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INFORMATION TECHNOLOGY QUALITY REVIEW DASHBOARD

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ABSTRACT

Texas Instruments' organizational philosophy is based on its strong belief in ethics, high performance, and always getting better. The IT Quality Review (ITQR) framework was created and put into action to bring IT service practices in line with the high standards set by Business Finance and additional services department that were important to the company. When the ITQR is aligned with higher-level organizational goals both technically and strategically, it can enable others to do their jobs well and create The poor culture of responsibility. The technology can also create broad analytical reports and show how well operations are performing, how well services are meeting standards, and how well they're getting along benchmarks by combining data and metrics from different sources. One of the main features of a dashboard is that it displays important performance metrics. (KPIs) and other important metrics in real time. users to recognize suitable medical care for further evaluation of their health.

KEYWORDS: *Performance Metrics, Key Performance, Indicators, Score Distribution,*

INTRODUCTION

Among the most critical tools in determining that an organization buys credible and of high quality Information Technology (IT) services is the IT Quality Assurance (ITQR) Dashboard. Since the world today is a computerized world, IT procedures and infrastructure is a central area because when firms are mandated to have a strong and stable infrastructure to support their goals. The IT Quality Reporting Dashboard is providing reporting on various measures of IT quality to enable the monitoring boundaries of compliance and performance to be raised in stakeholder performance. The dashboard is the organization culture tool that allows the real-time and significantly augmented decision-making since the

dashboard automatically collects and presents the most essential it data.

One of the major goals that ITQR Dashboard needs to accomplish is to bring together different organizational functions into one operation user interface. All of the problems that are typical of manual data gathering processes and may involve inaccuracy, time lag, and inconsistency of gathered data are eventually overcome in this integration. Resource utilization, security requirements, and IT operations performance from as far back as the current information and history.

LITERATURE SURVEY

All functional units have right to have an information custodian and the organization and various units can have access to the ITQR data.

The current processing of information retrieval and manual and processing is performed by a Site Administrator.

The administrator will, most of the time, make requests on data owners through email requiring them to publish the required data on the central repository using SharePoint.

The administrator will create the data manually and export it into spreadsheets so that it can be reviewed and analyzed when adequate information has been compiled.

Dashboard would be treated at least four times yearly or once in every three months in order to continuously check on the quality of IT services.

The data handling procedures, data collection, quality review efficacy, and quality review accuracy may be affected by the fact that the data may not be very up to date at the points of its entry into the spreadsheets. It is this latter form of slowdown that has the capacity of hampering the pace of decision-making and even effectiveness of the ITQR process. Moreover, the reliability of the data collection process is evaluated through the use of diverse communication channels, such as phone calls, mail communication, and instant messages which is another flaw in the whole system. Such a blind patch in this way often leads to misunderstanding, inaccuracy in reporting, or perhaps to irrelevant redundancy. The lack of a unified platform also means that administrators will have to dedicate still more time to cross-check the findings between platforms to ensure they have the requisite information.

EXISTING WORK

Several research efforts and industrial practices have focused on improving the way organizations monitor, evaluate, and optimize

their IT resources through dashboards and automated review systems. Dashboards in the field of Information Technology are designed to provide decision makers with a consolidated view of system performance, compliance status, and resource utilization.

Previous studies have emphasized the importance of integrating multiple IT service management frameworks such as ITIL (Information Technology Infrastructure Library) and COBIT (Control Objectives for Information and Related Technologies) into dashboard systems. These integrations allow organizations to maintain service quality, track incidents, and ensure alignment with business objectives. For example, works focusing on ITIL-based monitoring platforms have shown that a centralized dashboard reduces response time to service disruptions and enhances accountability across departments.

PROPOSED SYSTEM

The proposed Information Technology Review Dashboard is designed as a centralized and intelligent platform that enables organizations to effectively monitor, evaluate, and manage their IT resources in a unified manner. Unlike conventional monitoring tools that are often limited to specific functions such as server health or incident tracking, the proposed system integrates data from multiple domains including infrastructure, networks, applications, storage, and security. This integration ensures that decision-makers obtain a holistic view of organizational IT performance.

The system will be implemented as a web-based dashboard capable of collecting information from heterogeneous data sources such as system logs, helpdesk tools, monitoring applications, and audit records. The collected data will be standardized and presented in an interactive format to ensure consistency and ease of analysis. Real-time monitoring will allow IT teams to visualize system performance instantly, while automated alerts will notify administrators in case of service disruptions, performance drops, or security breaches, thereby reducing response time.

