can help individuals by its specific usage of open affiliations.

**Speed:** Speed of information suggests a sensitive time of information from unequivocal sources like specific government affiliations, long vary relative correspondence destinations, additionally, singular affiliations.

**Variety:** diverse mixes of data is passed on from different sources like substance, numeric, sound, video. These are the standard data structure for the most part made over the net.

**Volume:** once in a while loads of data is made each day at any rate mulling over respect, all data don't appear, unmistakably, to be correspondingly key. two or three data could similarly be sparing and supervisor for open accomplishment. sweeping data address clear loads and offers a fitting system for crucial affiliation that limits hazard and disturbs of people, society and open plot.

**Truthfulness:** Veracity recommends the trust and nature of information sorting out. Huge data advancement should keep up the standard and trust of data which may require accessory good old fashioned call by the open administrator.

#### **B.** Employments of massive information

Exactly when all is expressed in done society a colossal piece of The point of confinement of massive data might be enough utilized by the association relationship by abuse charming system through the gathering, change, and planning data getting from various sources [1]. Tremendous data gives a stimulating opportunity to government relationship to process it without irregularity that desire to require a bona fide call, seeing debasement, criminal and troubles and dangers furthermore, enduring a future call. it's not useful for open division affiliations like government playing experts, urban structures and inhabitants at any rate what is constantly mending affiliations, and on-line life. Since the overseeing body envelops a fundamental obligation to pass on and controlling learning. Government could be a clarification behind blend of each creation and control learning [7]. On these lines, the association body can oversee it by gutting huge data through examination.

## C. Challenges associated with Applying huge information within the Public Division

Despite the way in which that huge data has massive potential regardless inside the meanwhile have a few inconveniences in its utilization. Government affiliations need to address these weights intentionally [1]. a few data could in like way be animated furthermore the level of data is excessively clearing which can be broadened all around referenced. reasonable equipment and programming ought to be dead to deal with a liberal live of data. Some conceivable weights for the association affiliations are desperate down underneath which can peer inside the thick of and when usage of huge data.

#### 1) Privacy and security

Individuals by and goliath organization is verified around mooring the affirmation and security of the subject. That is the framework for finding the affiliation alliance joins a mentioning run and clean most remote inspiration driving using people's data. The affiliation working conditions ought to be well-kept open trust as a guaranteed storeroom [5]. An extra layer of anomaly could relatively be looked by the association working conditions for data affiliation the thing group engineer's center to hack a lot of information from government store. Government office ought to be alert on this issue. A couple government has open information approaches which can cause a vitalizing catastrophe of information by maltreatment dread based normally maddening individual or lacking gathering for express enlargement or maltreatment for different countries interest.

© 2019, IJCSE All Rights Reserved

This security issue should be well-kept totally by the affiliation association. The affiliation ought to guarantee the security of subject's information and can be used for call making, finding criminal, diminishing sullying and social welfare. An affirmed structure ought to be made around the beginning of the tremendous information development execution.

#### 2) Managing and sharing information

Data has 3 fundamental characteristics viz as certainable, accessible and usable. Offered data is Associate in nursing nonsensically dire instrument for making awesome economy. Security law should be joined by the association relationship for party, regulating, abuse and driving information. Office uses tremendous information examination for picking a choice rapidly. It should be sans beat, aggregate and open on date-book for quickly advantage. Some affiliation working conditions use intentional techniques and data for keeping up information advancement and straightforwardness inside the association affiliations. Nowadays intriguing affiliations use open framework that gathers instructional records are offered to people once all is pronounced in done. It develops joint exertion among thoroughly amazing workplaces by the by ought to be done underneath the security technique. Shrewd association needs Associate in Nursing anticipated stream of data which can be correct, open, ascertainable and usable [3]

