

Absenteeism Tracking Tool 2.1

User Manual

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1. INTRODUCTION

The purpose of the Absenteeism Tracking Tool, which has been developed in Microsoft® Access 2007, is to keep track of and analyze absenteeism data gathered through Workplace Satisfaction Surveys. The surveys are to be held periodically on pre-defined time periods to enable adequate analysis of absenteeism causes and to measure effectiveness of the mitigation strategies implemented to reduce absenteeism.

The structure of the database is illustrated in Figure 1:

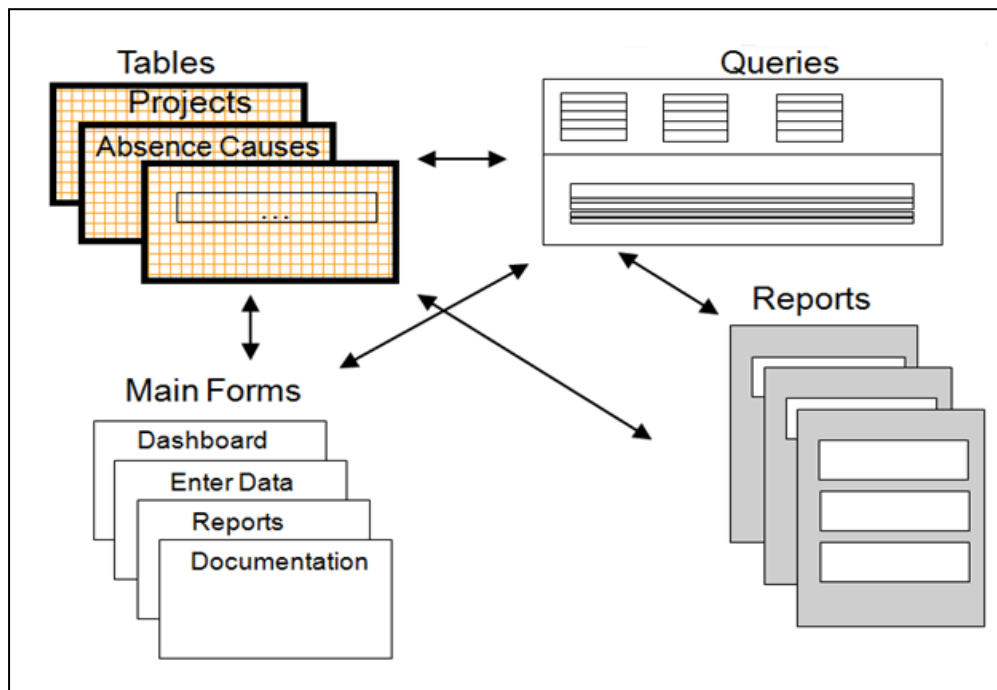


Figure 1: Absenteeism Tracking Tool Structure

The tool is designed to be user friendly. The user can easily enter data using the drop down boxes wherever applicable, while the results are simple to access and understand. Also, the user can design customized queries and reports using Microsoft® Access 2007 in order to obtain specific data.

2. GETTING STARTED

1. Copy the file “Absenteeism Tracking Tool V2.1” from the CD onto your desired hard drive location.
2. Once the file is copied to the desired location, double click the file and the following screen will appear as illustrated in Figure 2:

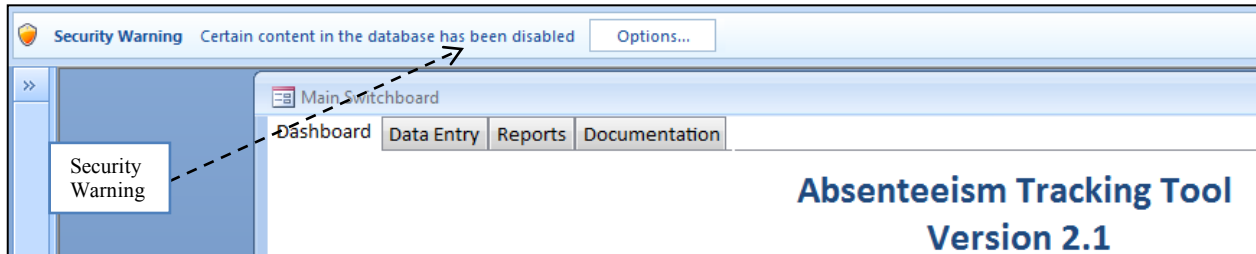


Figure 2: Security Warning Screen

3. Press “Options” and a security alert screen will appear as shown in Figure 3:



Figure 3: Security Alert Screen

4. Choose “Enable this content” and press OK.

3. CONTENT

The Absenteeism Tracking Tool consists of 4 main navigation tabs listed below:

- Dashboard: is set as the default screen when the user runs the application, it has the main selection criteria such as summary charts, project selection and time period selection.
- Data Entry: includes 4 tabs that enable the user to enter data collected through the survey in the same order.
- Reports: provides the user with a wide variety of graphical and numeric representation of data stored in the database.
- Documentation: provides user with the workplace satisfaction survey, license agreement and the user manual.

Figure 4 shows the different tabs for the Absenteeism Tracking Tool:

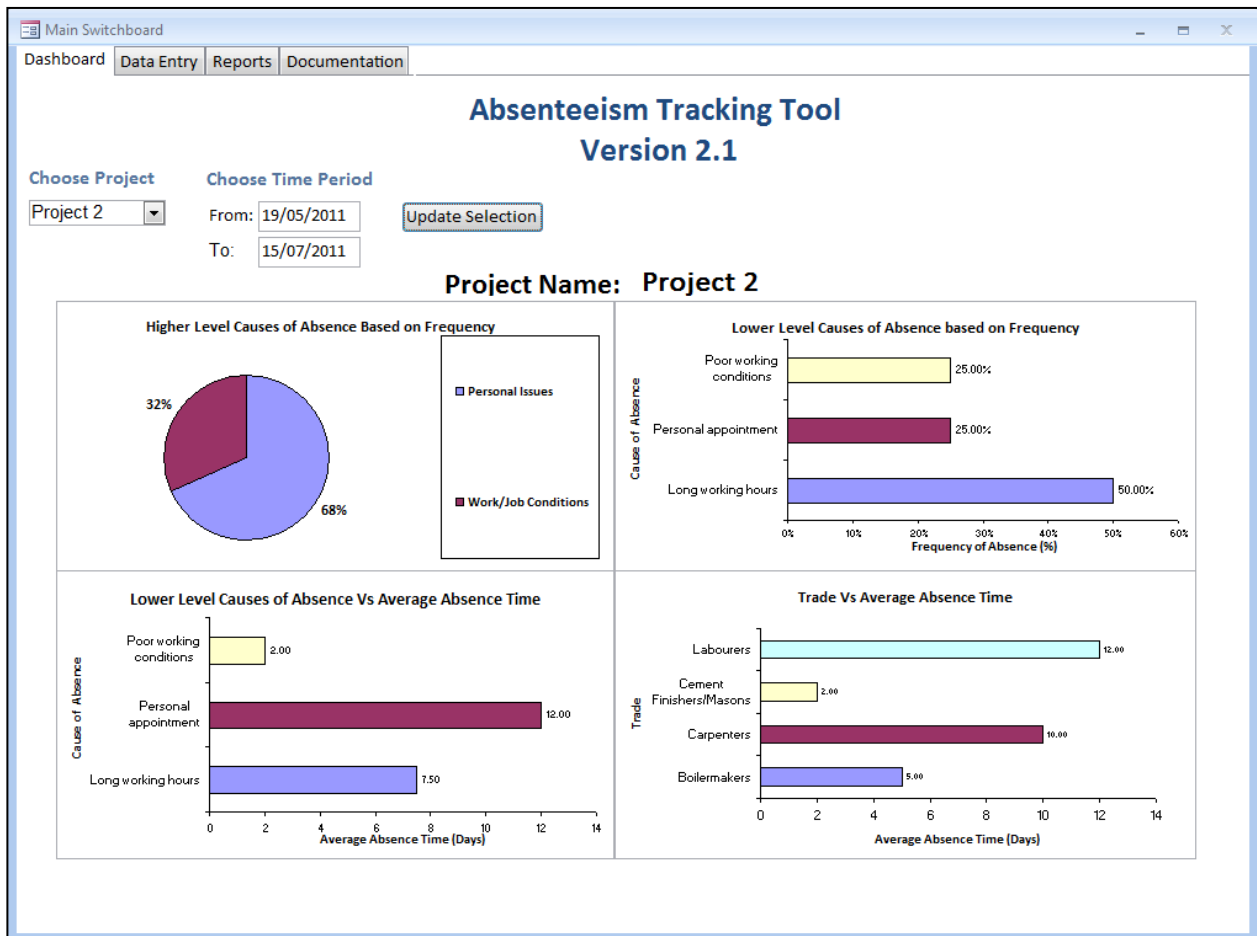


Figure 4: Absenteeism Tracking Tool Main Switchboard

However, for simplicity the tool will be divided into two main categories based on the data processing:

1. Data Entry
2. Data Analysis.

3.1. Data Entry:

3.1.1. Adding a New Project:

For the data entry of a new project, the following describes the procedures undertaken in order to add a new project, then entering the survey data. Procedures for adding a new project is previewed in Figures 5 and 6:

