A POPULATION FORECASTING ANALYSIS

1   INTRODUCTION

1.1   Overview

In the solution of any planning problem, the planner either makes an explicit forecast, or makes some implicit assumption about the population for which he is planning. "Population" includes much more than mere numbers of people. The planner must know what kind of people live in his planning area, what types of lives they lead, and would like to lead, how long they will live, and how long they will reside in the particular area; and who will replace them when they move out or die; how many children they will have (and would like to have under different conditions), whether these children will live in the area, and many other factors.

Many communities have installed facilities which have become useless because predicated on faulty estimates of future population, or they have failed to install facilities where justified by future population. A common example of such errors is the newly constructed school in an area where the population is aging rather than being replaced by young, child-bearing families. Sewer systems have been expensively developed only to be later replaced because the population soon was double or triple what was anticipated for the area. Narrow streets have been later widened at great expense. On the other hand, land often has been overly zoned for commercial purposes in the expectation of a vast increase in population which did not materialize. Or land was zoned for potential capacities in some cities of whole state or even the entire population of the country. Prematurely subdivided land is plaguing many of our communities today.

1.2   Purpose

This method involves discovery of the factors that influence present and past population increase and decrease. On the basis of assumptions concerning the future of these factors, and of other factors that are just emerging in the community, projections of fertility, mortality and migration trends are made. A population projection gives a picture of what the future size and structure of the population by sex and age might look like. It is based on knowledge of the past trends, and, for the future, on assumptions made for three components: fertility, mortality and migration.

Production forecasting helps product-based brands maintain optimal inventory levels. That way, they can keep customers happy and boost their overall profitability.

2 Problem Definition & Design Thinking

2.1 Empathy Map

Empathy map

Use this framework to develop a deep, shared understanding and empathy for other people. An empathy map helps describe the aspects of a user's experience, needs and pain points, to quickly understand your users' experience and mindset.

Share template feedback

Build empathy

The information you add here should be representative of the observations and research you've done about your users.

Says
What have we heard them say?
What can we imagine them saying?

Thinks
What are their wants, needs, hopes, and dreams? What other thoughts might influence their behavior?

Culling

Lethal Trapping

Translocation or Manipulation of the reproductive Capacity

Family Planing and Primary Health Care Programs

Consultancy

Publications

Reducing Individual Fertility

Population Forecasting Growth Control

Coercive Population Control

Ineffective Population Control Malthusianism

Unsustainable Development

Excessive Human Fertility Forced motherhood

Developing Scenarios For Population Growth

Empowering women

Improving Primary Education

Encouraging Family Planing Schemes

Does
What behavior have we observed?
What can we imagine them doing?

Feels
What are their fears, frustrations, and anxieties? What other feelings might influence their behavior?

Need some inspiration?
See a finished version of this template to kickstart your work.

