



Sankhya Analytics LLP UK

Decision making with statistical intelligence

Diploma in Data Science

Accredited by **eduQual**

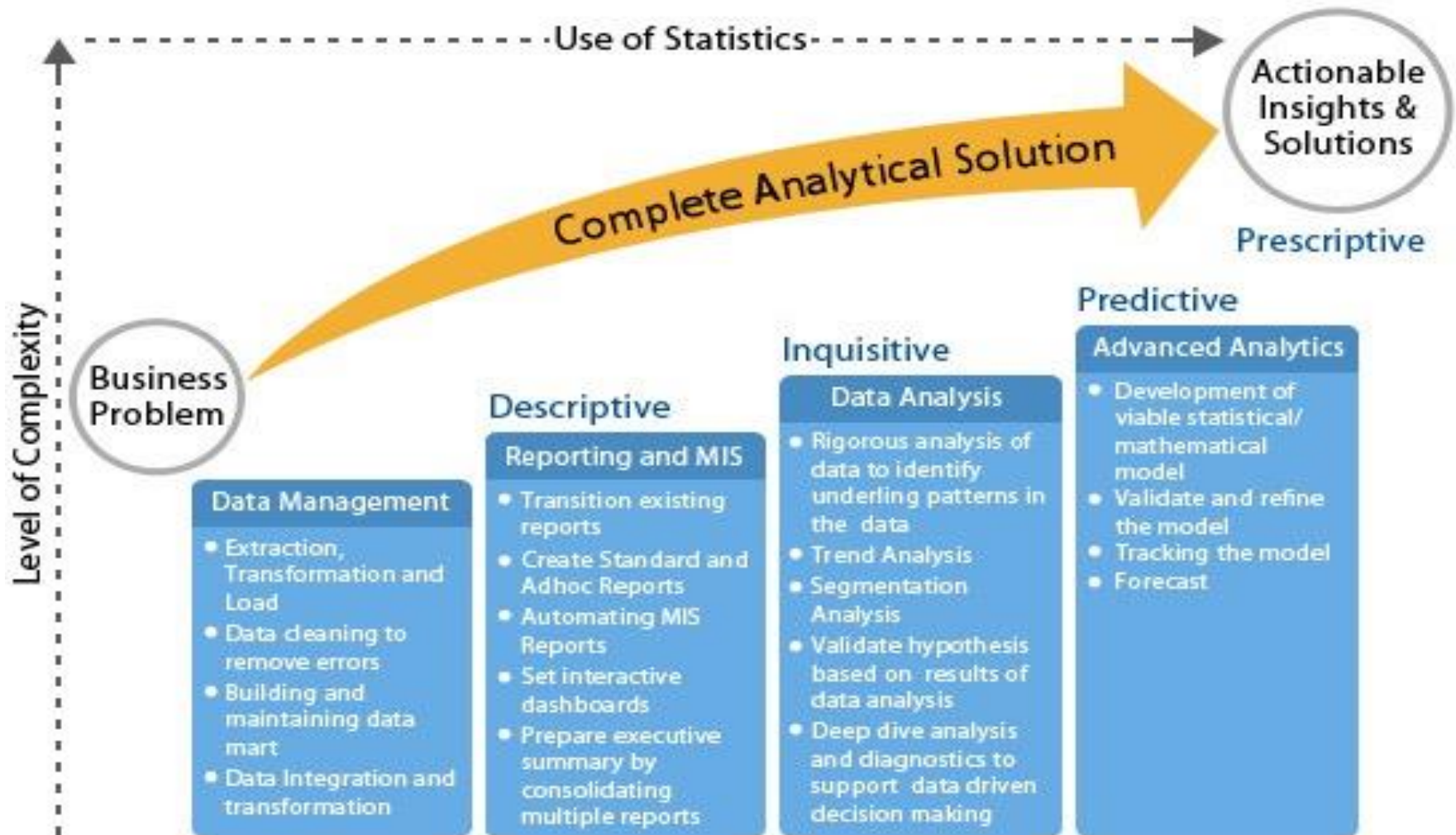
Qualifications for the digital age



Course Features

- International (UK) certification from eduQual leading to global opportunities
- Course design based on 12+ years industry experience
- Exposure to real world analytics
- Hands-on working on R and Rattle
- Business case examples from domains such as BFSI, FMCG, Retail, HR, Telecom, Pharmaceutical, etc.
- Course guided by highly skilled and experienced trainers
- www.sanaitics.com