1. Double click on “Project Name” table.

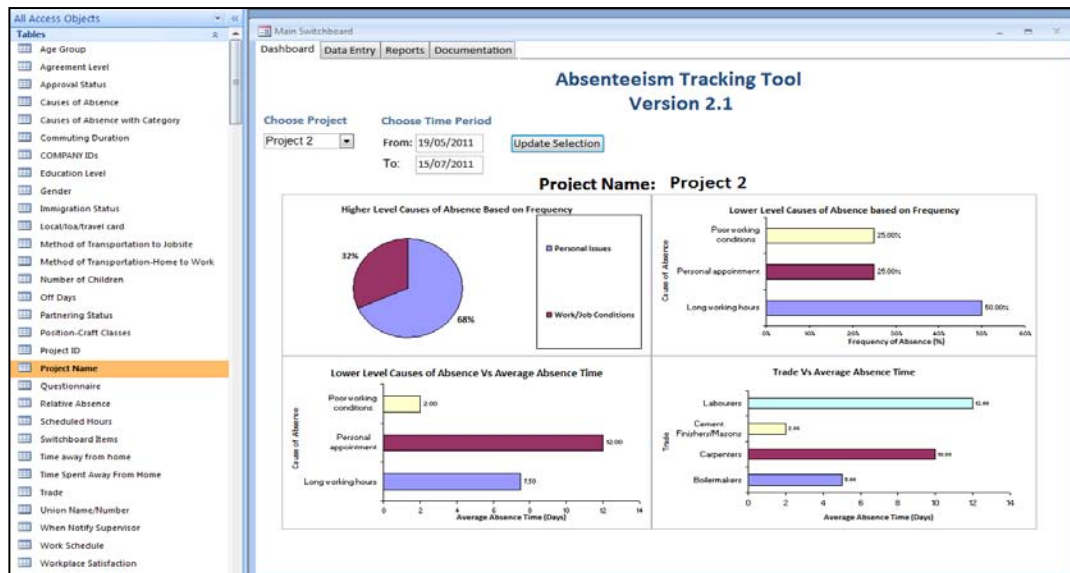


Figure 5: Adding a New Project

2. When the table opens add the desired project name to the table as shown in Figure 6:

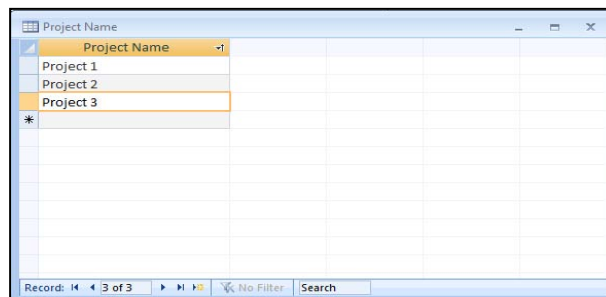


Figure 6: Assigning a Project Name

3. Close the table (New data entered will be automatically saved)

4. On the “Main Screen”, click on the “Design View” as shown in Figure 7:

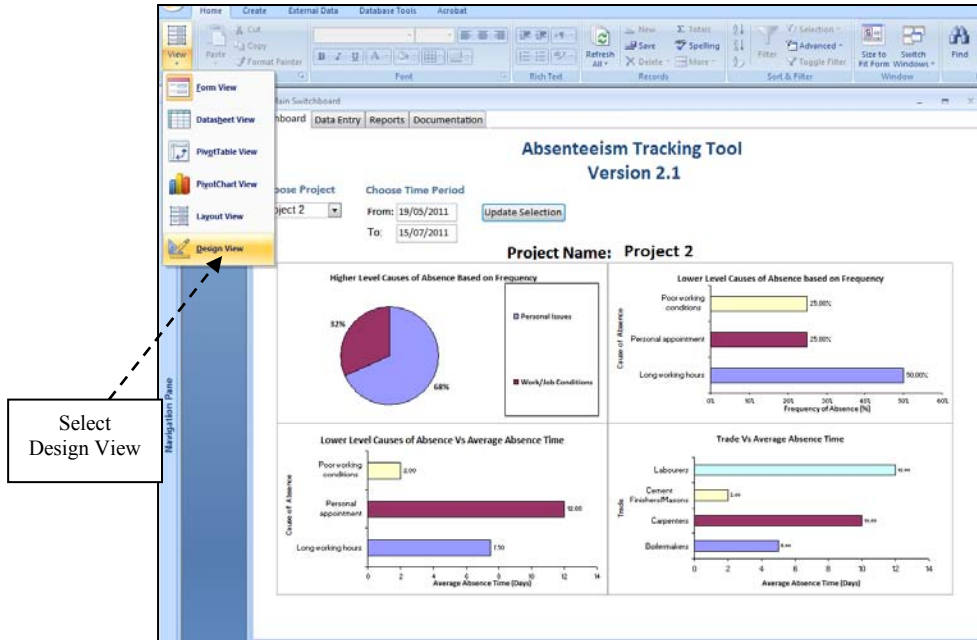


Figure 7: Defining Project Name in Design View

5. Once the “Design View” has been chosen, the following screen in Figure 8 will appear:

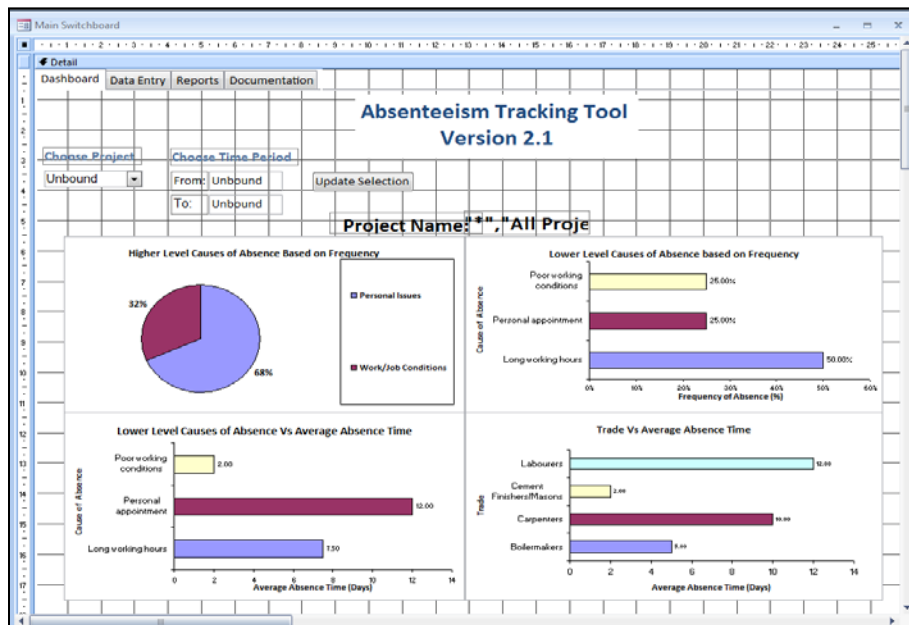


Figure 8: Design View Mode

- Double click on the project name box and the properties sheet will appear as shown in Figure 9:

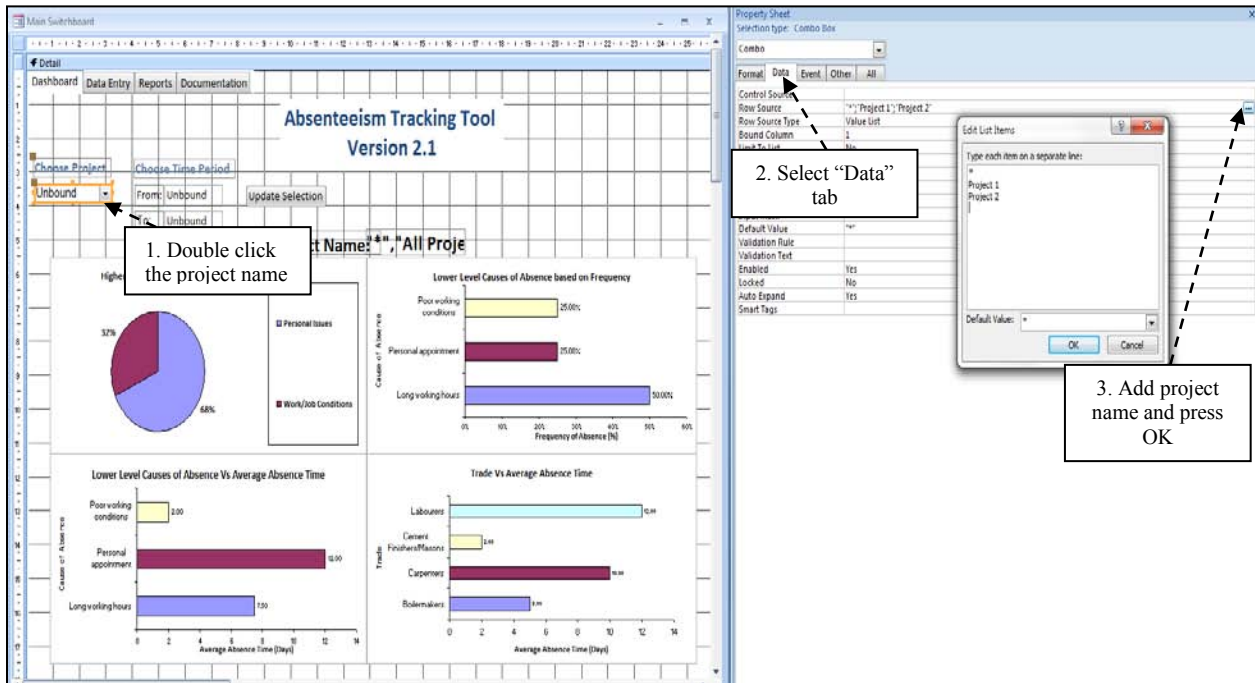


Figure 9: Adding Project Name in Main Switchboard

- After defining the project name, click “Form View” as displayed in Figure 10:

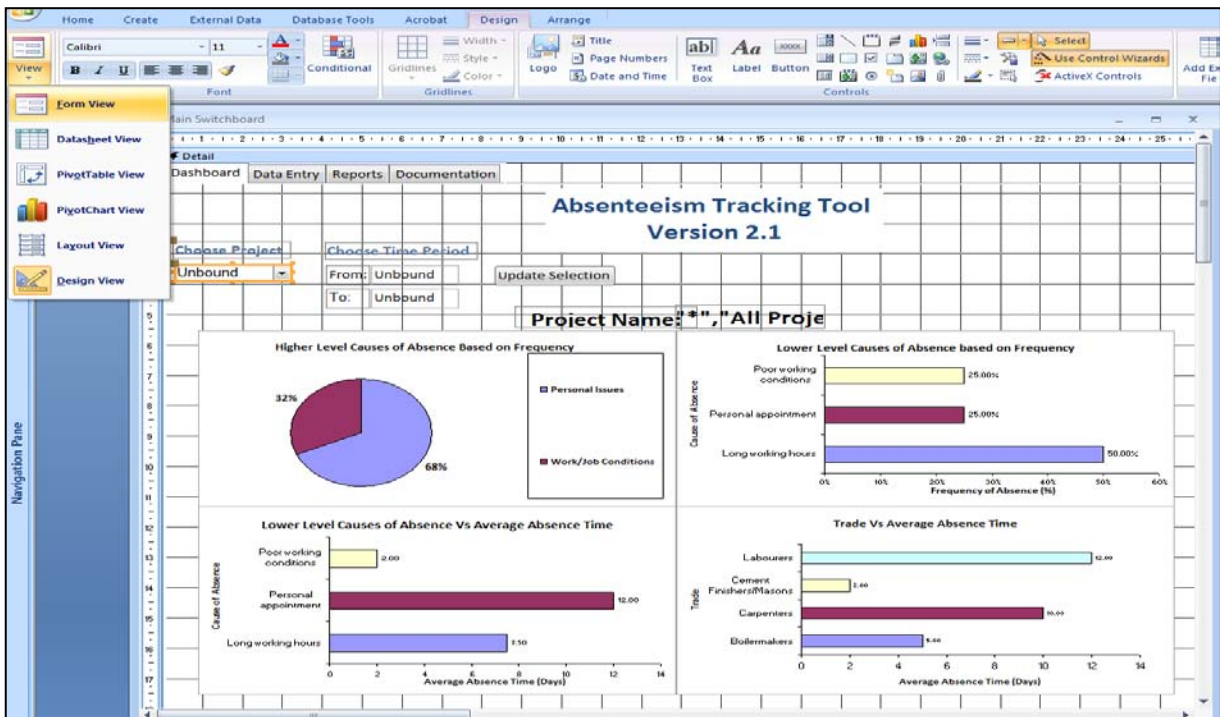


Figure 10: Form View Selection

8. Now the new project name has been defined in the Absenteeism Tracking Tool as shown in Figure 11:

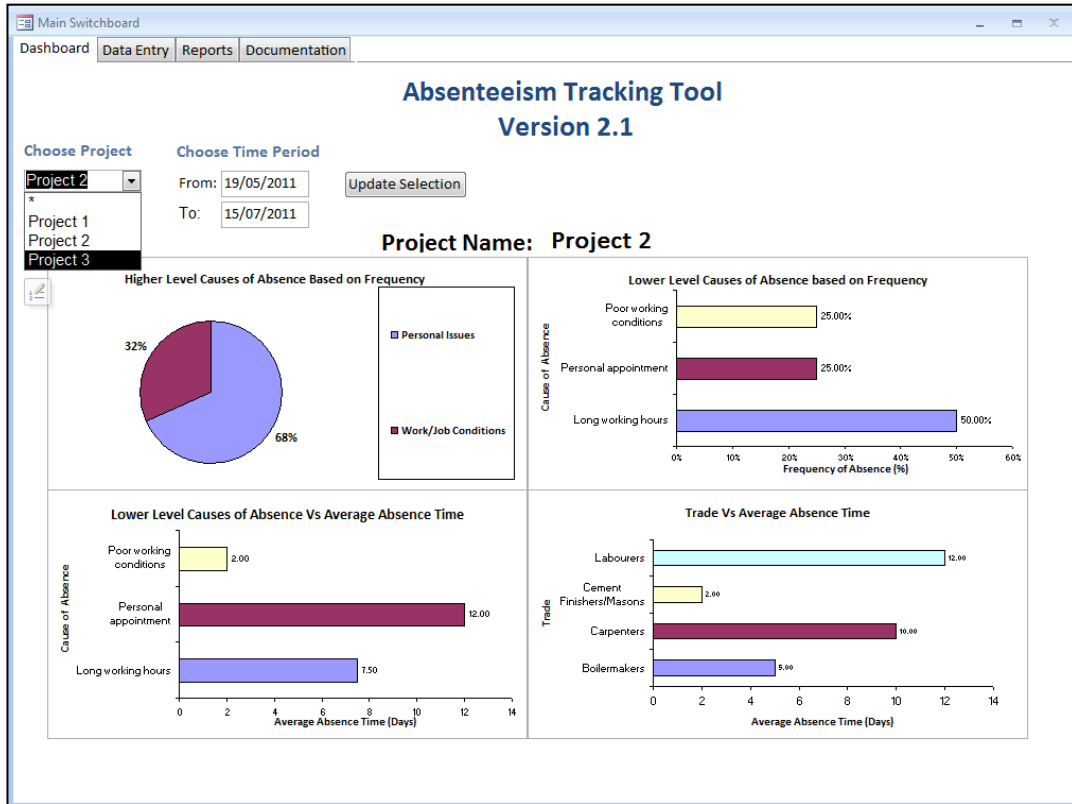


Figure 11: New Project Name Added

When the project name has been defined, the user then adds the company name through the “Company IDs” table as shown in Figure 12:

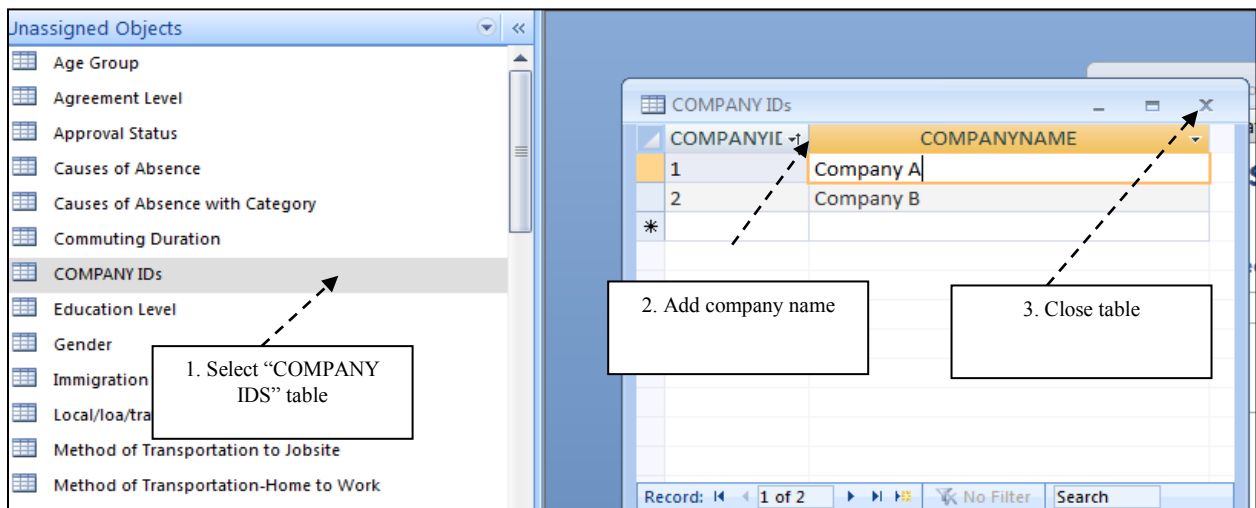


Figure 12: New Company Name Added

3.1.2. Entering Survey Data:

After defining the project name and company name, the user can then proceed with the data entry of the collected surveys. The user will switch to the “Data Entry” tab where 4 new tabs covering the items listed in the survey document will appear. The user can then fill the data starting from Part 1/4 till Part 4/4. Figure 13 illustrates Part 1/4 of the “Data Entry” tab:

The screenshot shows a web application window titled "Main Switchboard". At the top, there are four main tabs: "Dashboard", "Data Entry", "Reports", and "Documentation". Under the "Data Entry" tab, there are four sub-tabs: "Part 1/4", "Part 2/4", "Part 3/4", and "Part 4/4". The "Part 1/4" sub-tab is selected and contains the following content:

- 1. GENERAL INFORMATION**
 - Database ID: (New)
 - Company: [dropdown]
 - Project: [dropdown]
 - Union name: [dropdown]
 - Today's date: [text input]
- 2. INFORMATION ABOUT MOST RECENT ABSENCE**
 - How many shifts (days/nights) worked prior to your most recent absence: [text input]
 - What was the length of your most recent absence in days?: [text input]
 - When did you notify your supervisor/company of your absence?: [dropdown]
 - Did your supervisor pre-approve/approve?: [dropdown]
- 3. FACTORS CONTRIBUTING TO MOST RECENT ABSENCE**
 - Cause name: [dropdown]
 - If other, the reason of my absence was: [text input]
 - Suggestion to mitigate cause of my absence - part 1: [text input]
 - Suggestion to mitigate cause of my absence - part 2: [text input]

Figure 13: Data Entry Screen

The user can enter the data from the questionnaire into the “Data Entry” tabs. Once the data entry is completed, the user can then save the data by simply pressing “Save and Exit” on “Part 4/4” tab as shown in Figure 14:

Main Switchboard

Dashboard Data Entry Reports Documentation

Part 1/4 Part 2/4 Part 3/4 Part 4/4

10. WORK/JOB CONDITIONS

What has been your work shift in the last month?: Day Shift

How many hours are you scheduled to work per day?:

In a cycle, how many consecutive days do you generally work?: 7 to 10 Days

In a cycle, how many consecutive days do you get off?: 4-7 days

In a cycle, how long are you away from home?:

How long it take you to get to the jobsite on a daily basis?: 15 to 30 minutes

How long are you away from your accomodation daily for work?:

What is your method of transportation to jobsite, daily?: Project provided busses

What is your method of transportation to work from home?:

11. GROUP PERCEPTION

How many days per month do you think you take off or miss?: 2

How many days do you think your co-workers take off or miss?: 3

How many days would you like to work in a month?: 20

How do you asses your absence level to your co-workers?: 2

Save and Exit

Click on "Save and Exit"

Figure 14: Saving Data

After saving the data, the user will be automatically returned to the "Dashboard" tab.

3.1.3. Modifying Survey Data:

For modifying previously entered survey data, simply select “Questionnaire” table as shown in Figure 15:

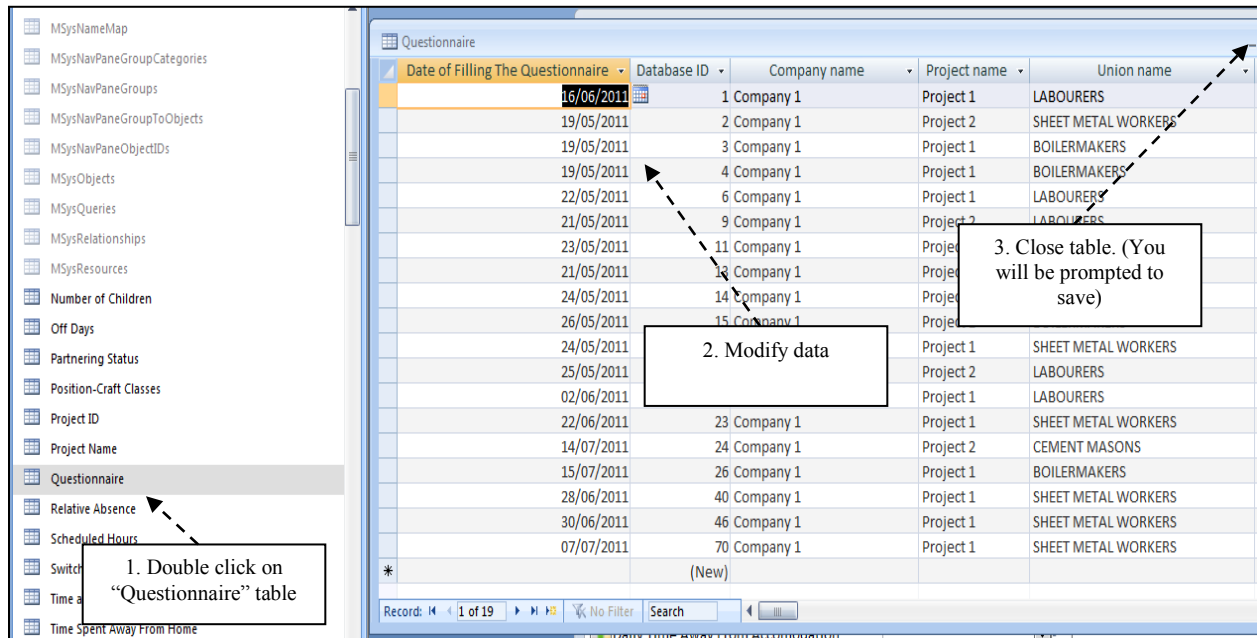


Figure 15: Modify Existing Data

Once the “Questionnaire” table is displayed, the user has full accessibility of modifying data he/she desires to adjust. After all modifications has been performed, the user can then close the “Questionnaire table and return to the main dashboard.

3.2. Data Analysis:

The data analysis is allocated into 2 main tabs namely; (1) “Dashboard” tab, and (2) “Reports” tab. Figure 16 illustrates the functionalities provided for the user to analyze the data saved in the tool’s database:

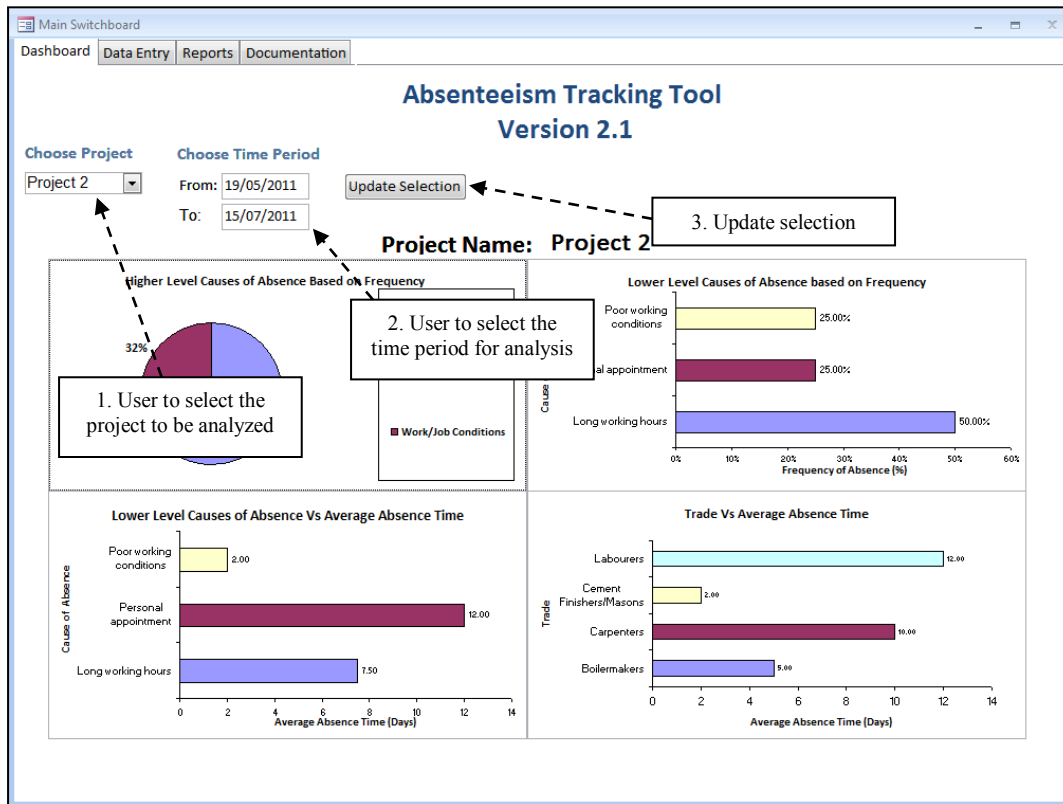


Figure 16: Data Analysis Tabs

Note: it is important to click the “Update Selection” button for the changes to take effect.

The “Dashboard” tab has 2 main functions for the user to benefit from: first, the user has 4 standard graphical representations to have a higher level overview of the current absenteeism status on the enterprise level (by choosing all projects) or by specifying a specific project through the “Choose Project” and “Choose Time Period” options. Four main graphical charts are configured on the main dashboard as follows:

- Higher Level Causes of Absence Based on Frequency.
- Lower Level Causes of Absence Based on Frequency.
- Lower Level Causes of Absence vs. Average Absence Time.
- Trades vs. Average Absence Time.

Second, the user's choice of project and date range will be reflected on the graphical and numerical reports developed by the tool as will be explained later in the manual. Figure 17 portrays the main dashboard for the Absenteeism Tracking Tool.