#### 3) Challenges known with improvement

Tremendous information upgrades were emanated an effect being dazzling in past scarcely any years. of Notwithstanding, beginning at now it makes puts stroll around grasped in each piece. It is right now possible to oversee, store and inspecting a mass volume of information by ethics of the occasion of progression. Big data needs expanded device and programming structure for utilize once all is announced in done society zone for get-together, regulating, taking a gander at and verifies information. The imaginative bothers and threats ought to be demandingly planned by the overseeing body office for getting the all out magnificent position from it. monster information upgrades need immaterial exertion social event, memory and cloud based strategy with tip high server and stage. Coursed fundamental thinking is basic among fluctuated enhancements for wide information use in people with everything contemplated half. The association work environment can while not an enormous live of a stretch use it for versatile framework examination. Government affiliations should ensure enough transmission control and wearisome examination of information for taking a correct affirmation on time by using cloud condition. The union workplaces should attempt with various all around of gateways working conditions for information change and most remote reason challenges of progression.

#### 4) Challenges known with aptitudes

As Associate in Nursing in like way new improvement, huge information needs a social occasion of made representatives for sorting out and driving it. Since it needs dynamic information of different controls, this business faces a nonattendance of information screen. The board working conditions should pick an individual World Health Organization will deal with the information unequivocally in light-weight of the style inside which that a touch trek may invite Associate in Nursing data disaster. Be that since it may, the alliance working conditions face all out activity of virtuoso information commentator which can hose the affiliation relationship to get a couple of data about this improvement. For getting an idea concerning and keeping up sharp association structure, a party of star people is key to the get-together, directing, controlling in like way, dealing with gigantic information for serving to the relationship in every half and limiting the hazard and risk against the connection work environments.



Figure 1 : Architecture of Proposed System

#### Elliptic- curve cryptography

Elliptic- curve cryptography (ECC) may be thanks to accommodate open key cryptography obsessed on the mathematical structure of elliptic bends over restricted fields. Computer code needs littler keys contrasted with non-EC cryptography (in light-weight of plain mathematician fields) to present proportional security. Table1 shows comparison between AES and ECC. So in this proposed system ECC algorithm is used for security

Elliptic bends are relevant for key assertion, computerized marks, pseudo-irregular generators and completely different errands. in an exceedingly detour, they will be utilized for encoding by change of integrity the key concurrence with a satellite encoding plot. They're likewise utilized in an exceedingly few number resolution calculations obsessed on elliptic bends that have applications in cryptography, for instance, Lenstra elliptic-bend resolution.

Open key cryptography depends on the refractoriness of sure numerical problems. Early open key frameworks are secure expecting that it's arduous to issue a large range created out of a minimum of 2 substantial prime variables. For ellipticbend primarily based conventions, it's expected that finding the separate index of associate absolute elliptic bend part as for associate overtly acknowledged base purpose is infeasible: this can be the "elliptic bend separate index issue" (ECDLP). The protection of elliptic bend cryptography depends upon the capability to method some extent increase and therefore the failure to register the number given the primary and item focuses. The extent of the elliptic bend decides the difficulty of the difficulty.

# ECC (elliptic curve cryptography) technique will be used for encryption and decryption of data.

The following are symbols we are used,

E-->Elliptic curve

P-->Point on the curve

n-->/Maximum limit(prime number)

#### **Generation of keys:**

Keys will be used for the encryption and decryption. Here we are using public key for encryption and private key for decryption. We have to choose a number 's' within range of 'n'.Using following formula we can generate the public key  $\rightarrow$ W=s\*p

Where s=The random number selected within the range(1 to n-1)

P is point on curve.

 $\rightarrow$  'W' is public key and 's' is private key.

Encryption

Assume 'x' is the data that sensed by the sensor sent to the Geo-social network. Represent this data on curve.Consider'x' as point 'M' on the curve 'E'.Randomly select 'k' from[1-(n-1)].Two cipher texts will be generated let be m1 and m2

M1=k\*p

M2=M+k\*W

#### **Decryption:**

We have to decrypt the data send by senor

X=M2-s\*M1;

Where x is the original message.