Open example

2.2 Ideation & Brainstorming Map

3   Result

3.1   Dashboard

3.2   Story

3.3 Dashboard Web

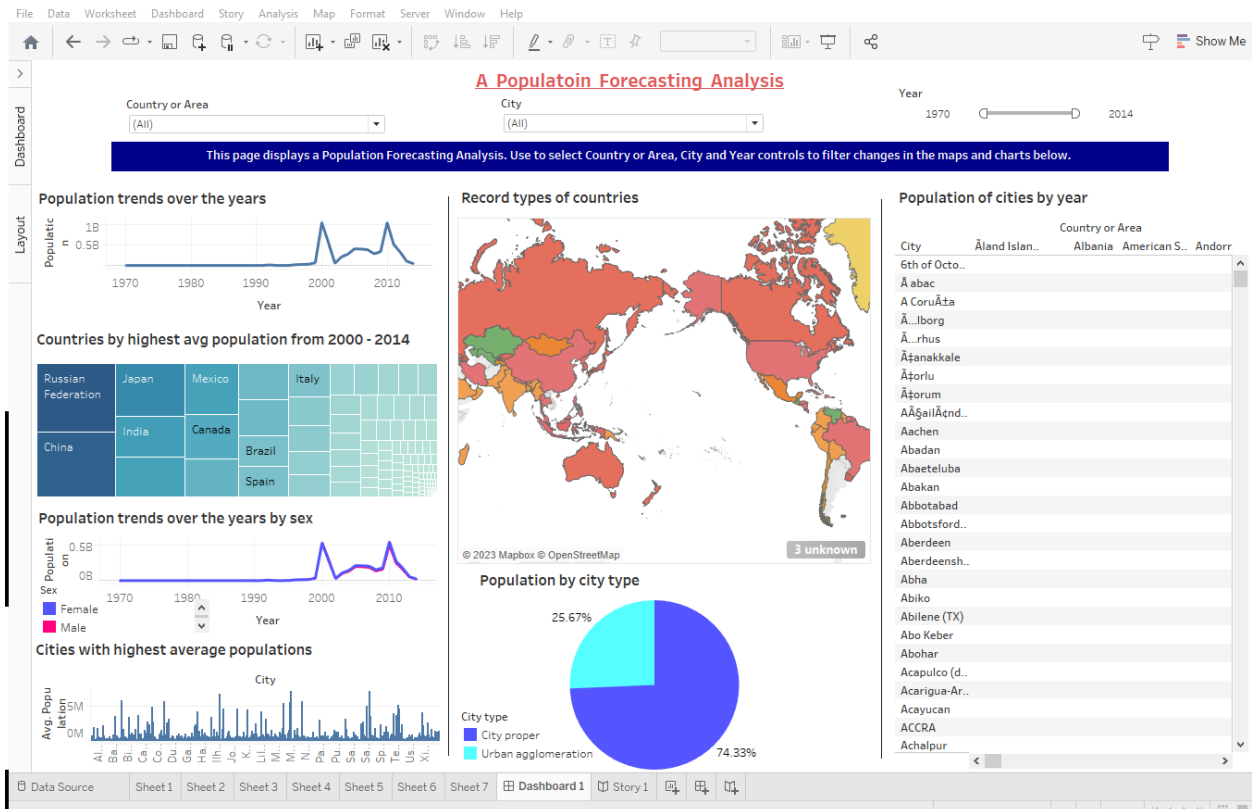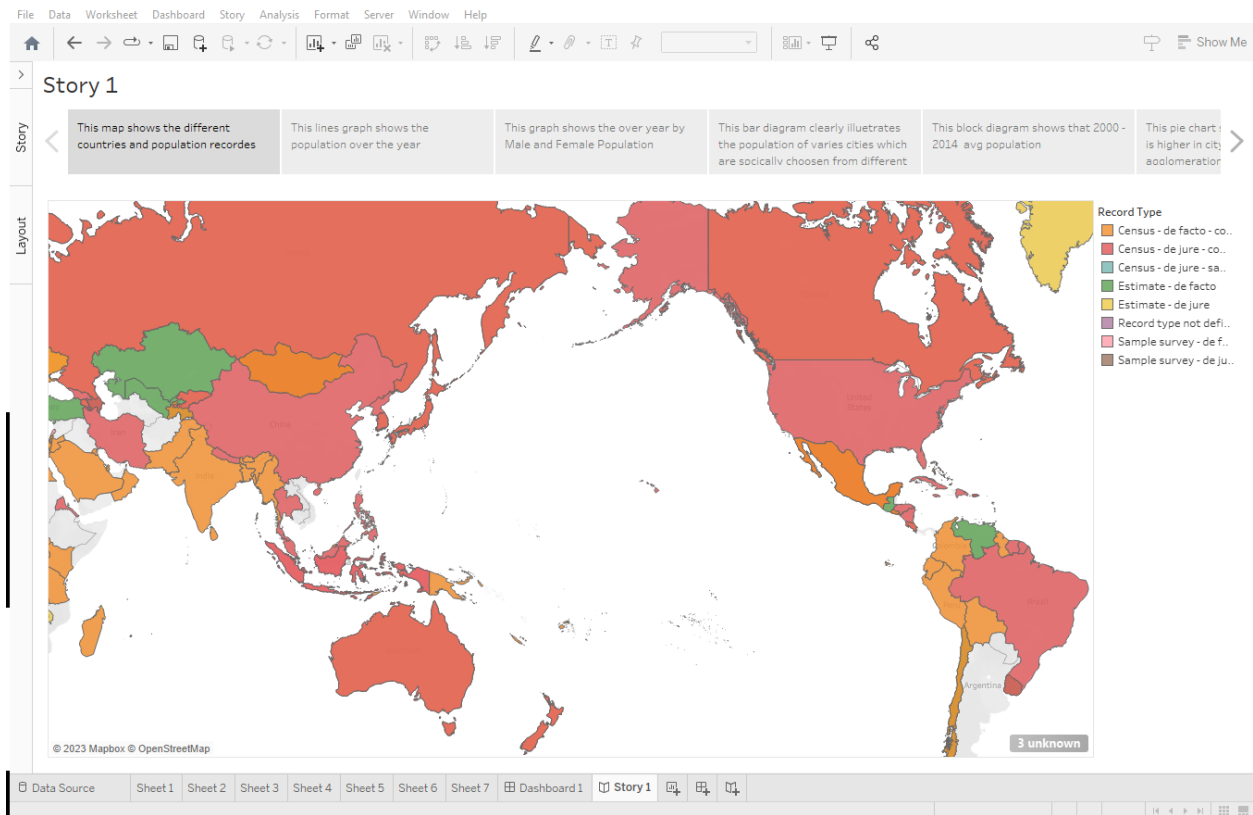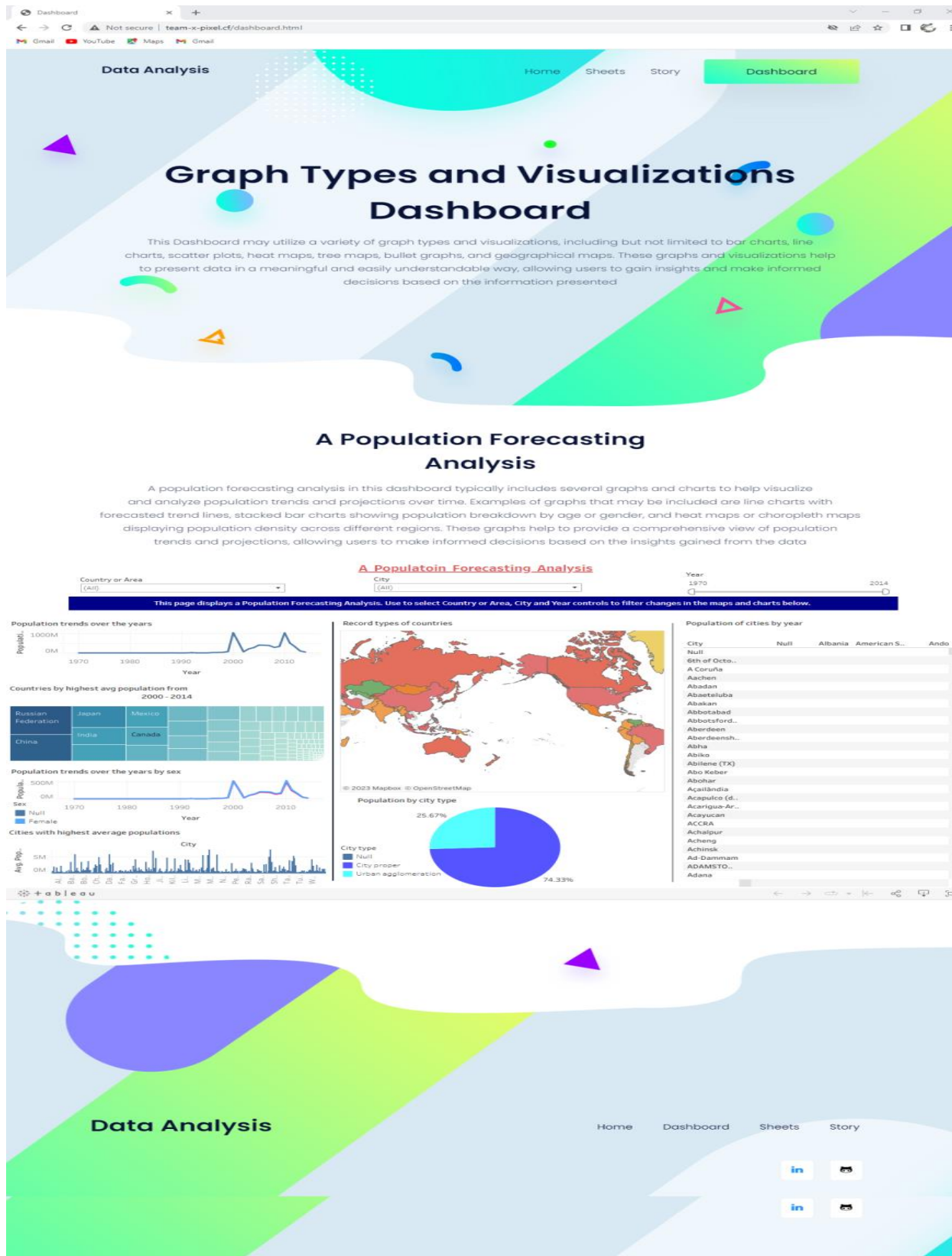