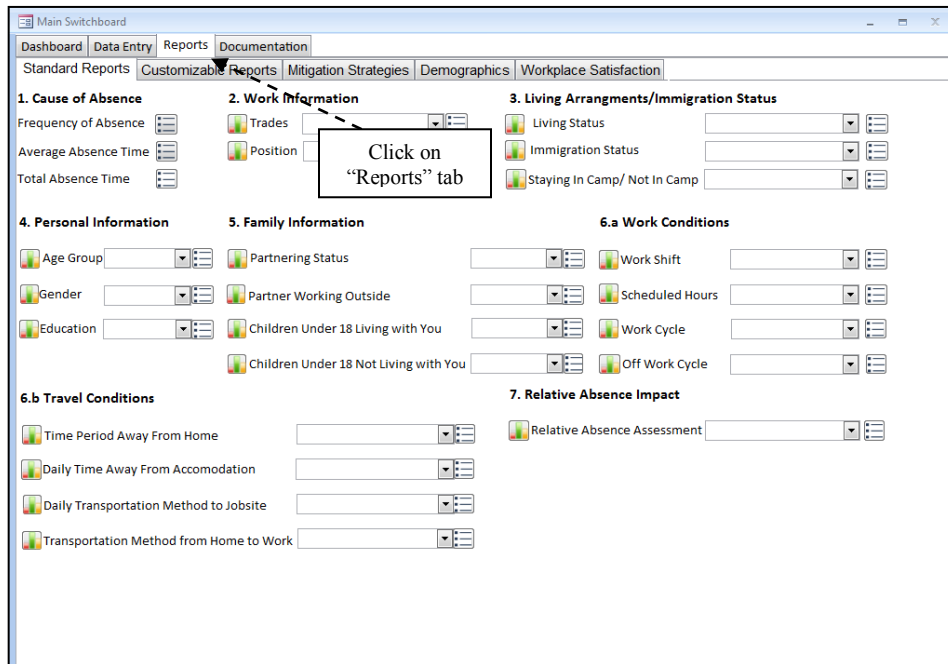


Figure 17: Report Tabs

Once the user has defined the project to be investigated along with the time period, he/she can proceed with moving to the “Reports” tab. A second line of tabs appear when the user clicks the “Reports” tab. The new tabs are:

- Standard Reports: these reports are predefined in the tool where the user just clicks the category of entry or specific subcategory.
- Customizable Reports: this tab is responsible for producing a graphical report with top 10 causes of absence on Y-axis vs. frequency of absence, average absence time and total absence time respectively on X-axis.
- Mitigation Strategies: all causes of absence and the proposed mitigation strategies proposed by workers who filled the survey are presented in this tab.
- Demographics: a statistical analysis is presented numerically in this tab, where the user can acquire further breakdown of the statistics of absent workers based on different demographics.
- Workplace Satisfaction: this tab provides the mean and standard deviation of the responses for the questions related to workplace satisfaction.

The following section provides an in-depth illustration of the different reporting capabilities of the Absenteeism Tracking Tool.

3.2.1. Standard Reports:

The part named “1. Cause of Absence “, has the capability of displaying the following graphical representations as shown in Figure 18:

- a) Frequency of Absence: this option lists three main graphical representations:
 - Higher level causes of absence based on frequency
 - Lower level causes of absence based on frequency
 - Top 10 causes of absence based on frequency

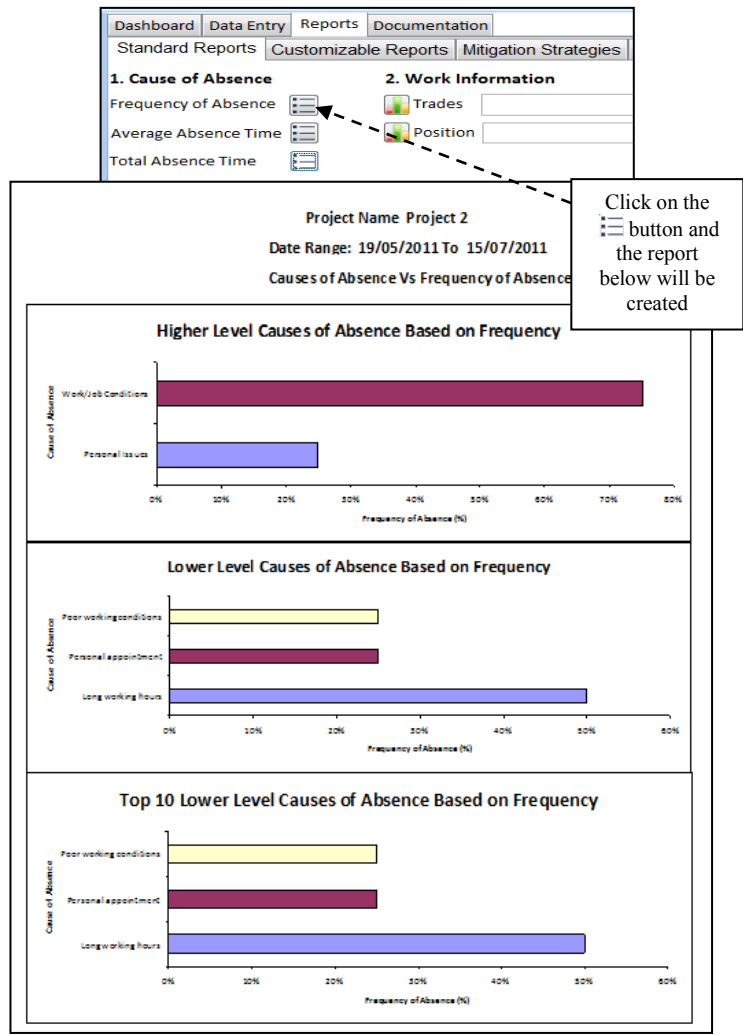


Figure 18: Causes of Absence Frequency

b) Frequency of Absence: this option lists three main graphical representations:

- Higher level causes of absence vs. average absence time
- Lower level causes of absence vs. average absence time
- Top 10 causes of absence vs. average absence time

Figure 19 provides a sample of the output of this reporting option:

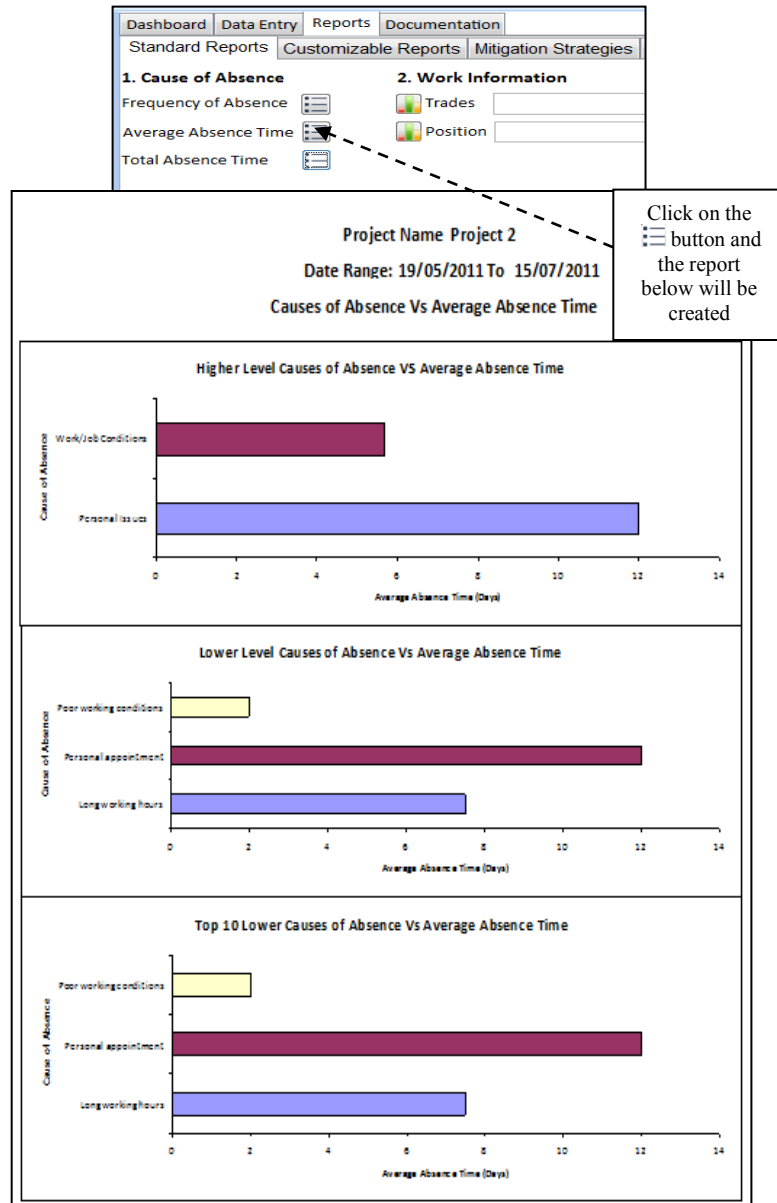


Figure 19: Causes of Absence Vs Average Absence Time

- c) Frequency of Absence: this option lists three main graphical representations:
- Higher level causes of absence vs. total absence time
 - Lower level causes of absence vs. total absence time
 - Top 10 causes of absence vs. total absence time

Figure 20 provides a sample of the output of this reporting option:

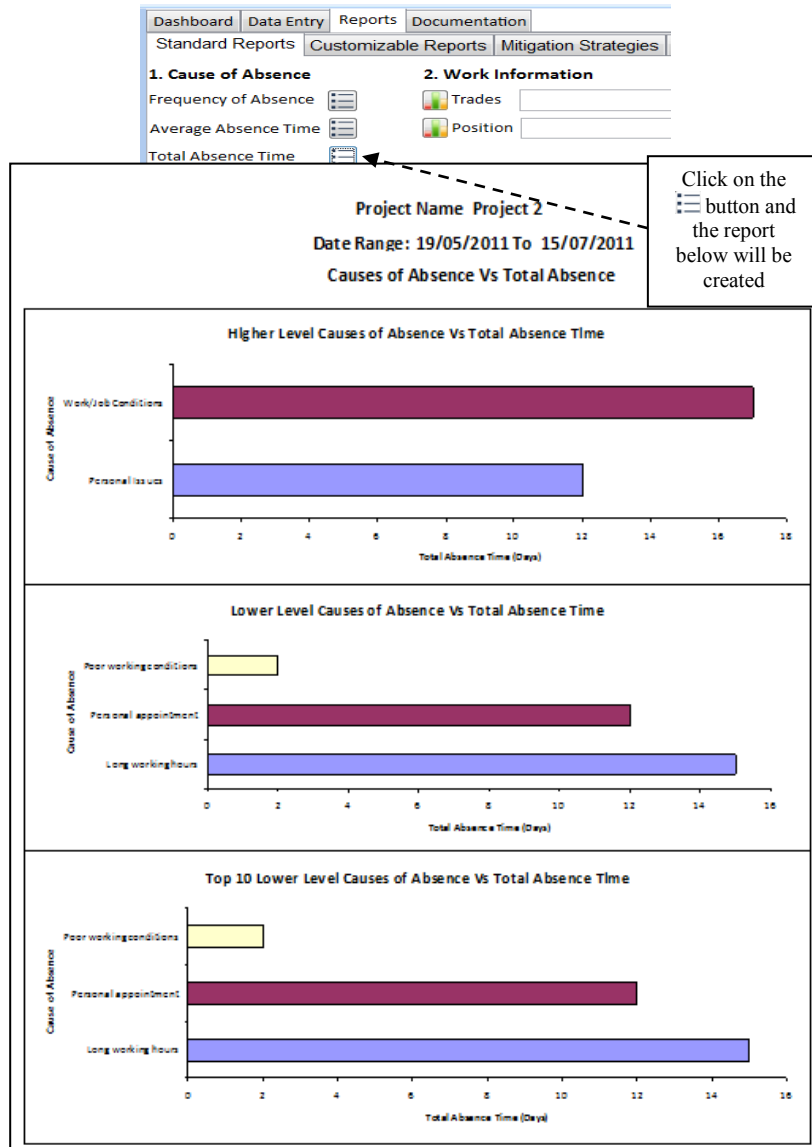




Figure 20: Causes of Absence Vs Total Absence Time

The remaining reports in this tab address different criteria of analysis in the following manner:

- Select  which lists the main criteria and provides a graphical representation against average absence time and total absence time.
- Select  which lists the top 10 causes of absence for just one of the criteria description against 3 factors namely: (1) Frequency of absence, (2) Average absence time, and (3) Total absence time.

For example, if the user wishes to conduct an analysis against absence time for different trades, then the following sequence is to be undertaken as portrayed in Figure 21:








<p>2. Work Information</p> <p> Trades <input type="text" value=""/></p> <p> Position <input type="text" value=""/></p>	<p>3. Living Arrangements/Immigration Status</p> <p> Living Status <input type="text" value=""/></p> <p> Immigration Status <input type="text" value=""/></p> <p> Staying In Camp/ Not In Camp <input type="text" value=""/></p>
---	--

Figure 21: Illustrative Example for Reports

For trades, select  which lists the different trades on one axis and the average absence time and total absence time respectively on the other axis, then the user can choose just 1 of the trades by choosing a specific trade from the combination box and then clicking  to identify their top 10 causes of absence against, frequency of absence, average absence time, and total absence time as displayed in Figure 22:

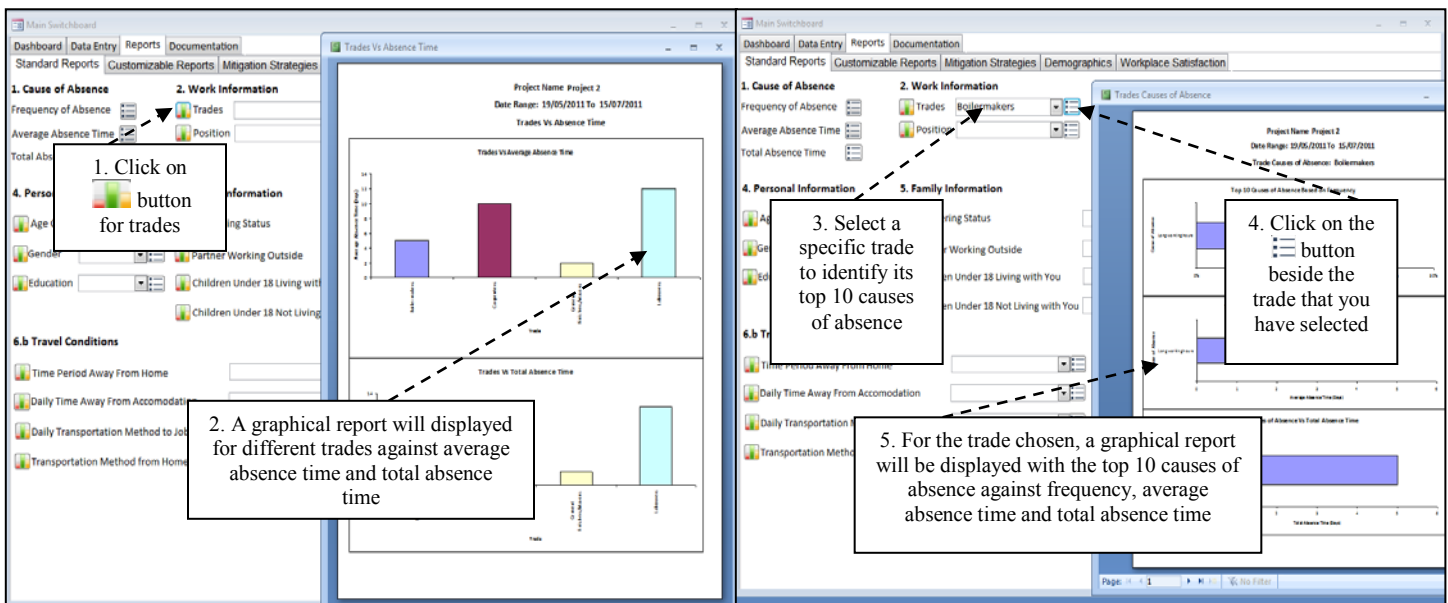


Figure 22: Graphical reports Sample

3.2.2. Customizable Reports:

The user can perform all individual analysis for combinations of more than one factor using the “Customizable Reports”. In this tab, the user has the flexibility and opportunity of choosing specific criteria upon which analysis of causes of absence against frequency, average absence time, and total absence time can be performed. Figure 23 provides an overview of an example case of choosing some criteria filters to be performed for the analysis:

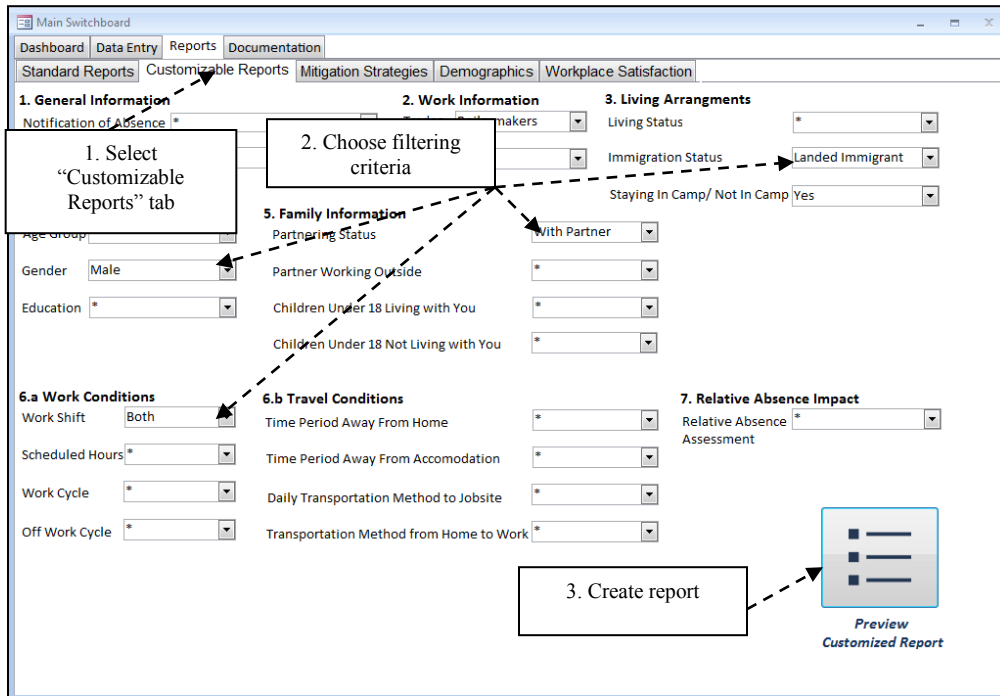


Figure 23: Customizable Reports

A hypothetical case was developed for the figure above, where it was assumed that the user is recalling the causes of absence for boilermakers who are landed immigrants, have a partner, and males. According to these filtering criteria, Figure 24 displays the report to be created based on the criteria selected above:

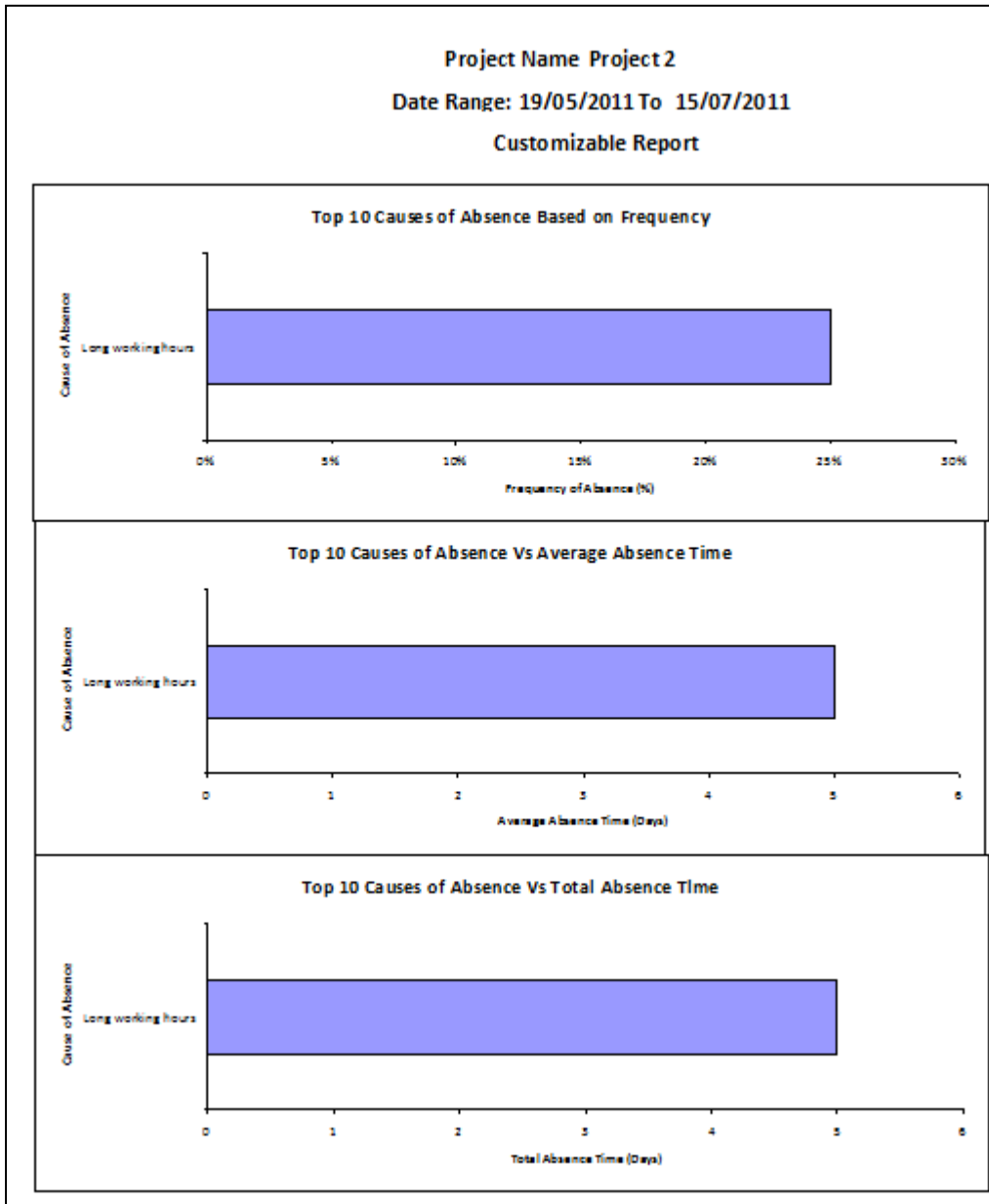


Figure 24: Customizable Reports Graphical Output

In this reporting tab, the user has the ability to design the report based on specific demographic requirements.

3.2.3. Mitigation Strategies

The tab named “Mitigation Strategies” introduces an essential functionality to the Absenteeism Tracking Tool, where it lists the causes of absence previously specified from participants who completed the survey and their proposed mitigation strategies to overcome these causes of

3.2.4. Demographics

When clicking the “Demographics” tab, an additional line of tabs will appear for the user to choose between. Figures 26 and 27 displays the different tabs under “Demographics”:

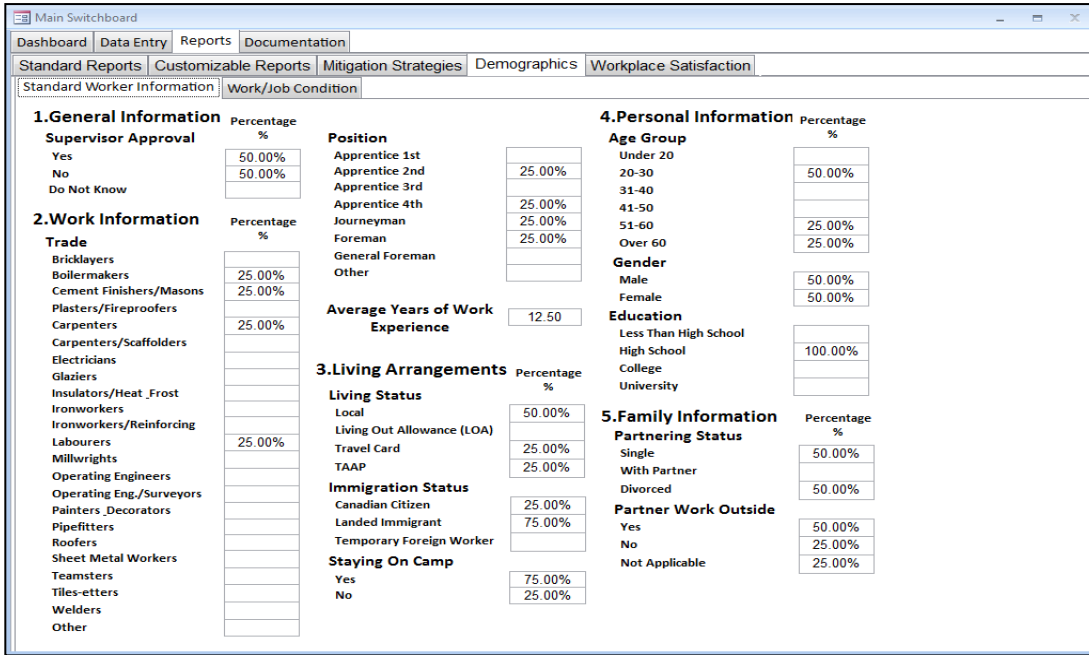


Figure 26: Standard Worker Information

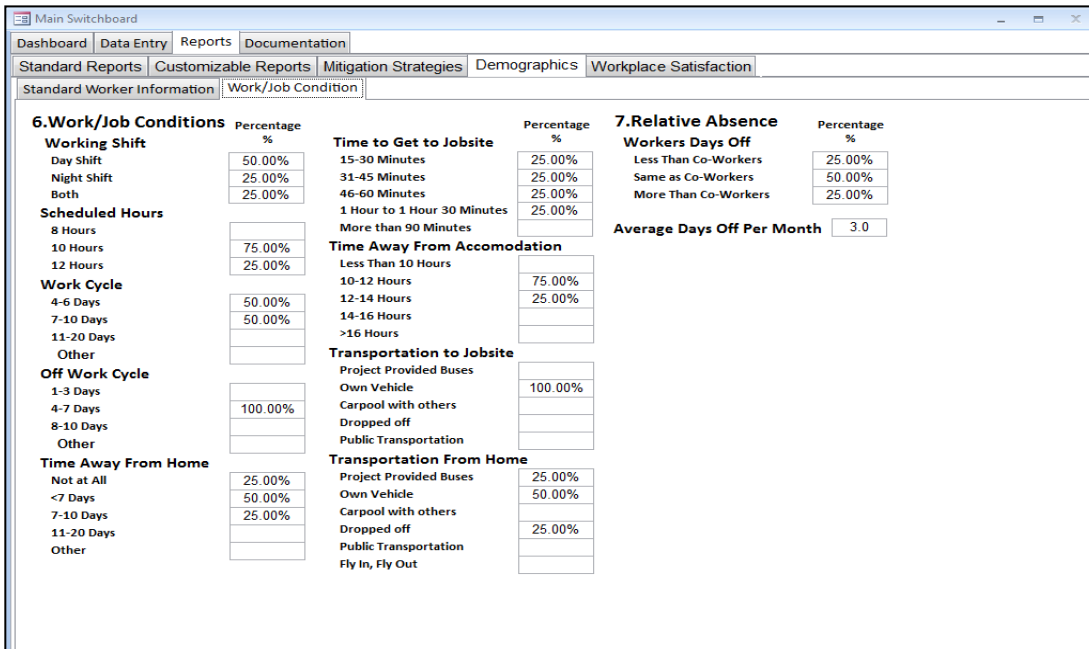


Figure 27: Work/Job Conditions

The first tab in “Demographics” provide the user with standard information about the absent worker such as age, gender, education, trade, approval status for absence immigration, and living status. While the second tab lists work/job conditions for the worker who had an absence such as working shift, transportation method, working cycle, and time away from home.