Training Program Framework

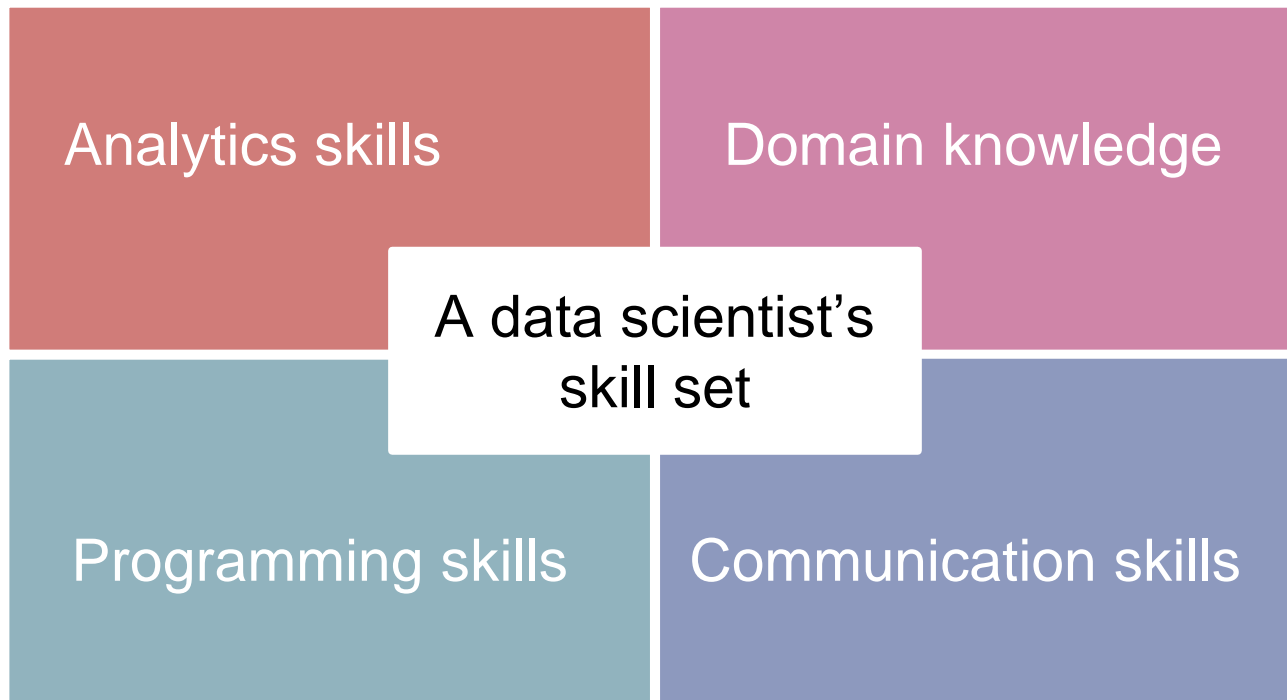




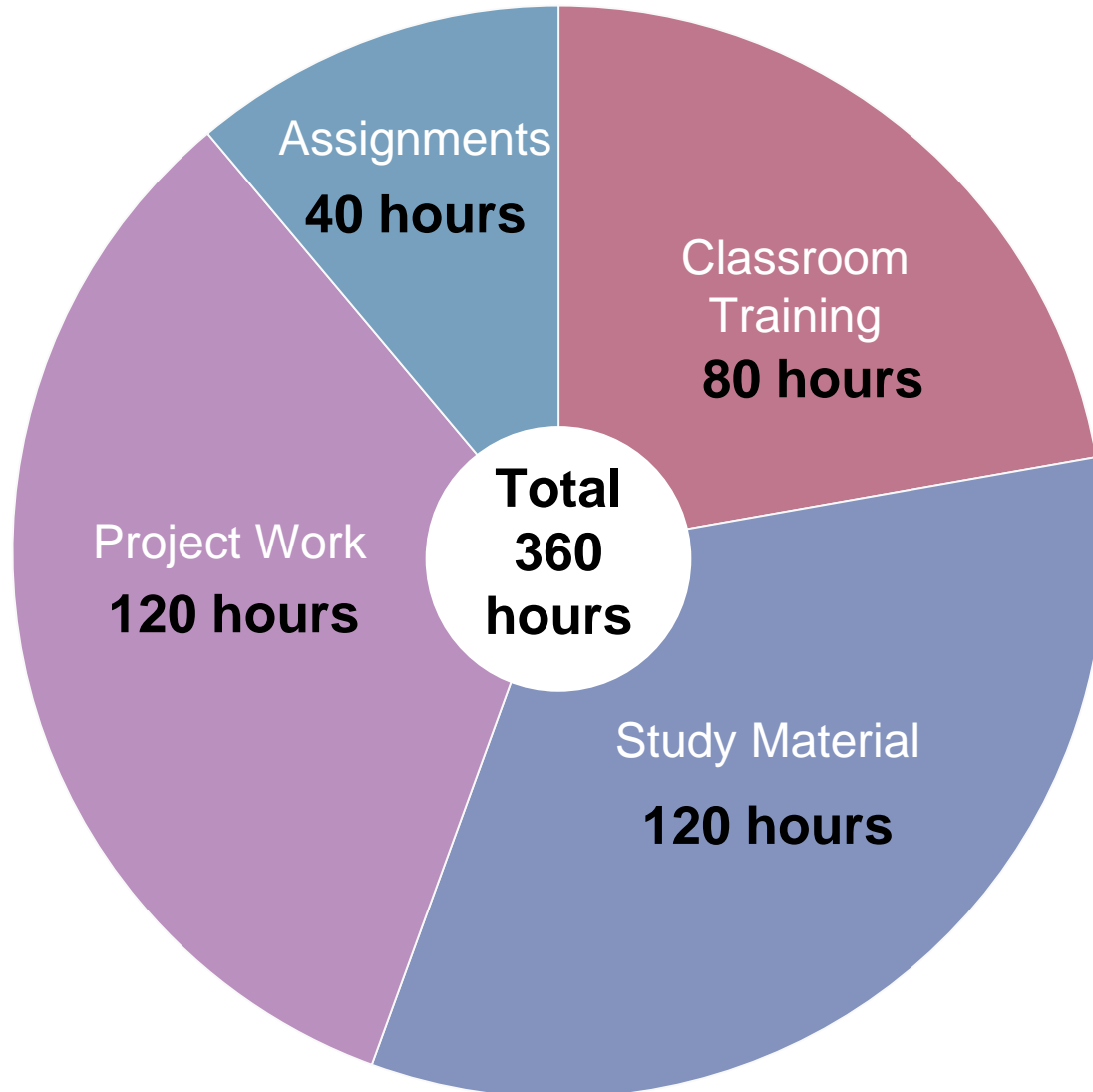
Focus Areas

A data scientist represents an evolution from the data analyst role.

A strong foundation in Statistics remains a formal requirement.



Course Structure





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- Instructor Led Classroom training
 - Industry experts sharing their hands-on experience
 - Advance Learning
 - Experience a steep learning curve from fundamentals of Statistics to Advanced Data Mining techniques
 - Hand Holding
 - Mentors available all days to resolve queries throughout the course
 - Project
 - Industry project work to understand the application of the concepts learnt
 - Placement Assistance
 - Ease of getting absorbed in the industry with a reputed Diploma recognized by both industry and academia



A Magical Career

“Statistical thinking will one day be as necessary for efficient citizenship as the ability to read and write.”

- H.G. Wells (1866-1946)

“Data Scientist: The Sexiest Job of the 21st Century”

- Harvard Business Review



190,000
data scientists
required by 2018



Forbes | glassdoor
BEST JOBS
for WORK-LIFE
BALANCE 2014

- stories
- studio, MS Excel,
-
- 8

Module 1: Exploratory Data Analysis



10 Data Management

- Import, sort, merge, aggregate, subset, derive
- Introduction to MySql

10 Descriptive Statistics

- Central tendency
- Variation
- Shape

10 Visualisation

- Bar charts/histograms
- Box-Whiskers plot
- Contour plot
