### DATA ANALYTICS PROCESS

Finding Best Online Certification Course

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## AGENDA

- **□**Objective
- □ Background
- □Data Analytics Steps:
  - Plan
  - Prepare
  - Process
  - Analyse
  - Share
  - Act
- □ Conclusion

# Objective

Searching the best online certification Course using data analytics and explaining it with six steps data analytics process i.e. plan, prepare, process, analyze, share and act.



## Proceeding with data analytics process

#### 1. Plan-

**Objective**: Identify the top online certification Course by examining factors like cost, duration, content quality, industry reputation, and user reviews.

**Stakeholders**: Individuals looking for certifications, educational institutions, employers, and career advisors.

#### **Key Questions**:

- Which Courses are the most cost-effective?
- Which Courses have the best user satisfaction ratings?
- What are the lengths and comprehensiveness of these Courses?
- How well-recognized are these certifications in the industry?

#### 2. Prepare

#### **Data Collection:**

- Sources: Online education platforms like Coursera, Udemy, edX, LinkedIn Learning.
- **Data Types**: Course costs, user reviews and ratings, Course durations, curriculum details, and industry recognition.

#### **Data Gathering Methods:**

- Extract data from websites, reviews, and industry reports.
- Use APIs or web scraping tools to collect information systematically.

#### 3. Process

#### **Data Cleaning and Preparation:**

- Remove any duplicate or irrelevant data.
- Handle missing values (e.g., fill in missing ratings or durations).
- Standardize data formats (e.g., ensure all costs are in the same currency).

#### **Data Transformation:**

- Convert categorical data (e.g., Course types) into numerical formats if needed.
- Normalize numerical data for comparison.

#### 4. Analyze

#### **Exploratory Data Analysis (EDA):**

- Use statistical methods to identify patterns and trends.
- Visualize data with charts and graphs to understand distributions and relationships.

#### **Modeling:**

- Apply ranking algorithms to compare Courses based on multiple criteria.
- Use clustering to group similar Courses together.

features	Google Data Analytics Professional Certificate		IBM Data Science Professional Certificate		Coursera Data Science Specialization	
Duration	6 months	$\odot$	6 months	$\bigcirc$	9 months	$\otimes$
Cost	<b>₹1000</b> /month (	$\bigcirc$	<b>₹1500</b> /month	$\otimes$	<b>₹2500</b> /month	$\otimes$
Career prospects	good	$\bigcirc$	good	$\bigcirc$	good	$\bigcirc$
Real life projects	yes	$\bigcirc$	yes	$\bigcirc$	yes	$\bigcirc$
Instructor	Google Employees and Industry Experts	$\bigcirc$	IBM Employees and Industry Experts	$\otimes$	Coursera Faculty and Industry Experts	$\otimes$
Reviews	4.8/5	$\bigcirc$	4.6/5	$\bigcirc$	4.4/5	$\otimes$

From above analysis I found Google Data Analytics Professional Certificate is the best fit for me.

#### 5. Share

#### **Communication of Results:**

- Create visual dashboards to present the findings.
- Prepare reports summarizing the top certification Courses.
- Highlight key insights and recommendations for different stakeholder groups.

#### **Presentation:**

- Use visual aids like bar charts, pie charts, and scatter plots to make the data easily understandable.
- Provide clear and concise summaries of the findings.

#### 6. Act

#### **Implementation**:

- Advise prospective students on the best certification Courses based on their needs and goals.
- Collaborate with educational institutions to improve their offerings based on feedback and analysis.
- Monitor the outcomes and continuously gather feedback to refine the recommendations.

#### Conclusion

The six-step data analytics process—Plan, Prepare, Process, Analyze, Share, and Act—we can systematically identify the best online certification Courses. This approach ensures that decisions are data-driven and tailored to the needs of various stakeholders.

- **Plan**: Defined objectives, key questions, and identified stakeholders.
- **Prepare**: Collected comprehensive data from reliable sources.
- **Process**: Cleaned and transformed data for accuracy and consistency.
- Analyze: Uncovered insights and trends through exploratory analysis.
- **Share**: Communicated findings via visual dashboards and reports.
- Act: Implemented insights, advised students, and refined recommendations.
- ☐ I have decided to upskill myself by doing an online certification course in data analytics
- ☐ I wanted a 3-6 months duration budget friendly course with real life projects
- ☐ I found Google Data Analytics Professional Certificate is the best fit for me