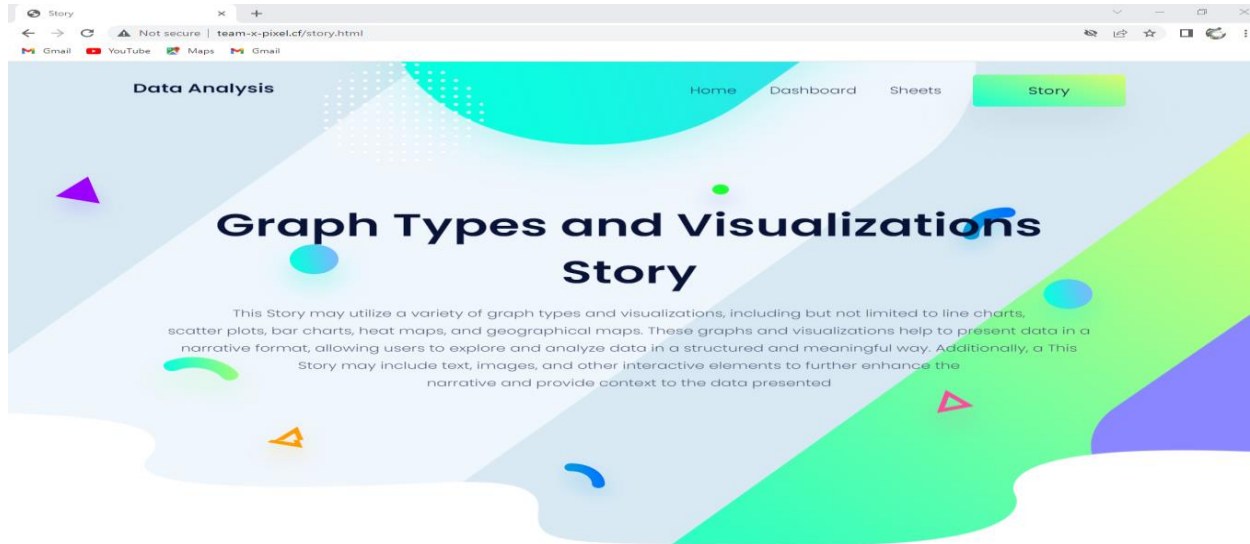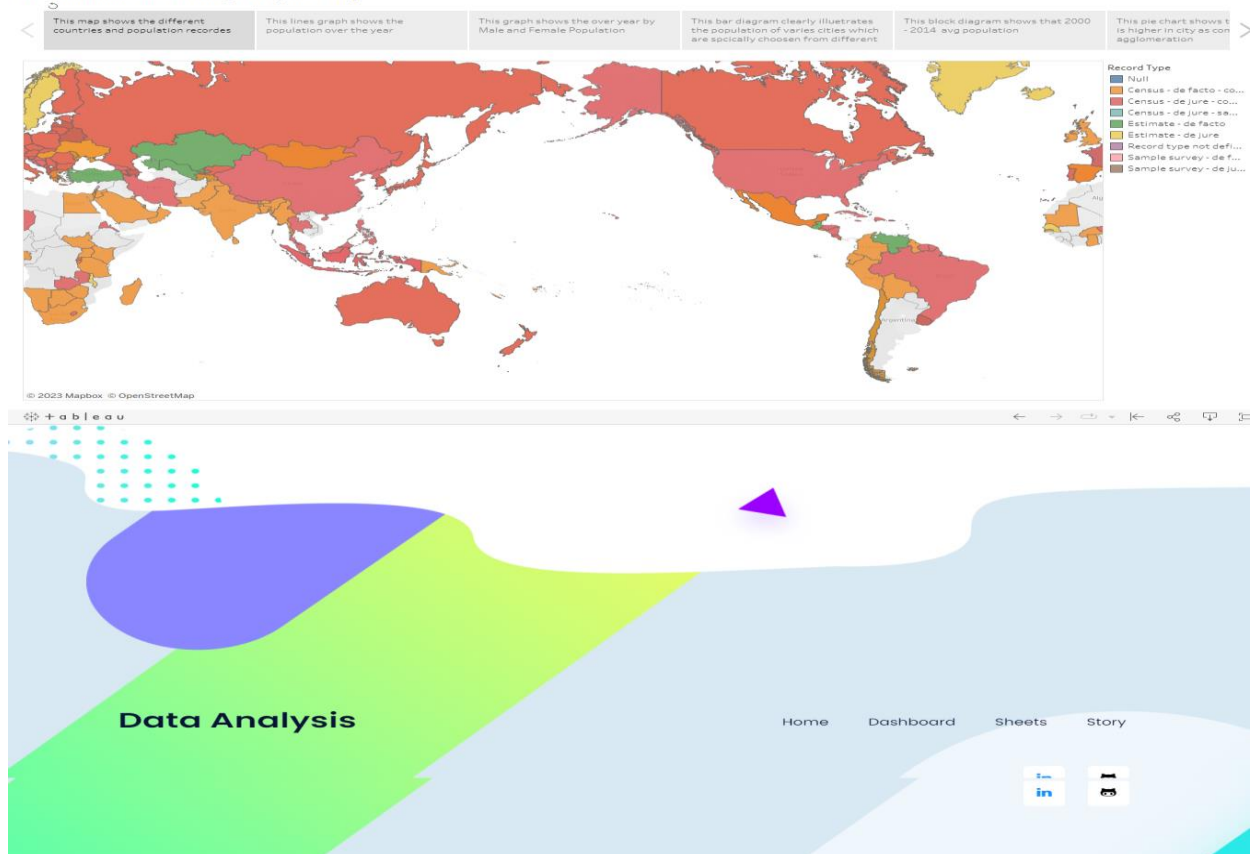## 3.4   Story Web