### Proof:

 $\begin{array}{l} X=M2-s*M1 \\ \text{`x' can represent as `M2-s*M1'} \\ M2-s*M1=(x+k*Q-s*(K*P) \\ M1=K*p) \\ =X+k*s*P-S*K*p \\ =x(\text{original message}) \end{array}$  (M2=x+K\*Q &

Table 1 Comparison Lee and ALS
--------------------------------

Comparison	Elliptic Curve Cryptography (ECC)	Advanced encryption standard (AES)
------------	--------------------------------------	---

Туре	It's a Asymmetric Encryption	It's a symmetric Encryption
Principle	ECC works on curve equations	AES works on permutation and substitution method
Key size	256 bits	128 bits
Speed	ECC is fast	AES less
Secure	More Secure Because of 2 Keys Used(public and private key pair)	More Secure Because of single Key Used(secret key)

#### V. RESULTS AND DISCUSSION

An effective review of composing and meta examination strategy is used with various elements of scales and markers. Composing diagram shows that different models have been made to illuminate keen organization anyway precise research on the fittingness and relevance of colossal data for sharp organization of open associations is up 'til now insufficient. Colossal data can deal with complex sociopolitical issues of government associations by reducing threats, risks, and challenges and improving productivity, adequacy, and straightforwardness. There was a positive critical association between the learning intensity of affiliation's Information System (IS) business aptitudes with advantages anyway has no enormous effect on the association between the versatility of IT establishment and high grounds. the shortcoming speculation of Information Systems (IS) and pointed out that mistake in which little mischief can have unbalanced impact results similarly as the value of the whole structure which can provoke disproportioned financial and social damages.

The use of enormous information for sharp organization in the open territory can extend the profitability of the open associations fastest open organization transport, improving straightforwardness, lessening open issue and serving to the become an insightful office. This paper further fights that execution of tremendous data for sagacious organization has an essential occupation in promising, botch free, legitimate and cost effective organization movement to locals which prompts the handy monetary headway of a country. The disclosures suggest that each open division association should be brought under sharp organization which should be a totally progressed under gigantic data advancements for basic access, clear and dependable, and trouble free open workplaces.

The dataset text file in HDFS directory The file contains with public agencies data which processes large amount of

data.The final result is storing in document and sending to user with content via mail. In proposed system dataset contains environment (disaster information) and RTO data. To analyze the proposed system we are using the dataset like which can contains the various disaster information like earthquake, fire, bomb event. we are using dataset from year 2000 to 2017,we are analyzing the data. figure 2 shows the

The analysis is conducted based on the user searching form the particular event .here we are also showing results for graph of encryption and decryption time taken for particular event data.

dataset containing disaster information



Figure 2 Dataset of each event.

Figure 3 shows encryption and decryption time. Here the encryption time is more because all the data to encrypt and send the data .decryption time is less because after user searching the event in data.



Figure 3. Encryption and Decryption time

#### Vol.7(4), Apr 2019, E-ISSN: 2347-2693



RTO related data which consists of vehicle details.

Figure 5 shows type of two wheelers in dataset.



Figure 5. Two wheeler types.



Below figure 6 shows the type of four wheeler in dataset.

Figure 6.Four wheeler types.



Figure 7. Encryption and Decryption w.r.t RTO dataset

In this RTO Department, all dataset is uploading to HDFS. when user searching the event, applying MapReduce algorithm, data will be encrypted and decrypted using ECC algorithm and display to the user. Final result is storing in file and sending content to user Email.

#### VI. CONCLUSION

To explore the suitability of big data technologies for smart governance in public agencies. It is basically driven by the research gap between the theoretical assumption of big data application and subsequently implementation of government agencies in the public sector this system suggests a conceptual model which explains how data will be collected from varies sources and followed a series of the procedure by maintaining a certain that explains the measurements of the standard of the system. The government agency can easily improves the public services delivery day today operator policy making decision and other value added service to the citizen by holding a large amount of data with applying big data analysis but privacy of the citizen should be maintain strictly and priority based to minimize the risks ,threats, challenges. In proposed effective has a significant role in timely ,error free appropriate and cost effective service delivery to the citizens. it suggests that every government agency should adopt big data technologies for reducing the corruption ,threat ,and challenges and increasing the efficiency accountability and hassle free public agencies. We are using hadoop system using MapReduce algorithm. Mainly providing security for data using ECC algorithm. Storing result data into document and sending contents to user via E-mail.

