Expert System For E-Grievance

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Abstract- *Governments embraced electronics to engage with citizens in service provision and interacting with their citizens. Convenient service delivery, improved communication, cost reduction, efficient and effective ways of service provision are among promised notions of electronic government systems. In consequence, the study of e-government has gained considerable attention. The use of ICT and particularly the Internet, as a tool to achieve better Progress''. Unfortunately, many of the e-government studies focused on the supply side and how e-governments systems affect public organisations. This study has tried to breach that gap by focusing on the demand side of the e-government. E-grievance systems were the main theme of the research by being one of the main reasons citizens contact their governments. Local governments are considered as natural customers of public citizens. Many of Citizen's Everyday needs relating to water/sewerage, electricity, roads, parking are linked to local governments. Local governments are also the point at which citizens seek: obtaining certificates, building permits, registering and subdividing plots of land are all important transactions that local governments around the world often have the sole responsibility. Therefore, it is considered essential that processes of complaint redressal are clearly defined and publicly available. . It has been discussed about the development of an integrated system to take care citizen's electronic complaints.*

Keywords- E-government,E-grievance systems,complaint handling mechanisms,ICT, GeoICT, E-participation, citizen-initiated contacts.

I. INTRODUCTION

Governments are using Information and communication technologies in their daily work and businesses with the promise of more and convenient service delivery, improved communication, transparency and accountability, (Ciborra 2005), and citizen inclusion (Poelmans 2006). E-government is defined as "the use of ICTs, and particularly the Internet, as a tool to achieve better government" (OECD 2003b). Therefore, the use of information and communication technology (ICT) has changed the way of interaction between governments and citizens. ICT not only provides the opportunities of government to be more efficient and direct citizens to their websites for information and application but also it allows citizens to take advantage of the internet to initiate their contacts with governments and to express their appeals, complaints, suggestions and opinions (Chorng-ShyongOng and Shang-Wei Wang 2009). And in this case, it has been considered that use of ICT in governments will increase citizen participation through e-government projects which are designed to facilitate community participation (Ian Kearns, Jamie Bend et al. 2002). The new phenomena of E-participation thus emerged as a field of study in E-government.

II. RELATED WORKS

[1] Entity resolution use such rules to derive temporal records information of time order and trend of their attribute's evolvement with elapsing of time.[2] Recognizing Pattern propose the formal semantics of such pattern evaluation two evaluation frameworks, and algorithms and optimizations in these frameworks. Our evaluation result using both real traces and synthetic systems show that the event-based framework always outperforms the point-based framework and with optimizations it achieves high efficiency for a wide range of workloads tested.[3] Crowdsourcing System use knowledge base [k B] and design an Online Task Assignment algorithm, which judiciously and efficiently as signs tasks to appropriate workers. Experiments show that DOCS performs much better than the state-of-the-art approaches.[4] Tracking Entities reduces difficult problem, record matching with evolution to two simple problems record matching without evolution then evolution detection among the resulting clusters.[5] Crowdsourcing develop a system called the Quality-Aware Task Assignment System for Crowd sourcing Applications (QASCA) on top of AMT. We find that QASCA is efficient, and attains better result quality (of more than 8% improvement) compared with existing methods.[6] Crowd Source Data Management survey and synthesize analysis we then outline key factors that need to be considered to improve crowd sourced data management.[7] CDB employs a graph-based query model that provides more fine-grained query optimization. Second, CDB adopts a unified framework to perform the multi-goal optimization based on the graph model.[8] Crowdsourcing for Entity Matching executes crowd sourced RDBMS joins cleaning learning models, and soliciting complex information types from crowd workers.[9] crowdsourcing may yield low-quality answers, and a redundancy-based method is widely employed, which first assigns each task to multiple workers and then infers the correct answer (called truth) for the task based on the answers

of the assigned workers.[10] Crowd sourcing proposing an approximate algorithm that is computationally efficient. This computation algorithm is also accurate, and its error is proved to be bounded within 1%.

Our existing system depends on the definite timestamp methods, which can only reason a relative currency order with currency constraints transmitting the complaints and assisting the complaints to particular terms are done in manual process. In this system, efficiency and accuracy is less.

Therefore, the Crowdsourcing system has to cope with those different aspects.

DISADVANTAGES

1.Lack of customer management.
2.Time consuming process.
3.Handling Data currency is difficult.