4   ADVANTAGES & DISADVANTAGES

Advantages:

Insight Creation - Gaining insight is a must for operations that are seeking to generate adequate forecasts. Forecasting gets you into the habit of looking at the past and real-time data to predict future demand. While doing this, you will be able to anticipate demand fluctuations more effectively. It also will provide insight into your company's supply chain health and provide you with an opportunity to make any corrections or adjustments based off of new information that is received through real-time data. Learning From Past Mistakes - Forecasting also enables you to make decisions based off of past errors and could provide insight on how to correct these in the future. You don't start from scratch after each forecast. Even if your prediction was nowhere close to what ended up coming to pass, it provides a starting point. It is common to review where and why things didn't happen the way you had predicted and you should be able to see an improvement in your forecasts. You will also get into the habit of reflecting upon past performance as a whole. Cost Decrease - Cost decrease is another substantial factor within manufacturing operations considering that forecasting can reduce the amount of errors due to following a schedule based off of the past. Anticipating demand will aid you with tweaking your processes to increase efficiency all along the supply chain. Because you are able to predict what customers will want and when they'll want it, you will ultimately be able to decrease excess inventory levels and increase overall profitability.

Disadvantages:

Forecasts are Never Completely Accurate - Forecasts are never 100% and it is almost impossible to predict the future with certainty. Even if you have a great process in place and forecasting experts on your payroll, your forecasts will never be spot on. Some products and markets will have a high level of volatility, especially during times of crisis. The coronavirus has definitely enhanced and increased this volatility within the market - which is why understanding what factors influence your demand can potentially aid with developing forecasts during this time. Having said that, the main drawback of forecasts are that they are almost always wrong - which leads to excess or shortage of inventory.

It can be Time-Consuming and Resource-Intensive - Forecasting pertains to data gathering, data organizing, and coordination. Companies will employ a team of demand planners who are responsible for coming up with the forecast. In order to adequately conduct this function, demand planners will need a substantial amount of input from sales and marketing teams. It is also not uncommon for process to be manual and labor-intensive, which will ultimately take up a lot of time. If you have the correct technology in the right place, it is much less of an issue.

Could be Costly - Forecasting can be extremely costly - especially if it is done right. If you want adequate and close-to-accurate forecast, you have to spend the money, time, and resources to do so. Hiring a team of demand planners is a significant investment and adds to the cost of utilizing quality tools. While it is costly, you should easily see a return on this investment over time and your forecast should be much more accurate, thus saving you money and paying for itself in the long run.

A software that can aid with adequate and appropriate forecasting pertains to PlanetTogether's Advanced Planning and Scheduling (APS) Software. Advanced Planning and Scheduling (APS) Software can aid with forecasting through utilizing real-time and historical data and ultimately coming up with a production plan that enables manufacturers to reduce waste and increase profitability.

Advanced Planning and Scheduling (APS) Software increases operational efficiency through utilizing these forecasts and ultimately coming up with a production plan that is the most efficient for their manufacturing operation. PlanetTogether's APS Software is a must for manufacturing facilities that are seeking to maintain a competitive edge and take their operation to the next level.

5   APPLICATIONS

This method involves discovery of the factors that influence present and past population increase and decrease. On the basis of assumptions concerning the future of these factors, and of other factors that are just emerging in the community, projections of fertility, mortality and migration trends are made

A population projection gives a picture of what the future size and structure of the population by sex and age might look like. It is based on knowledge of the past trends,

and, for the future, on assumptions made for three components: fertility, mortality and migration.

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6 CONCLUSION

The study found that there is a significant relationship between time and student population. Given that this relationship is positive, it is expected that the population of University of Kabianga will keep on increasing with increase in time. Furthermore population is expected to reach 32,421 by the year 2023 if all other factors apart from time are held constant. This implies that it is possible the population may not hit the 32,000 mark if all other factors are put into play. Factors such as the institutions policies on student enrolment as mentioned in chapter two of this research in particular those that state cut-off points for enrolling for certain programs may limit growth. However since this forecast is based on only three campuses of University of Kabianga. it is then possible that the opening of new campuses or expansion of the already existing ones may lead to a higher actual figure. This is because the additional space allows for more students to be enrolled in University of Kabianga. Other external factors like government policies on institutions of higher learning could also have an impact on the outcome of this prediction.

7 FUTURE SCOPE

A quantitative study of human distribution in a particular area or space. Variation in population density due to environmental or geographical condition. The demographic phenomenon like mortality, growth rate, birth rate, etc. is studied.

Population growth has a big problem all over the world. There are many consequences of rapid population growth. Example: environment population, exploitation of natural resources, loss of diversity, increase in social evils and crimes and etc. Population education includes these factors and gives knowledge about them.