#### REFERENCES

- Yueqian Xu, "E-governament and governance in china," in IEEE, 978-1-4244-5326-9,2010.
- [2] R.D.Pathak,Gurmeet Singh,Rakesh Belwal,REL Smith, "Governance and corruption -Developments and Issues in Ethopia." Springer, volume 7,2007.
- [3]. Alfredo Cuzzocrea, "Privacy Preserving Big data Stream, mining: Opportunities, Challenges, Directions".IEEE,2017.

#### International Journal of Computer Sciences and Engineering

- [4]. Huai Jinmei, "Quality Evaluation of E-Government Public Service" IEEE 2011.
- [5] Nuno vasco Lupes , "Smart Governance : a key factor for Smart cities Implementation", IEEE , 978-1-5386-0504-2/17,2017
- [6] K. Schedler, A. A. Guenduez, and R. Frischknecht, "How smart canthe government be? – discussing the barriers to smart governmentadoption," in *IPMN Conference*, 2017, pp. 1–17.
- [7] S. Mellouli, L. F. Luna-Reyes, and J. Zhang, "Smart government, citizen participation and open data," *Inf. Polity*, vol. 19, no. 1–2, pp.1–4, 2014.
- [8] H. J. Scholl and M. C. Scholl, "Smart Governance: A Roadmap forResearch and Practice," in *iConference 2014 Proceedings*, 2014, no.1.
- [9] M. N. I. Sarker, Y. Bingxin, A. Sultana, and AZM S. Prodhan, "Problems and challenges of public administration in Bangladesh: apathway to sustainable development," *Int. J. Public Adm. Policy Res.*, vol. 3, no. 1, pp. 16–25, 2017.
- [10] E. Ogbuju, I. Aminu, and A. M. Peter, "Towards a Data-driven SmartGovernance in Nigeria," IEEE, 2016.
- [11] K. C. Desouza and B. Jacob, "Big Data in the Public Sector: Lessonsfor Practitioners and Scholars," *Adm. Soc.*, vol. 49, no. 7, pp. 1043–1064, 2017.
- [12] J. Manyika *et al.*, "Big data: The next frontier for innovation, competition, and productivity," IEEE, 2011.
- [13] Shankar M.Patil, Praveen Kumar, "Data Mining Model for Effective Data Analysis of Higher Education Students Using MapReduce", IJERMT, ISSN:2278-9359, Vol.6, Issue 4, April 2017.
- [14] Madhavi Vaidya,"Parallel Processing of cluster by MapReduce", IJDPS, Vol.3, No.1, 2012.
- [15] Rakesh.S.Shirsath,Vaibhav A.Desale,Amol D.Potgantwar, "Big Data Analytical Architecture for Real-Time Applications" IJSRNSC, ISSN: 2321-3256, Volume-5, Issue-4, August 2017
- [16] V. Kapoor, "A New Cryptography Algorithm with an Integrated Scheme to Improve Data Security" IJSRNSC, ISSN: 2321-3256 ,Volume-1, Issue-2, June- 2013.
- [17] Anitya Kumar Gupta, Srishti Gupta, "Security Issues in Big Data with Cloud Computing", IJSRCSE, E-ISSN: 2320-7639 Vol.5, Issue.6, pp.27-32, December -2017.
- [18] K. Parimala, G. Rajkumar, A. Ruba, S. Vijayalakshmi, "Challenges and Opportunities with Big Data" IJSRCSE, E-ISSN: 2320-7639 Vol.5, Issue.5, pp.16-20, October-2017.

#### **AUTHORS PROFILE**

**Rashmi G.B** is studying M.Tech in Computer Science and Engineering at M.S.Engineering College,Bengaluru.Her area of interest is big data analytics



**Mr. Malatesh S Havanur** working presently as Associate Professor in Department of Computer Science &Engineering at M S Engineering College, Bengaluru. He Has Published more than 25 research papersNational and International Journals and Conferences. and guided Many



M.Tech students in the area of Computer Science & Engineering. He is a member of IAENG,CSI,MISTE,IEEE computer society till 2015. His areas of interest are Data Analytics, Data Mining, Big Dataanalytics, computer Architecture.