DASHBOARD REQUIREMENTS SPECIFICATION

GCS Analytics Platform

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1. Introduction

1.1   Purpose

The purpose of this project is to conduct a dashboard for GCS Analytics Platform to help monitoring the production use and leaked time dashboard consumption on the leak rate specification. The Dashboards must display a dense array of information in a small amount of space in a manner that communicates clearly and immediately. This can be achieved only when the visual design of dashboards is central to the development process and is informed by a solid understanding of visual perception what works, what doesn't, and why.

- *Strategic Perspective*: High-level measures of performance that allow a quick overview that decision makers need to monitor the production use and leaked time of the business.

- *Analytical Perspective*: Analytical dashboards should support interactions with the data, such as drilling down into the underlying details. They allow to see what is going on but also to examine the causes.

- *Operational Perspective*: Operational dashboards must have the means to grab your attention immediately if an operation falls outside the acceptable threshold of performance, you must maintain awareness of activities and events that are constantly changing and might require attention and response at a moment's notice.

- Support internal enterprise users in the assessment, enhancement and optimization of organizational performance & operation.

- Supporting optimal decision making.

- Too much information can kill the information.

- If too many measures are chosen, the amount of time necessary to capture the data may outweigh the value of the information.

- The dashboard should confine its display to a single screen, with no need for scrolling or switching between multiple screens.

- Dashboards can provide a unique and powerful means to present information, but they rarely live up to their potential.

- Most of them fail to communicate efficiently and effectively, not because of inadequate technology or relevant information, but because of poorly designed implementations.

- Dashboard it must include graphical display mechanisms such as traffic lights and a variety of gauges and meters, many similar to the fuel gauges and speedometers found in automobiles.

- We decided to turn our dashboards toward their vocation, with a minimum of colors or attractive design.

1.2   Document Conventions

The dashboard will simulate the various forms of usage of trend consumed by the At&t employee and also create a comparison between those productive time consumption which will reduce the cost and help the employee.

1.3   Project Scope

The project scope is to design a dashboard as a web application to display the Utilization/Leaked Time consumption of At&t with simple graphical presentation to make it easier for users to monitor the status of daily usage. The dashboard will also provide a detailed comparison between production on different time scale and various equivalent units of KPI.

2. Overall Description

2.1   Product Perspective

The project is to conduct a mock-up for the website which will display the Daily productive usage.

2.2   Product Features

- Direct Reports Display in different units (electricity, fuel, carbon dioxide and water)
- Time Period (Days) display in different time scales (daily, weekly, monthly, yearly)
- Competition between buildings with the display of percentage change and total trend usage.

- Display of Avg. Productive Time and Avg. Leaked Time.
- Download the displayed data (at&t ATTUID)

2.3　　User Classes and Characteristics

The website will be available for two different classes of users:

- The first class is public users represented in Business units or any other kind of employee who would like to check the status of the production/leaked time usage.
- The second class will include two sub organization represented in supervisors and administrators.

2.4　　Operating Environment

The dashboard will be displayed as an html website and published on Microstrategy server which will be compatible with most web browsers and available to work on any operating system.

2.5　　Design and Implementation Constraints

The dashboard will be implemented to instantly simulate and retrieve data from the () control systems.

2.6　　Assumptions and Dependencies

The mock-up was built on the assumption that all required data is available and can be instantly retrieved from the Johnson control systems.

3. System Features

- The dashboard was built as a web application to make easier for any employee of users to understand it and use it without any prior knowledge.

3.1　　Design and graphics

The website will be design with a catchy and simple template with clear representation of data and information, at the same time the graphics will be simple to reduce the required time for processing and transfer between pages.

3.2　　Description of presented data

3.2.1   Information and data will be presented in form of charts and graphs that display the trend usage consumption with the ability to choose different time scales (today, yesterday, last week, last month and last year) and different equivalent units (Work State, Work City, Job Title and Time Period (Days)) for any specific chosen from direct reports list.

3.2.2   ==There== will be a page assigned to display data of each building in campus including science and services buildings as well as residence buildings, all buildings will be displayed in a list with the availability to choose any specific building.

3.2.3   Another page will represent a comparison between leaked time weekly Average yearly summery and leaked time weekly Average yearly summery chart with the ability to compare between two specific representing the information with respect to time scale and equivalent units mentioned in section 3.2.1

3.2.4   The website will include a "green tips" page with widgets to make the user familiar with the new green news and attract him to the idea of green environment and also to spread this idea between University students and employees.

3.2.5   A page that includes information (if available) about each building in campus with possible future improvements.

3.2.6   A page will contain the administrator's access to all data displayed in the website with the ability to download all information and graphs in supported file format.

3.3   Functional Requirements:

- Energy consumption display of individual building in form of charts and performance increase or decrease percentage including (productive usage/leaked time).

- Availability for different time scale presentation (current, hourly, weekly, monthly and yearly).

- Comparison between different categories of buildings or two specific buildings. Comparison is available for different time scales and different units.

- Competition between buildings and with detailed information about whether building performance increased or decreased comparing to recent usage.

- Green building features which describe each building in terms of energy saving architecture, and include information about possible future green features.

- Green tips page which display some tips about new green environmental movements and news.

4 External Interface Requirements

4.1 Hardware Interfaces

The dashboard will be a website displayed in browsers and has direct interface with the Microstrategy installed in A&T environment with the ability to get instant measured values from it.

4.2 Software Interfaces

The website will be able to function in every common used web browser and any operating system without installing any additional software.

5 Nonfunctional Requirements

5.1 Performance Requirements

The web site will be able to work as quickly as possible without any unnecessary time delay that causes the user to leave the website.

5.2 Safety & Security Requirements

All information available in the web site will be Acadia university property with copyright reservation. Public users will not have access to download any graphs or data from the website without the administrator's approval (all data are user name and password protected)

5.3   Software Quality Attributes

The administrator will be able to edit the web site or perform regular maintenance without contacting the designers.