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Smart Governance Through Bigdata Digital Transformation of Public Agencies

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Abstract: Bigdata is a potential instrument to transform traditional governance into smart governance. There are a long debate and discussion on the application of big data for the transformation of traditional public administration to modern and smart public administration in the academician, researchers, and policymakers. This study aims to explore the suitability and applicability of big data for smart governance of public agencies. A systematic review of literature and metaanalysis method is employed with various levels of scales and indicators. Literature survey shows that a number of models have been developed to explain smart governance but systematic research on the suitability and applicability of big data for smart governance of public agencies is still lacking. This article argues that the application of big data for smart governance in the public sector can increase the efficiency of the public agencies fastest public service delivery, enhancing transparency, reducing public hassle and helping to the become a smart agency. This paper further argues that implementation of big data for smart governance has a significant role in timely, error-free, appropriate and costeffective service delivery to citizens which leads to the sustainable economic development of a country. The findings suggest that every public-sector agency should be brought under smart governance which should be a fully promoted under big data technologies for easy access, transparent and accountable, and hassle-free public agencies.

Keywords: Hadoop distributed file system(HDFS).

REFERENCE

Dr. M. Ramasubramanian, Burjukindi Tejasri, Pendyala Priyanka, Nenavath Mamatha. The Title of the Paper: Smart Governance through bigdata digital transformation of public agencies

I. INTRODUCTION

This study aims to explore the suitability and applicability of big data for smart governance of public agencies. A systematic review of literature and meta analysis method is employed with various levels of scales and indicators.

1) *Research Design:* This study is qualitative in nature which uses a systematic literature review. The study mainly focuses on dimensions, key drivers, challenges, threats and opportunities of big data implementation for smart governance in public sector.
2) *Sources of Data and Search Strategy:* A systematic literature review has been done by following the objectives of the study strictly. According to Rother, a systematic literature review is considered as an original research work because of following a rigorous, and systematic process. The analysis has been confined to the suitability of big data for smart governance in public agencies but also applicable for the private sector. An extensive review is done by using web of science, science direct, scopus and Google scholar, website and some keywords like “big data, information, smart, governance, government, public, the administration” have been used to get the latest research related to the topic. Fifty-two journal articles, working papers, and books have been reviewed to explore the applicability of big data for smart governance and challenges, threats and opportunities of big data implementation in public sector agencies. The data collection and analysis for this study have been done .
3) *Data Analysis:* Data is analyzed from different perspectives of government considering various dimensions and indicators for big data technologies implementation for smart governance. A conceptual model has been developed for big data implementation for smart governance in the public sector.

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II. PROPOSED SYSTEM

In this paper author is suggesting government to convert all traditional public application to smart application using Bigdata technology. Now-a-days due to mobile or IOT (internet of things) lots of data gather on internet from various applications such online social networking, health care, traffic data, banking etc. To process such huge data traditional application may not be suitable as it works on a single threaded application. To overcome from this problem we can use Bigdata technologies such HADOOP and its parallel processing algorithm called MAPREDUCE or apache SPARK etc.