8   APPENDIX

In appendix we are attached,

Home, Dashboard, Story pages **HTML & CSS** Source Code

Home page HTML

```html
<!DOCTYPE html>
<html lang="zxx">

<head>
  <meta charset="utf-8">
  <title>Home</title>

  <!-- mobile responsive meta -->
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1">

  <!-- ** Plugins Needed for the Project ** -->
  <!-- Bootstrap -->
  <link rel="stylesheet" href="plugins/bootstrap/bootstrap.min.css">
  <!-- themefy-icon -->
  <link rel="stylesheet" href="plugins/themify-icons/themify-icons.css">
  <!-- slick slider -->
  <link rel="stylesheet" href="plugins/slick/slick.css">
  <!-- venobox popup -->
  <link rel="stylesheet" href="plugins/Venobox/venobox.css">
  <!-- aos -->
  <link rel="stylesheet" href="plugins/aos/aos.css">

  <!-- Main Stylesheet -->
  <link href="css/style.css" rel="stylesheet">

  <!--Favicon-->
  <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon">
  <link rel="icon" href="images/favicon.ico" type="image/x-icon">

</head>

<body>
```

```html
<!-- navigation -->
<section class="fixed-top navigation">
  <div class="container">
    <nav class="navbar navbar-expand-lg navbar-light">
      <h4>Data Analysis</h4>
      <button class="navbar-toggler border-0" type="button" data-
toggle="collapse" data-target="#navbar" aria-controls="navbar"
        aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <!-- navbar -->
      <div class="collapse navbar-collapse text-center" id="navbar">
        <ul class="navbar-nav ml-auto">
          <li class="nav-item">
            <a class="nav-link" href="dashboard.html">Dashboard</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="story.html">Story</a>
          </li>
          <li class="nav-item">
            <a class="nav-link page-scroll" href="#team">Team</a>
          </li>
        </ul>
        <a href="index.html" class="btn btn-primary ml-lg-3 primary-
shadow">Home</a>
      </div>
    </nav>
  </div>
</section>
<!-- /navigation -->

<!-- hero area -->
<section class="hero-section hero" data-background="" style="background-image:
url(images/hero-area/banner-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-12 text-center zindex-1">
        <h1 class="mb-3">A Population Forecasting<br>
          Analysis</h1>
        <p class="mb-4">In this page on we are discussing Tracing the Growth of
the Global Community<br>
          A Population Forecasting Analysis</p>
        <a href="dashboard.html" class="btn btn-secondary btn-lg">explore us</a>
        <!-- banner image -->
```

```html
        </div>
      </div>
    </div>
    <!-- background shapes -->
    <div id="scene">
        <img class="img-fluid hero-bg-1 up-down-animation" src="images/background-
shape/feature-bg-2.png" alt="">
        <img class="img-fluid hero-bg-2 left-right-animation" src="images/background-
shape/seo-ball-1.png" alt="">
        <img class="img-fluid hero-bg-3 left-right-animation" src="images/background-
shape/seo-half-cycle.png" alt="">
        <img class="img-fluid hero-bg-4 up-down-animation" src="images/background-
shape/green-dot.png" alt="">
        <img class="img-fluid hero-bg-5 left-right-animation" src="images/background-
shape/blue-half-cycle.png" alt="">
        <img class="img-fluid hero-bg-6 up-down-animation" src="images/background-
shape/seo-ball-1.png" alt="">
        <img class="img-fluid hero-bg-7 left-right-animation" src="images/background-
shape/yellow-triangle.png" alt="">
        <img class="img-fluid hero-bg-8 up-down-animation" src="images/background-
shape/service-half-cycle.png" alt="">
        <img class="img-fluid hero-bg-9 up-down-animation" src="images/background-
shape/team-bg-triangle.png" alt="">
    </div>
</section>

<!-- team -->
<section class="section-lg team" id="team">
    <div class="container-fluid">
        <div class="row">
            <div class="col-lg-12 text-center">
                <h2 class="section-title">Our Team</h2>
                <p class="mb-100"></p>
            </div>
        </div>
        <div class="col-10 mx-auto">
            <div class="team-slider">
                <!-- team-member -->
                <div class="team-member">
                    <div class="d-flex mb-4">
                        <div class="align-self-center">
                            <h4>S.Tamizharasi</h4>
                        </div>
                    </div>
```

```html
        <p>B.Sc Maths<br>Final year<br>SIRI PSG Arts & Science for Women</p>
      </div>
      <!-- team-member -->
      <div class="team-member">
        <div class="d-flex mb-4">
          <div class="align-self-center">
            <h4>S.Priya</h4>
          </div>
        </div>
        <p>B.Sc Maths<br>Final year<br>SIRI PSG Arts & Science for Women</p>
      </div>
      <!-- team-member -->
      <div class="team-member">
        <div class="d-flex mb-4">
          <div class="align-self-center">
            <h4>B.Mythili</h4>
          </div>
        </div>
        <p>B.Sc Maths<br>Final year<br>SIRI PSG Arts & Science for Women</p>
      </div>
    </div>
  </div>
</div>
<!-- backgound image -->
<img src="images/backgrounds/team-bg.png" alt="team-bg" class="img-fluid team-bg">
<!-- background shapes -->
<img class="team-bg-shape-1 up-down-animation" src="images/background-shape/seo-ball-1.png" alt="background-shape">
<img class="team-bg-shape-2 left-right-animation" src="images/background-shape/seo-ball-1.png" alt="background-shape">
<img class="team-bg-shape-3 left-right-animation" src="images/background-shape/team-bg-triangle.png" alt="background-shape">
<img class="team-bg-shape-4 up-down-animation img-fluid" src="images/background-shape/team-bg-dots.png" alt="background-shape">
</section>
<!-- /team -->

<!-- footer -->
<footer class="footer-section footer" style="background-image: url(images/backgrounds/footer-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-4 text-center text-lg-left mb-4 mb-lg-0">
        <!-- logo -->
```

```html
        <h3>Data Analysis</h3>
      </div>
      <!-- footer menu -->
      <nav class="col-lg-8 align-self-center mb-5">
        <ul class="list-inline text-lg-right text-center footer-menu">
          <li class="list-inline-item active"><a href="index.html">Home</a></li>
          <li class="list-inline-item"><a
href="dashboard.html">Dashboard</a></li>
          <li class="list-inline-item"><a href="story.html">Story</a></li>
          <li class="list-inline-item"><a class="page-scroll"
href="#team">Team</a></li>
        </ul>
      </nav>
      <!-- footer social icon -->
      <nav class="col-12">
        <ul class="list-inline text-lg-right text-center social-icon">
          <li class="list-inline-item">
            <a class="linkedin" href="#"><i class="ti-linkedin"></i></a>
          </li>
          <li class="list-inline-item">
            <a class="black" href="#"><i class="ti-github"></i></a>
          </li>
        </ul>
      </nav>
    </div>
  </div>
</footer>
<!-- /footer -->

<!-- jQuery -->
<script src="plugins/jQuery/jquery.min.js"></script>
<!-- Bootstrap JS -->
<script src="plugins/bootstrap/bootstrap.min.js"></script>
<!-- slick slider -->
<script src="plugins/slick/slick.min.js"></script>
<!-- venobox -->
<script src="plugins/Venobox/venobox.min.js"></script>
<!-- aos -->
<script src="plugins/aos/aos.js"></script>
<!-- Main Script -->
<script src="js/script.js"></script>

</body>
</html>
```

