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Data Warehouse in E-Governance

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Abstract

With many computer applications in place, large quantities of data have been collected over a period of years. Private organizations recognized that there is value in the historical data of their own organizations and have undertaken projects to build data warehouses to make the data accessible in a meaningful and timely manner through mining and querying tools. But mostly in government organizations, it is not so. Data -ware technology has extensive potential applications in the government in various central government sectors such as agriculture, rural development, health and energy etc. In this paper, we are just giving some informative solution for the emerging concept of E-panchayat. Data warehouse architectures implemented in private organizations provide a thought to design data mart approach architecture for a centralized E-Governance.

Keywords- Warehouse.

Introduction

Generally, data warehouse is an enterprise where all the relational database of different departments are collectively stored for senior management reporting such as annual and quarterly comparison. Data warehousing spread across the business world. Data warehousing started in the United States and eventually spread worldwide. Data warehouses are as common today in Malaysia as in Brazil, Australia, Europe and elsewhere.

The first data warehouse emerged in the late 1980s and was called as "atomic databases", but later on in the early 1990s, it is overcome by the advent of Extraction, Transformation and Online Analytical Processing (OLAP), but soon data warehousing transformed into free-fledged architecture known as the Corporate Information Factory. The data warehouse meant for e-Governance is e-Governance-data warehouse [1]. The data warehouse can be valuable resource for all the users that need information to provide support for:-

- Day-to-Day operations
- Decisions support
- > Strategic planning
- Performance Management
- Compliance Reporting

In today's era, there is all urgent need for data warehousing in government circles. As compared to private companies government is adopting data warehouses very slowly.

The most fundamental reasons are:

- There is a major dissimilarity in business world and the government.
- In the business world, the most elementary inspiration for data warehousing are to raise profit or raise market share protection.

Stages of Data Warehousing



Stages of Data Warehousing

Needs and benefits of Data warehouse for E-Governance

- Government has to deal with enormous data and when it is used properly, it can help planners and decision-makers in making proper decisions.
- ➤ Due to absence of data warehouse in government, government have to depend on

IT staff for making special reports, which often takes long time to generate.

- ➤ Data warehousing can deliver strategic intelligence to the decision-makers and provide an insight into the overall situation from the historical data.
- ➤ With the help of decision-makers, government can take their micro-level decisions in a timely manner without depending on their IT staff.
- Citizens can take huge benefit of decisionmakers as they can view frequently asked queries whose result will be their in database.

Pre-Computerization

As we have seen that people are developing day by day, but still there are lot of things that should be improved. When any person wants to catch something corresponding to the government policies, he/she have to go to their respective department, they have to fulfill all the requirements like form formalities, long queue, etc

The main overview of the pre-computerization is:

- ➤ Due to the lack of computerization resources, people feel very discomfort to pay their income tax.
- > There was a big problem to pay electricity bills.
- Inconvenient to interact with public to introduce them with latest government policies.
- ➤ Due to inconvenient communication resources, government fails to introduce their policies to public.
- In municipality, *tehsil* and court having already too much work load. Therefore, they unable to do work rapidly such as making property inventory.
- ➤ Due to absence of E-Governance, government is helpless to deal with companies in proper manner.

Post-Computerization

Now-a-days, government is enlarging their facilities vividly and vastly. As a demand and inconvenient resources provided for public, government introduced "E-Governance", in which people can easily interact with the government and its latest policies. Now, almost all government policies are available online, people can easily paying their bills. They can smoothly getting their salaries, birth certificates, death certificates, income tax certificates, caste certificates by registering from their respective places [2].

Government is also comfortable to deals with different companies. Now -a-days, it is very convenient for the staff of government to manage the record in their offices. Some of the advantages of post-computerization are:

- > Increased accountability
- > Increased transparency
- > High availability of public domain information.

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- > Reduced corruption.
- ➤ Higher penetration due to automation
- > Improved competence due to connectivity
- Process re-engineering

Objectives

Information Technology Department will make every effort to:-

- Provide Government services to Citizens through the internet at the earliest
- Make nation the Best in IT enabled Governance
- Significantly raise the software exports of country
- > Take Computing in nation to a higher level
- ➤ Improve the class of life of people through Information and Communication Technology (ICT)

Impact

People can perceive the impact of E-Governance in their life. Some general activities are holding with are:

- People affecting by the E-Governance by obtaining their policies at the accurate time.
- It is totally time saver technique to all.
- > By taking this technique government can save money and records cheaply.

Hurdles

- ➤ Illiteracy
- > Electricity problem
- ➤ Internet problem
- > Technology adaption
- Awareness about government portal among Indians

Conclusion

In 2002, in his contribution WATSON highlighted various data warehousing failures elaborately in his case studies and finding. The size of data warehouses depends on the department data

into consideration. All these databases help planners and decision-makers in making in form decision leading to positive impact on targeted group of citizens. Data warehouse can deliver strategic intelligence to the decision makers and provide an insight into the overall situation from the historical data [3]. In order to support the data warehouse facilities, the authorities of the government should:

Appoint the technical staff for data administration activities, maintenance and for providing services to the staff for efficient use.

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- A team should look after the selection of centralized databases of various governmental departments to select as the subject oriented areas for the data ware.
- A committee/task force may be appointed in order to look after the co-ordination activities and enforcing standards.
- There should be an availability of the data dictionary with the technical team.
- Understanding the client's needs and the determination to meet those needs should be considered.
- Should have control on the size of the data in the data warehouse depending on the problem and the computer application.

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