III. ARCHITECHTURE

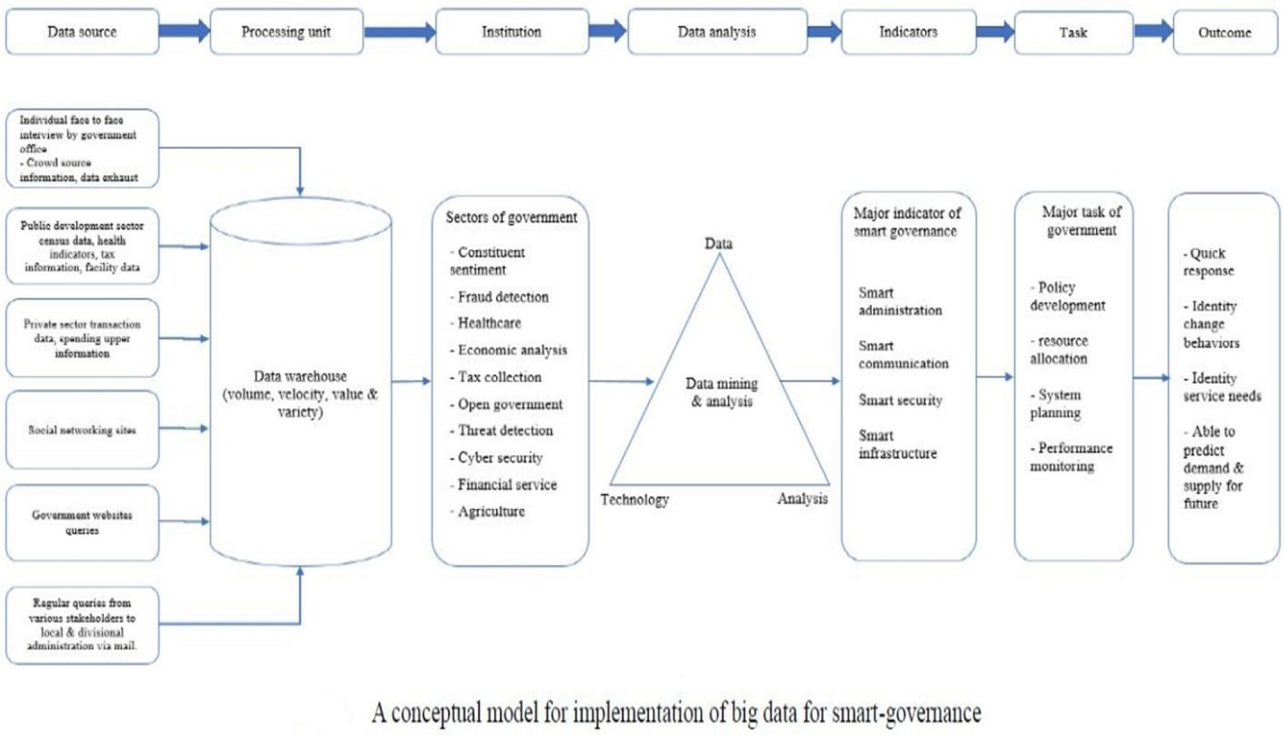

Figure : System Architecture

Data source will be collected from various sources like public development sector, private sector, social networking sites etc. The Data Processing will happen in the further step through Data ware house(which includes volume, velocity, value & variety).
This Big Data get divides into various sectors of government like Fraud detection, Healthcare, Economic analysis, Tax collection, Threat detection, Cyber security, Financial service, Agriculture.
Data analysis and Data mining are performed in the next step. This data is taken through various Indicators like Smart administration, Smart communication, Smart security and Smart Infrastructure. Then the major task of government is Policy development, resource allocation, System planning, Performance planning.

IV. IMPLEMENTATION

1) *Upload Public Information Dataset:* Task is to upload the information of public and their details.
2) *Search Type:* The type of occupation is searched through the search type button.
3) *Search Value:* Using this module the type of value from the Big Data is searched and is implemented.
4) *Search Public:* Information Using Big Data Hadoop Map reduce with privacy : Using this module, we search public information using Big Data Map reduce
5) *Data Visualization Graph:* It shows the graph with percentage of different search type categories of people.

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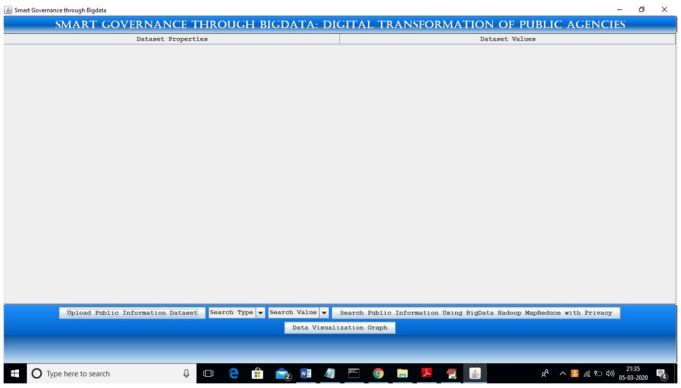
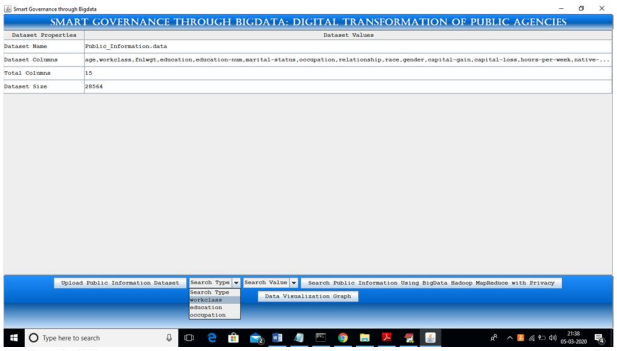
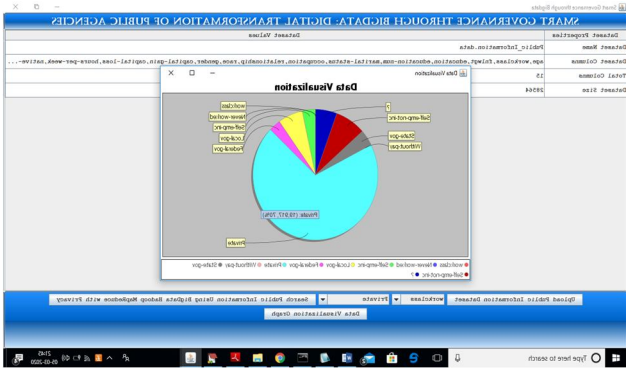
V. RESULTS



In above screen click on 'Upload Public Information Dataset' button and upload public data.In above screen I am uploading 'PublicInformation.data' file and after uploading dataset will get below screen.