Dashboard page HTML

```html
<!DOCTYPE html>
<html lang="zxx">

<head>
  <meta charset="utf-8">
  <title>Dashboard</title>

  <!-- mobile responsive meta -->
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <meta name="viewport" content="width=device-width, initial-scale=1, maximum-scale=1">

  <!-- ** Plugins Needed for the Project ** -->
  <!-- Bootstrap -->
  <link rel="stylesheet" href="plugins/bootstrap/bootstrap.min.css">
  <!-- themefy-icon -->
  <link rel="stylesheet" href="plugins/themify-icons/themify-icons.css">
  <!-- slick slider -->
  <link rel="stylesheet" href="plugins/slick/slick.css">
  <!-- venobox popup -->
  <link rel="stylesheet" href="plugins/Venobox/venobox.css">
  <!-- aos -->
  <link rel="stylesheet" href="plugins/aos/aos.css">

  <!-- Main Stylesheet -->
  <link href="css/style.css" rel="stylesheet">

  <!--Favicon-->
  <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon">
  <link rel="icon" href="images/favicon.ico" type="image/x-icon">

</head>

<body>


<!-- navigation -->
<section class="fixed-top navigation">
  <div class="container">
```

```html
    <nav class="navbar navbar-expand-lg navbar-light">

      <h4>Data Analysis</h4>
      <button class="navbar-toggler border-0" type="button" data-
toggle="collapse" data-target="#navbar" aria-controls="navbar"
        aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <!-- navbar -->
      <div class="collapse navbar-collapse text-center" id="navbar">
        <ul class="navbar-nav ml-auto">
          <li class="nav-item">
            <a class="nav-link" href="index.html">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="story.html">Story</a>
          </li>
          <li class="nav-item">
            <a class="nav-link page-scroll" href="index.html#team">Team</a>
          </li>
        </ul>
        <a href="dashboard.html" class="btn btn-primary ml-lg-3 primary-
shadow">Dashboard</a>
      </div>
    </nav>
  </div>
</section>
<!-- /navigation -->
<!-- header-->
<section class="hero-section hero" data-background="" style="background-image:
url(images/hero-area/banner-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-12 text-center zindex-1">
        <h1 class="mb-3">Graph Types and Visualizations<br>Dashboard</h1>
        <p class="mb-4">This Dashboard may utilize a variety of graph types and
visualizations, including but not limited to bar charts, line<br>charts, scatter
plots, heat maps, tree maps, bullet graphs, and geographical maps. These graphs
and visualizations help<br>to present data in a meaningful and easily
understandable way, allowing users to gain insights and make
informed<br>decisions based on the information presented</p>
        <!-- banner image -->


      </div>
    </div>
```

```html
  </div>
  <!-- background shapes -->
  <div id="scene">
    <img class="img-fluid hero-bg-1 up-down-animation" src="images/background-
shape/feature-bg-2.png" alt="">
    <img class="img-fluid hero-bg-2 left-right-animation" src="images/background-
shape/seo-ball-1.png" alt="">
    <img class="img-fluid hero-bg-3 left-right-animation" src="images/background-
shape/seo-half-cycle.png" alt="">
    <img class="img-fluid hero-bg-4 up-down-animation" src="images/background-
shape/green-dot.png" alt="">
    <img class="img-fluid hero-bg-5 left-right-animation" src="images/background-
shape/blue-half-cycle.png" alt="">
    <img class="img-fluid hero-bg-6 up-down-animation" src="images/background-
shape/seo-ball-1.png" alt="">
    <img class="img-fluid hero-bg-7 left-right-animation" src="images/background-
shape/yellow-triangle.png" alt="">
    <img class="img-fluid hero-bg-8 up-down-animation" src="images/background-
shape/service-half-cycle.png" alt="">
    <img class="img-fluid hero-bg-9 up-down-animation" src="images/background-
shape/team-bg-triangle.png" alt="">
  </div>
</section>
<!-- /header -->
<div class="row">
  <div class="col-lg-12 text-center zindex-1">
    <h3 class="mb-3">A Population Forecasting<br>
      Analysis</h3>
    <p class="mb-4">A population forecasting analysis in this dashboard typically
includes several graphs and charts to help visualize<br>and analyze population
trends and projections over time. Examples of graphs that may be included are
line charts with<br>forecasted trend lines, stacked bar charts showing population
breakdown by age or gender, and heat maps or choropleth maps<br>displaying
population density across different regions. These graphs help to provide a
comprehensive view of population<br>trends and projections, allowing users to
make informed decisions based on the insights gained from the data</p>
    <!-- banner image -->

  </div>
</div>
<!-- dashboard link -->
<div class='tableauPlaceholder' id='viz1682151726942' style='position:
relative'><noscript><a href='#'><img alt='Dashboard 1 '
src='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AP&#47;APopulat
oinForecastingAnalysis_16821516779740&#47;Dashboard1&#47;1_rss.png'
```

```html
style='border: none' /></a></noscript><object
class='tableauViz'  style='display:none;'><param name='host_url'
value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param name='embed_code_version'
value='3' /> <param name='site_root' value='' /><param name='name'
value='APopulatoinForecastingAnalysis_16821516779740&#47;Dashboard1' /><param
name='tabs' value='no' /><param name='toolbar' value='yes' /><param
name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AP&#47;APopul
atoinForecastingAnalysis_16821516779740&#47;Dashboard1&#47;1.png' /> <param
name='animate_transition' value='yes' /><param name='display_static_image'
value='yes' /><param name='display_spinner' value='yes' /><param
name='display_overlay' value='yes' /><param name='display_count' value='yes'
/><param name='language' value='en-US' /><param name='filter' value='publish=yes'
/></object></div>                    <script
type='text/javascript'>                    var divElement =
document.getElementById('viz1682151726942');                    var vizElement =
divElement.getElementsByTagName('object')[0];                    if (
divElement.offsetWidth > 800 ) {
vizElement.style.width='1366px';vizElement.style.height='795px';} else if (
divElement.offsetWidth > 500 ) {
vizElement.style.width='1366px';vizElement.style.height='795px';} else {
vizElement.style.width='100%';vizElement.style.height='2577px';}
    var scriptElement =
document.createElement('script');                    scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';                    vizEle
ment.parentNode.insertBefore(scriptElement, vizElement);                    </script>
<!-- /dashboard link -->

<!-- footer -->
<footer class="footer-section footer" style="background-image:
url(images/backgrounds/footer-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-4 text-center text-lg-left mb-4 mb-lg-0">
        <!-- logo -->
        <h3>Data Analysis</h3>
      </div>
      <!-- footer menu -->
      <nav class="col-lg-8 align-self-center mb-5">
        <ul class="list-inline text-lg-right text-center footer-menu">
          <li class="list-inline-item active"><a href="index.html">Home</a></li>
          <li class="list-inline-item"><a
href="dashboard.html">Dashboard</a></li>
          <li class="list-inline-item"><a href="story.html">Story</a></li>
```

```html
          <li class="list-inline-item"><a class="page-scroll"
href="#team">Team</a></li>
        </ul>
      </nav>
      <!-- footer social icon -->
      <nav class="col-12">
        <ul class="list-inline text-lg-right text-center social-icon">
          <li class="list-inline-item">
            <a class="linkedin" href="#"><i class="ti-linkedin"></i></a>
          </li>
          <li class="list-inline-item">
            <a class="black" href="#"><i class="ti-github"></i></a>
          </li>
        </ul>
      </nav>
    </div>
  </div>
</footer>
<!-- /footer -->

<!-- jQuery -->
<script src="plugins/jQuery/jquery.min.js"></script>
<!-- Bootstrap JS -->
<script src="plugins/bootstrap/bootstrap.min.js"></script>
<!-- slick slider -->
<script src="plugins/slick/slick.min.js"></script>
<!-- venobox -->
<script src="plugins/Venobox/venobox.min.js"></script>
<!-- aos -->
<script src="plugins/aos/aos.js"></script>
<!-- Main Script -->
<script src="js/script.js"></script>

</body>
</html>
```

