**Assignment : Creating Dashboard**

**Layout of the dashboard:**

I have created an approximate layout of the dashboard using the tableau containers. The screenshot below represents the same.

A screenshot of a computer

Description automatically generated

**Data Cleaning process:**

My dataset consists of 4 files consisting information of schools and institutions and their sports related data like information about the number of players, coaches, expenses, revenue and other generic information about the schools-private or public sector, state, address of schools. To clean this data I have chosen to remove all the unnecessary fields like coaches information, coaches salary, I could bring down th e sheets from 58 columns to 16 columns. Similarly, I removed rows which have null values and split the sector rows to extract sector and sector tenure separately so that this might be useful in sector wise analysis.

**Selection of Charts:**

**To create the dashboard, I have chosen to analyze it using bar chart, bubble chart and map.**

**Chart-1:**

**A screenshot of a graph

Description automatically generated**

I wanted to identify and bring to notice the variations in expenses and revenue among various states and as to also observe the differences among the male female ratio, I believed a bar chart is the best option to represent such huge number with clear labels. We could do the same with other charts but they are not fit for representing the minor difference as they are not as effective as bar charts.

**Chart-2:**

**A close-up of several circles

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Similary, I wanted to identify the top listed institutions and the states for various metrics that I have chosen. Here, for my analysis, it is enough if we identify the quantity of difference between top few universities without the need of exact figures and labels. So, a bubble chart would suffice this requirement.

**Chart-3:**

**A map of the united states

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A map chart is best to analyze these metrics from region to region, it gives an overall idea of performance by region-north, south, East, west. You can have an approximate idea of each state by viewing the color gradient in the map.

**Final Dashboard:**

**A screenshot of a computer

Description automatically generated**

**Business Insights:**

**Chart-1:**

-By observing these stats here, we may see that few states i.e California, Masachusets, Pennysylvania, Tennessee besides New York have highest number of female players but they are not having the highest revenue. Despite the fact that male count also contributes to this number, sponsors can collaborate with colleges in these states to market their brand as well increase the revenue for colleges. This is a two way benefit.

-Other insights include selecting the top 10 states with highest player count to observe which states have good headcount where sponsors can invest in.

-By observing the differences between the expenses and revenue of states, we can come to an analysis which states have good performance. With this stats, companies with large brand value can invest in such states for marketing their brand value.

**Chart-2:**

-We may see that Jacksonville University in Florida has the highest revenue despite the fact that that it does not even fall in atleast top 10 in expenditure. This is a great profit ratio that indicates it has good players. Brands that are interested in marketing can track such colleges using this chart and invest there whereas NGOs or non profitable sponsors who are interested in uplifting sportspersons on the contrary can target institutions with high players, low revenue and high expenses.

-Sponsors will be able to narrow down their targets from the chart 1 states to the institution by using various parameters in chart 2. For example, Sponsors have decided to invest in Florida state- but all institutions might not fit for the purpose, this chart will help to analyze the right colleges that will serve the purpose and bring out the best for investors and sponsors.

-This serves as a great way for institutions to identify their competitors, their strengths and weaknesses and proactive steps can be taken for the betterment of the areas where they are lacking.

**Chart-3:**

-From the map chart, by analyzing the female and male number of players we can understand the regional disparities between several states of US which can help in uplifting and betterment.

-Understanding the distribution, business leads can be given to sports companies with low performance areas which have abnormally high headcount but do not have good revenue.

-This provides an overview of competitive analysis among the various states in USA and also we can easily observe the region wise disparities which is a great knowledge for resource allocation and marketing leads.