



**InnoVision Executive Education**

## **Data Visualisation using Google Looker Studio**

# Data Visualisation using Google Looker Studio



**Module Title:** Data Analytics & Visualisation using Google Looker Studio

**Module Duration:** 18 Hours

## Learning Outcomes

Successful Participants of this module should be able to

- I. Make a judicious selection of analytical tools appropriate to the problem at hand, informed by the knowledge of theory and based on experience. (LO1)
- II. Express vague ideas graphically in a way that should allow users from all functions to extract advantages of the dashboards (LO2)
- III. Develop Analytical & Reasoning Skills in analyzing data and to build effective dashboards keeping in mind objective and user of the dashboard (LO3)
- IV. Communicate statistics in a clear, organized, and inspiring way, using a variety of graphs in ways that are appropriate for the audience (LO4)

## Module Description

Visual analytics is the science of combining interactive visual interfaces and information visualization techniques with automatic algorithms to support analytical reasoning through human-computer interaction. People use visual analytics tools and techniques to synthesize information and derive insight from massive, dynamic, ambiguous, and often conflicting data, and to communicate their findings effectively for decision-making. This module will serve as an introduction to the science and technology of visual analytics and will include lectures on both theoretical foundations and application methodologies.

This module is a foundation-level program catering to all employees, with no pre-requisite defined. The program will cover the conceptual understanding of Business Analytics, Business intelligence Machine Learning, Data Science. How analytics can give the organisation competitive edge and how should you adapt Data driven /Informed Decision making using various tools and techniques.

The objective of this training program is to equip participants with the knowledge and skills to effectively create and utilize visualisations using Looker Studio. The program aims to enhance their understanding of data visualization principles, best practices, and hands-on experience with Looker Studio's features and functionalities.

## Contents

### Introduction

- I. Business Analytics
- II. Business intelligence
- III. Machine Learning
- IV. Data Science
- V. Four types of Analytics with applications Theory to Practice
- VI. Identify the ongoing analytics needs of organization and suggest course of action.
- VII. How business analytics can give organization a competitive edge
- VIII. Building Blocks of Visual Analytics

# Data Visualisation using Google Looker Studio



## Storytelling with data

- I. Understand the context.
- II. Choose effective visuals.
- III. Eliminate clutter and focus your audience's attention.
- IV. Tell the Story
- V. Do's & Don'ts of communicating using data.
- VI. Introduce the principles of effective data visualization, including clarity, simplicity, and context.
- VII. Explore different types of visualizations and their appropriate use cases.
- VIII. Discuss the role of color, layout, and interactivity in creating engaging visualizations.

## Introduction to Looker Studio

- I. Provide an overview of Looker Studio and its capabilities.
- II. Discuss the benefits of using Looker Studio for data visualization.
- III. Walk participants through the interface and navigation of Looker Studio.
- IV. Building Basic Visualizations in Looker Studio
- V. Demonstrate the process of creating basic visualizations using Looker Studio.
- VI. Showcase the available chart types, filters, and formatting options.
- VII. Guide participants in building their own visualizations using sample datasets.
- VIII. Explore advanced visualization techniques, such as drilldowns, pivots, and advanced calculations.
- IX. Discuss the use of custom visualizations and integrations within Looker Studio.
- X. Showcase examples of complex visualizations created with Looker Studio.
- XI. Dashboard Design and Layout
- XII. Introduce the principles of effective dashboard design and layout.
- XIII. Discuss best practices for organizing visualizations, using filters, and creating user-friendly dashboards.
- XIV. Guide participants in designing their own dashboards using Looker Studio.
- XV. Interactive Elements and Filters
- XVI. Explore the use of interactive elements and filters in Looker Studio.
- XVII. Explain how to create dynamic filters, drill-through functionality, and interactive elements within visualizations.
- XVIII. Demonstrate the benefits of interactive elements in enhancing user experience and data exploration.
- XIX. Sharing and Collaboration with Looker Studio
- XX. Discuss the various options for sharing and collaborating on visualizations created in Looker Studio.
- XXI. Showcase the use of scheduled deliveries, embedding visualizations, and sharing dashboards with stakeholders.
- XXII. Guide participants in sharing their own visualizations and dashboards with colleagues.

## Advanced Features and Tips

Highlight advanced features and tips for optimizing visualizations in Looker Studio.

- I. Discuss Performance Optimisation, data caching, and data modeling considerations.
- II. Provide additional resources and references for further learning and exploration.

# Data Visualisation using Google Looker Studio



## Reference Books

Storytelling with data a data visualization guide for business professionals By Cole Nussbaumer Knaflic  
Wiley 2015

Business Analytics: The Science of Data Driven Decision Making by Dinesh Kumar 2017 Wiley  
Publications