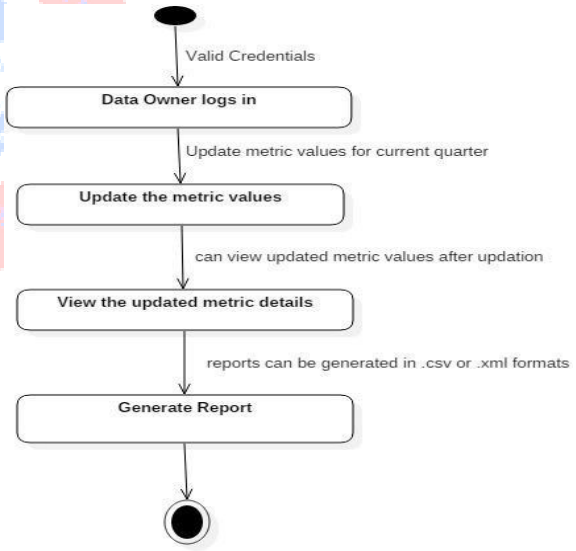
A major strength of the proposed system is its flexibility in defining Key Performance Indicators (KPIs). Managers will be able to configure KPIs according to organizational needs, for example, measuring SLA compliance, downtime, or incident resolution times.

METHODOLOGY

The methodology adopted for the development and evaluation of the Information Technology Quality Review (ITQR) Dashboard followed a structured, multi-phase approach to ensure accuracy, efficiency, and practical relevance. The process began with a **requirement analysis phase**, where existing IT quality review practices, audit mechanisms, and reporting tools were studied in detail. Interviews with IT managers, system administrators, and auditors were conducted to identify gaps in the current review system and to finalize the set of performance indicators, compliance measures, and visualization needs that would guide the dashboard's design.

The next stage involved **data collection and preparation**, where IT service logs, performance reports, and audit records were gathered from multiple departments to form a comprehensive dataset. This dataset was standardized, cleaned, and structured to ensure consistency and reliability. Key metrics such as service uptime, response time, incident frequency, security compliance, and resource utilization were selected as the foundation of the dashboard.

Following this, the **system design and development phase** was carried out. A modular architecture was chosen to ensure scalability and flexibility. The data integration layer was developed to pull data from multiple IT sources in real time, while the visualization layer was built using interactive charts, graphs, and filters to provide meaningful insights at different organizational levels. Prototyping was applied at this stage, where initial versions of the dashboard were shared with stakeholders to gather continuous feedback.



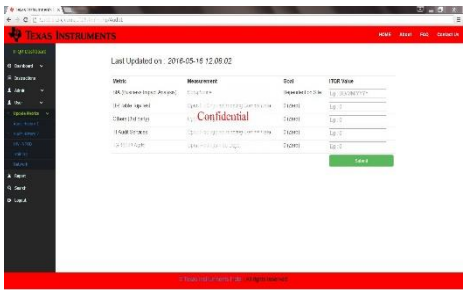
Once the prototype reached a stable version, a **pilot testing phase** was conducted in selected IT environments. The dashboard was evaluated based on usability, performance, accuracy of data representation, and ability to support decision-making. User feedback from IT staff

and management was collected through surveys and structured interviews, which helped refine the interface, improve chart readability, and add drill-down functionalities for deeper analysis.

EXPERIMENTAL RESULTS

To evaluate the effectiveness of the Information Technology Quality Review (ITQR) Dashboard, an experimental study was conducted within selected IT service units. The dashboard was deployed in three operational areas: network management, application support, and system administration. The experiment was designed to measure improvements in reporting efficiency, data accuracy, and decision-making when compared with the existing manual review process.

The findings of the experiment demonstrated a clear advantage of using the ITQR Dashboard. Report preparation time, which previously required several hours of manual compilation, was reduced to less than thirty minutes with the automated system. This improvement not only saved staff effort but also enabled more frequent and timely reviews. In terms of accuracy, the automated reports showed a reduction in data inconsistencies and errors, improving overall reliability of quality assessments.



The results also highlighted performance benefits in incident tracking and service monitoring. The dashboard provided real-time visibility into system uptime, resource utilization, and security alerts, which led to faster identification of issues. On average,

downtime was reduced as teams were able to respond more quickly to critical events. Feedback collected from IT managers and auditors confirmed that the visual representation of data—through charts, graphs, and drill-down functions—helped in identifying trends and problem areas more effectively than static reports.

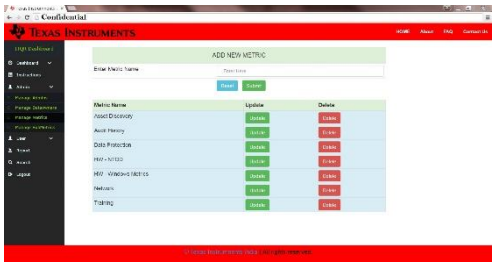


Fig 1: Audit History

CONCLUSION

With its user-friendly and intuitive interface, this web-based application offers a revolutionary method for creating the Information Technology Quality Review (ITQR) Dashboard. In automating a process that had been time and cumbersome in the original manual system like the busy workloads during quality review, ITQR dashboard has helped curb the limitations of the previous system.

Since ITQR Dashboard uses tried-and-true queries, it also eliminates a lot of manual effort. It is able to access the reports and data with a single click. The system enables the user to export the referenced data into comma separated value (CSV) records, and excel spreadsheets besides the ability to save the current dashboard data.

The web application and a remarkably friendly interface allows reporting of the Information Technology Quality Review (ITQR) Dashboard. Since the ITQR Dashboard digitizes load preparation on the quality review, it eliminates all the disadvantages of the previous manual approach.

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