Story page HTML

```html
<!DOCTYPE html>
<html lang="zxx">

<head>
```

```html
  <meta charset="utf-8">
  <title>Story</title>

  <!-- mobile responsive meta -->
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <meta name="viewport" content="width=device-width, initial-scale=1, maximum-
scale=1">

  <!-- ** Plugins Needed for the Project ** -->
  <!-- Bootstrap -->
  <link rel="stylesheet" href="plugins/bootstrap/bootstrap.min.css">
  <!-- themefy-icon -->
  <link rel="stylesheet" href="plugins/themify-icons/themify-icons.css">
  <!-- slick slider -->
  <link rel="stylesheet" href="plugins/slick/slick.css">
  <!-- venobox popup -->
  <link rel="stylesheet" href="plugins/Venobox/venobox.css">
  <!-- aos -->
  <link rel="stylesheet" href="plugins/aos/aos.css">

  <!-- Main Stylesheet -->
  <link href="css/style.css" rel="stylesheet">

  <!--Favicon-->
  <link rel="shortcut icon" href="images/favicon.ico" type="image/x-icon">
  <link rel="icon" href="images/favicon.ico" type="image/x-icon">

</head>

<body>


<!-- navigation -->
<section class="fixed-top navigation">
  <div class="container">
    <nav class="navbar navbar-expand-lg navbar-light">

      <h4>Data Analysis</h4>
      <button class="navbar-toggler border-0" type="button" data-
toggle="collapse" data-target="#navbar" aria-controls="navbar"
        aria-expanded="false" aria-label="Toggle navigation">
        <span class="navbar-toggler-icon"></span>
      </button>
      <!-- navbar -->
      <div class="collapse navbar-collapse text-center" id="navbar">
```

```html
        <ul class="navbar-nav ml-auto">
          <li class="nav-item">
            <a class="nav-link" href="index.html">Home</a>
          </li>
          <li class="nav-item">
            <a class="nav-link" href="dashboard.html">Dashboard</a>
          </li>
          <li class="nav-item">
            <a class="nav-link page-scroll" href="index.html#team">Team</a>
          </li>
        </ul>
        <a href="story.html" class="btn btn-primary ml-lg-3 primary-
shadow">Story</a>
      </div>
    </nav>
  </div>
</section>
<!-- /navigation -->
<!-- header-->
<section class="hero-section hero" data-background="" style="background-image:
url(images/hero-area/banner-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-12 text-center zindex-1">
        <h1 class="mb-3">Graph Types and Visualizations<br>Story</h1>
        <p class="mb-4">This Story may utilize a variety of graph types and
visualizations, including but not limited to line charts,<br>scatter plots, bar
charts, heat maps, and geographical maps. These graphs and visualizations help to
present data in a<br>narrative format, allowing users to explore and analyze data
in a structured and meaningful way. Additionally, a This<br>Story may include
text, images, and other interactive elements to further enhance the<br>narrative
and provide context to the data presented</p>
        <!-- banner image -->

      </div>
    </div>
  </div>
  <!-- background shapes -->
  <div id="scene">
    <img class="img-fluid hero-bg-1 up-down-animation" src="images/background-
shape/feature-bg-2.png" alt="">
    <img class="img-fluid hero-bg-2 left-right-animation" src="images/background-
shape/seo-ball-1.png" alt="">
    <img class="img-fluid hero-bg-3 left-right-animation" src="images/background-
shape/seo-half-cycle.png" alt="">
```

```html
        <img class="img-fluid hero-bg-4 up-down-animation" src="images/background-
shape/green-dot.png" alt="">
        <img class="img-fluid hero-bg-5 left-right-animation" src="images/background-
shape/blue-half-cycle.png" alt="">
        <img class="img-fluid hero-bg-6 up-down-animation" src="images/background-
shape/seo-ball-1.png" alt="">
        <img class="img-fluid hero-bg-7 left-right-animation" src="images/background-
shape/yellow-triangle.png" alt="">
        <img class="img-fluid hero-bg-8 up-down-animation" src="images/background-
shape/service-half-cycle.png" alt="">
        <img class="img-fluid hero-bg-9 up-down-animation" src="images/background-
shape/team-bg-triangle.png" alt="">
    </div>
</section>
<!-- /header -->
<div class="row">
    <div class="col-lg-12 text-center zindex-1">
        <h3 class="mb-3">A Population Forecasting<br>Analysis</h3>
        <p class="mb-4">A population forecasting analysis Tableau Story may utilize a
variety of graph types and visualizations,<br>such as line charts with forecasted
trend lines, stacked bar charts showing population breakdown by<br>age or gender,
heat maps or choropleth maps displaying population density across different
regions, and other<br>interactive elements like filters, drop-downs, and
tooltips. These graphs and visualizations help to tell a<br>compelling story of
population trends and projections over time, allowing users to gain insights and
make<br>informed decisions based on the information presented</p>
        <!-- banner image -->

    </div>
</div>
<!-- story -->
<div class='tableauPlaceholder' id='viz1682152048857' style='position:
relative'><noscript><a href='#'><img alt='A Population Forecasting Analysis '
src='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AP&#47;APopulat
oinForecastingAnalysisStory&#47;Story1&#47;1_rss.png' style='border: none'
/></a></noscript><object class='tableauViz'  style='display:none;'><param
name='host_url' value='https%3A%2F%2Fpublic.tableau.com%2F' /> <param
name='embed_code_version' value='3' /> <param name='site_root' value='' /><param
name='name' value='APopulatoinForecastingAnalysisStory&#47;Story1' /><param
name='tabs' value='no' /><param name='toolbar' value='yes' /><param
name='static_image'
value='https:&#47;&#47;public.tableau.com&#47;static&#47;images&#47;AP&#47;APopul
atoinForecastingAnalysisStory&#47;Story1&#47;1.png' /> <param
name='animate_transition' value='yes' /><param name='display_static_image'
value='yes' /><param name='display_spinner' value='yes' /><param
```

```html
name='display_overlay' value='yes' /><param name='display_count' value='yes'
/><param name='language' value='en-US' /></object></div>                        <script
type='text/javascript'>                           var divElement =
document.getElementById('viz1682152048857');                      var vizElement =
divElement.getElementsByTagName('object')[0];                   vizElement.style
.width='1323px';vizElement.style.height='795px';                          var
scriptElement =
document.createElement('script');                          scriptElement.src =
'https://public.tableau.com/javascripts/api/viz_v1.js';                       vizEle
ment.parentNode.insertBefore(scriptElement, vizElement);                    </script>
<!-- /story -->
<!-- footer -->
<footer class="footer-section footer" style="background-image:
url(images/backgrounds/footer-bg.png);">
  <div class="container">
    <div class="row">
      <div class="col-lg-4 text-center text-lg-left mb-4 mb-lg-0">
        <!-- logo -->
        <h3>Data Analysis</h3>
      </div>
      <!-- footer menu -->
      <nav class="col-lg-8 align-self-center mb-5">
        <ul class="list-inline text-lg-right text-center footer-menu">
          <li class="list-inline-item active"><a href="index.html">Home</a></li>
          <li class="list-inline-item"><a
href="dashboard.html">Dashboard</a></li>
          <li class="list-inline-item"><a href="story.html">Story</a></li>
          <li class="list-inline-item"><a class="page-scroll"
href="#team">Team</a></li>
        </ul>
      </nav>
      <!-- footer social icon -->
      <nav class="col-12">
        <ul class="list-inline text-lg-right text-center social-icon">
          <li class="list-inline-item">
            <a class="linkedin" href="#"><i class="ti-linkedin"></i></a>
          </li>
          <li class="list-inline-item">
            <a class="black" href="#"><i class="ti-github"></i></a>
          </li>
        </ul>
      </nav>
    </div>
  </div>
</footer>
```

```html
<!-- /footer -->

<!-- jQuery -->
<script src="plugins/jQuery/jquery.min.js"></script>
<!-- Bootstrap JS -->
<script src="plugins/bootstrap/bootstrap.min.js"></script>
<!-- slick slider -->
<script src="plugins/slick/slick.min.js"></script>
<!-- venobox -->
<script src="plugins/Venobox/venobox.min.js"></script>
<!-- aos -->
<script src="plugins/aos/aos.js"></script>
<!-- Main Script -->
<script src="js/script.js"></script>

</body>
</html>
```