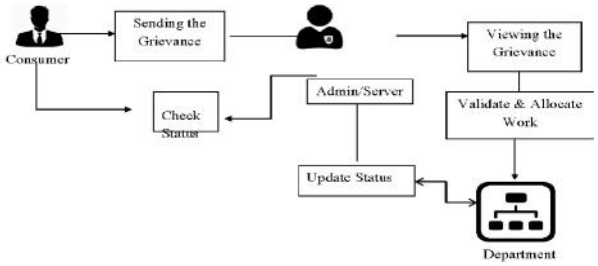
III. ALGORITHM

ENTITY RESOLUTION ALGORITHM

Definition 1. (Entity Resolution on imprecise temporal data). R = (A1,...Am) is a relation schema and IR = {r1,...,rn} is a set of instances of R which contains n records. IR has no precise timestamps. The Entity Resolution problem on imprecise temporal data is to cluster the records into clusters, such that records in the same clusters refer to the same entity over time and records in different clusters refer to different entities. To discover the evolving trend, the temporal order of tuples is determined by comparing the values on some attributes which demonstrate the currency of the tuples. Take r4 and r5 for example, as one's salary level is always in non-decreasing trend, it can be inferred that r5 is more current than r4, i.e., r5's observing time point is earlier than r4's. Through such target attributes, we can infer the whole evolving trend of the records. Fig.1 shows the overview of the proposed methods, which consists of two main processes, similarity comparison and clustering. In the similarity comparison step, a model is designed to measure evolving possibilities of attributes. Intuitively, the more diverse the attribute's active domains, the higher probability it will evolve. Thus, we propose the unstableness of attributes to capture evolving possibilities. According to each attribute's instability, the dynamic weight scheme is designed, according to which, the weights of unstable attributes are lower. As a result, r2 and r3 in Table 1 could be matched since the similarity gets high enough. The details are discussed in Section 3. In clustering steps in Fig.1, we first partition the records into blocks with matching dependencies. Since that dynamic weight scheme may lead to false positives. With the weight scheme discussed above, both(r4,r5)and(r4,r6)are judged to be matched. To solve this problem, we then use currency constraints to exclude such false positive pairs before the similarity join based on the dynamic weight scheme. After that, we

Propose skeleton clustering on the blocks. The final merging process consists of three steps. Firstly, we determine the singleton clusters and merge them into existing candidates or let it be a new candidate. Next, we compute the banding similarity between candidate clusters. And we finally merge pairwise candidates into correct clusters according to the banding similarity. Example 2 shows how our method executes in the records in Table 1.

4. ARCHITECTURE DIAGRAM



IV. DESCRIPTION

People who need to say their complaints on a daily basis can send via the internet. The Advantage in our project is that the complaints get to the government directly and the complaints are automatically generated to the respective department and the status of the complaint can be viewed by the people who send their complaints and can see whether necessary action is taken or not.

V. PROPOSED SYSTEM

We have proposed a rule-based ER method to address the entity value evolution effectively for processing E-grievance. In our proposed system, we have implemented the rule-based entity resolution for transmitting the E-grievance, to overcome the issues faced in the existing system. Here, we have a tendency to use such rules to allocate the work to the respective department automatically. In this system, a model is designed to measure evolving possibilities of attributes and also it partitions the records into blocks with matching dependencies.

ADVANTAGES

1.Effective customer management.

2.Time constraint is less.
3.Effective handling of Data Currency

VI. METHODOLOGIES

DATA COLLECTION

There are two major approaches to gathering information about a situation, a person, problem or phenomena and these are: Primary data: Data collected through sources such as questionnaire and interviews, etc Secondary data: This is collected through sources of documents that already existed. It includes earlier research, government publications, etc. Both of the approaches are used in this research and in the next sections a detailed overview of each method used is explained.

COMPLAINT HANDLING

Electronic Complaint handling systems are a recent phenomenon, but the traditional handling of complaints existed a long time in Amsterdam. Its establishment ranges from two months to two years. It is believed that it has reduced the physical interaction of citizens and the front office. A fact that has been acknowledged is that the E-Complaint system coexists with other traditional means of complaint handling and that is only one extra service. In 1991, the Internal Complaint Act was included in the General Administrative Law Act. The Law gave each and every person the opportunity to complain about the way that administrative body treats him/her. Previously complaints about the government were possible and certainly the Amsterdam citizens made use of it but it certainly lacked the legal procedure. Since the autumn of 2007, complaint coordinators of the platform worked on streamlining the complaint treatment in Amsterdam, trying to formulate minimum conditions for a correct complaint treatment. This resulted in the Directive complaint treatment, which was declared binding for all services in June 2008 by the City Council. As the evolution entailed, there was a concern of the piecemeal growth of the complaint handling with different speed and at various levels. To overcome this piecemeal growth of Complaint systems in Amsterdam, the Ombudsman tried to form a complaint platform of the districts and departments.

VII. CONCLUSION

This project solves the issues of entity resolution on imprecise temporal data. We have proposed a rule-based ER method to address the entity value evolution effectively for processing E-grievance. We apply rules to allocate the work to respective departments automatically and to determine the currency order of records from target attributes. Various experiments on both real-life and synthetic data verify our methods outperform traditional methods in entity resolution on data without timestamps, and our method achieves almost the same performance on temporal data. Hence, by our proposed system, transmitting of E-grievance is done efficiently. Future work includes seeking for more rules to model the evolving trend of the temporal data more accurately and learning efficient methods to find the rules.

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