For example the figure above displays 75% of the workers who were absent are living on camp versus 25% of the absence is attributed to workers not living on camp.

3.2.5. Workplace Satisfaction

The last tab for the “Reports” category is the “Workplace Satisfaction” tab, where it provides the user with the mean rating received for a specific question and the standard deviation for how much this number could vary. Figure 28 portrays the User Interface for the “Work Satisfaction” tab.

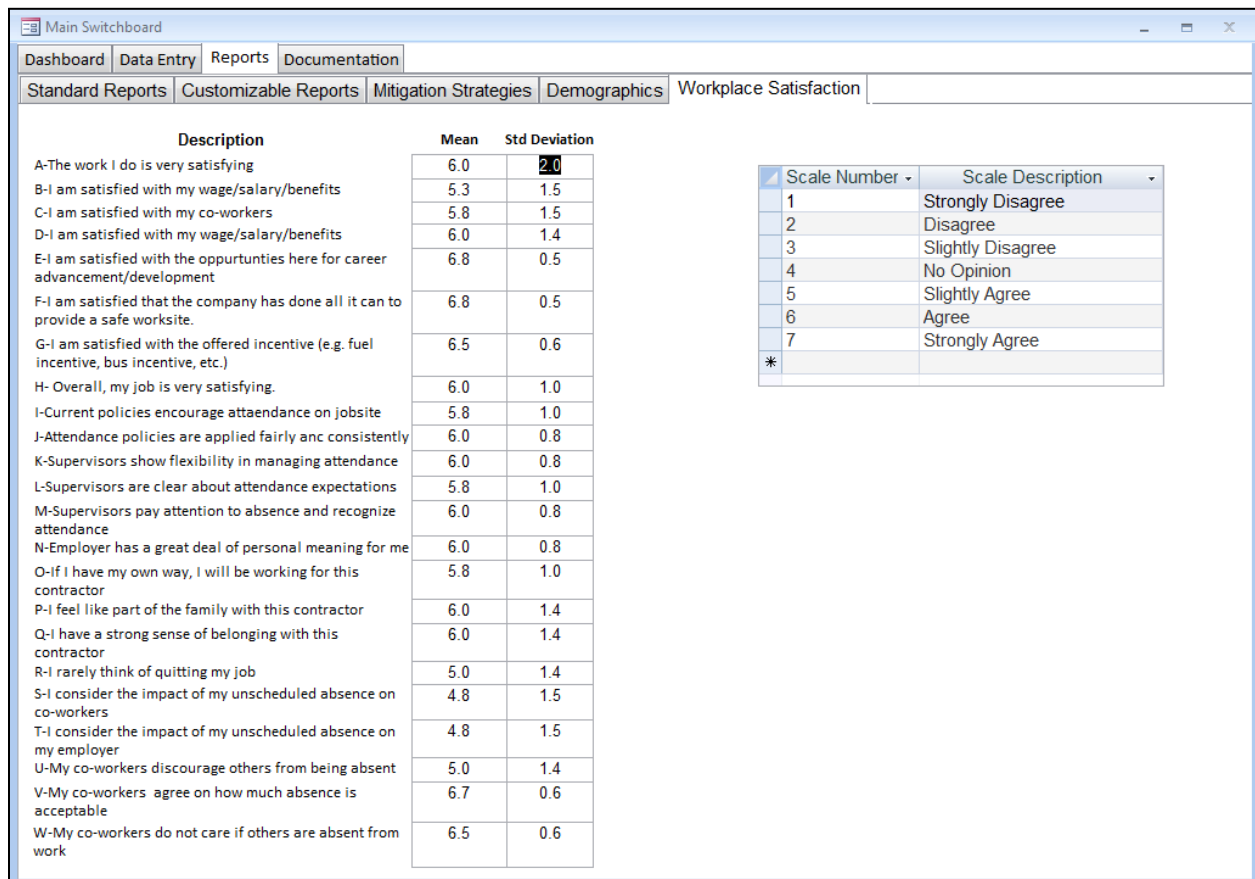


Figure 28: Workplace Satisfaction

For example, question U provides a mean of 5 which is “Slightly Agree” for the question imposed, however the standard deviation is of value 1.4.

3.3. Documentation:

The documentation tab includes three important documents for the user which are:

- License Agreement.
- Workplace Satisfaction Survey.
- User Manual.

At anytime during using the Absenteeism Tracking Tool, the user can switch to any of the above mentioned documents through the “Documentation” as shown in Figure 29:

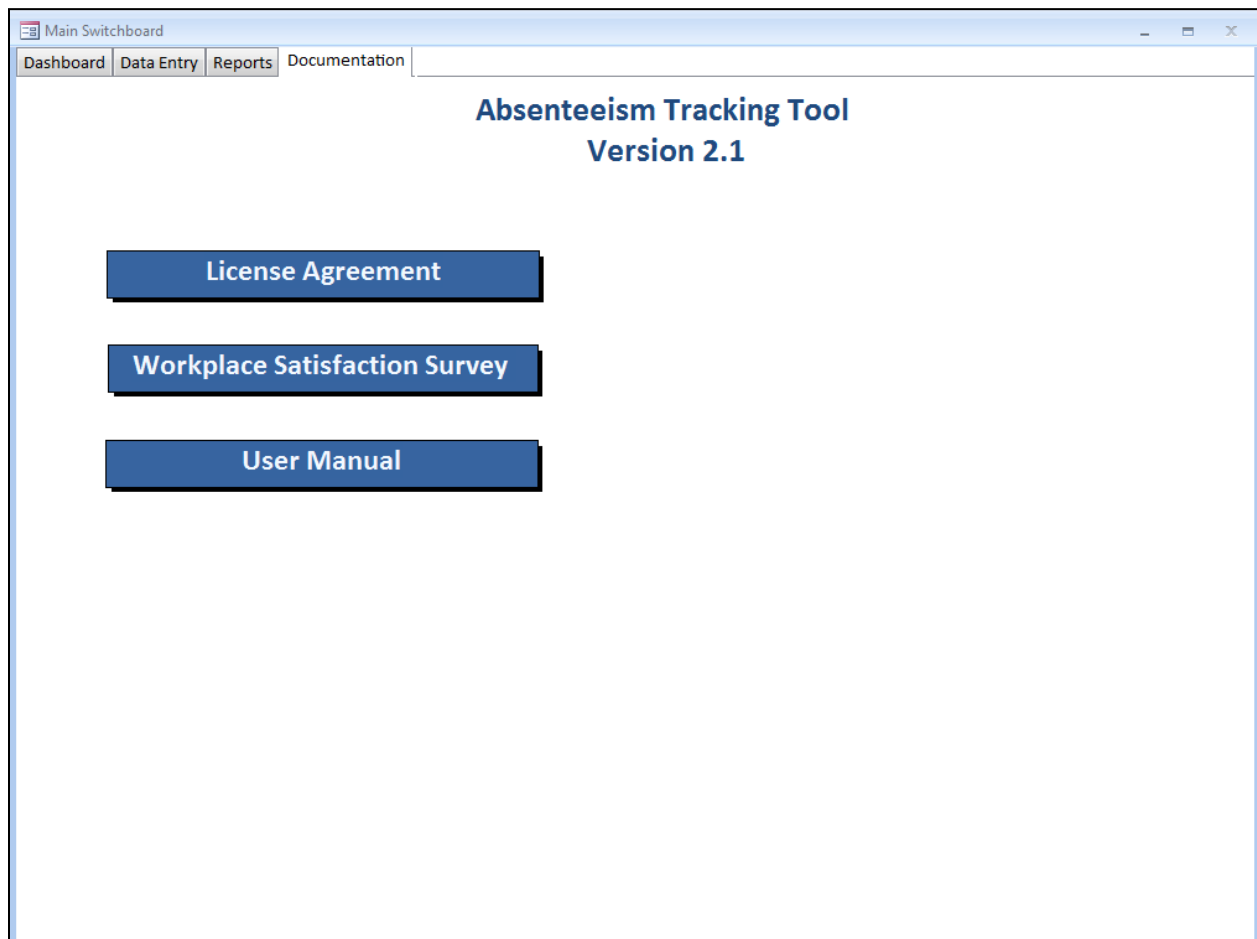


Figure 29: Documentation

4. DEFINITIONS

This section portrays the different definitions required to develop the reports to be used in the tracking tool.

- a. **Frequency:** Frequency is defined as the number of responses for a specific parameter divided by the total number of responses. For example, if the trades are being analyzed for different causes of absence, then for trade X, the frequency will be the number of responses for trade X divided by the total number of responses for all trades. Accordingly, frequency shall always add to 1.
- b. **Total Absence Time:** The total absence time is the cumulative absence time in days for a certain predefined category
- c. **Average Absence Time:** The average absence time in days is calculated by dividing the total absence time by the number of responses. For example, for a trade X, the average absence time is the sum of absence time for trade X divided by the number of responses.
- d. **Number of responses:** The number of responses is the summation of the responses received with the same characteristics or properties defined by the user.
- e. **Mean:** The mean is the mathematical average of a set of numbers. The average is calculated by adding up two or more values and dividing the total by the number of values.
- f. **Standard deviation:** A measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the standard deviation.