In above screen from second dropdown I am selecting 'Private' value which means I want to search all peoples who are working under 'Private Work Class' and below are the search results. After selection click on 'Search Public Information Using BigData Hadoop MapReduce with Privacy' button to start search operation.



In above graph we can see clearly how many peoples are working in which sector.In above screen when I put cursor then application showing total peoples and its percentage working in that class

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VI. CONCLUSION

This project attempts to explore the suitability of big data technologies for smart governance in the public agencies. It is basically driven by the research gap between the theoretical assumption of big data application and subsequently its implementation for smart governance in the public sector. This study suggests a conceptual model which explain how data will be collected from various sources and followed a series of the procedure by maintaining a certain indicator that explains the measurement of the standard of the system. It also explains the outcome after following a series of procedures. This study reveals that big data has actually big potential for smart governance in the public sector even though it is still in its initial stage. The government agencies can easily improve its public service delivery, day to day operators, policy-making decision, and other value-added services to the citizen by holding a large amount of data with applying big data analytics.

VII. ACKNOWLEDGMENT

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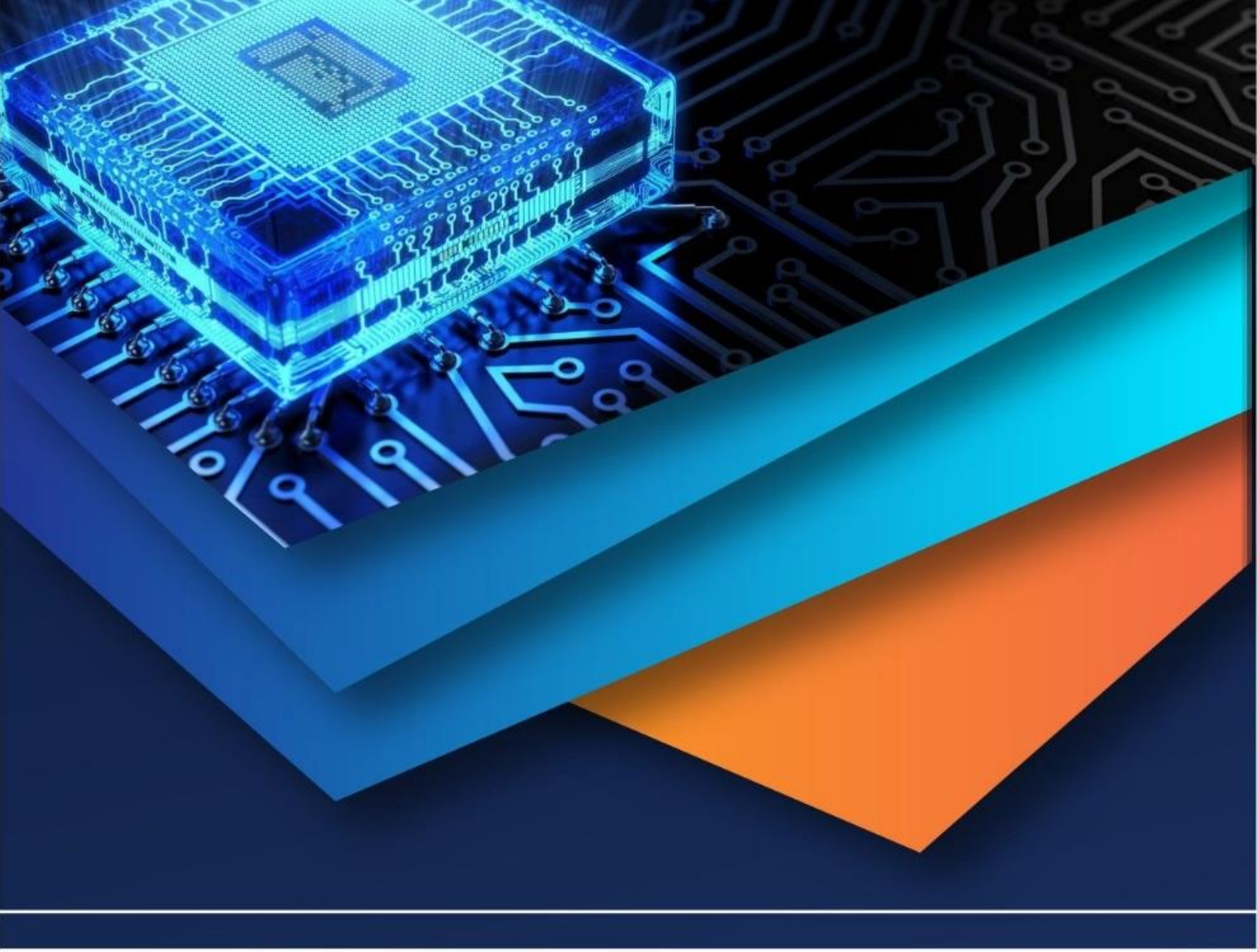

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