- Motion chart

□ Critical for successful analytics implementation

□ Good data management helps to

- assess quality of data
- improve the quality of data
- make data analysis ready

□ Provides data insights

□ Guides towards business research problem solution using advanced analytics

Module 2: Statistical Interference



⑩ Distribution Theory and Hypothesis Testing

- Discrete distributions
- Continuous distributions
- Parametric tests
- Non-parametric tests
- Analysis of Variance
- Analysis of Covariance

- Powerful tool for testing researcher's claim in the planned experiment
- Wide application in clinical, market and social research
- Marketing campaigns can be designed and tested before full fledged implementation

Module 3: Predictive Modelling - Fundamentals



10 Basics of modelling

- Modeling framework
- Best practices

10 Multiple Linear Regression

- Mathematical model
- Validating assumptions
- Residual analysis
- Multicollinearity problem
- Out of sample validation

- ▣ Growing area in Risk Management & Marketing
- ▣ Cross selling/up-selling can be done scientifically
- ▣ Financial institutions can predict 'bad' customers
- ▣ Huge scope in e-commerce business

Module 4: Predictive Modelling - Advanced



10 Categorical Response Variable

- Binary logistic regression
- Multinomial logistic regression
- Ordinal logistic regression
- Poisson regression (modelling count response variable)
- Cox regression

- ▣ Categorical response variables are frequently incorporated in real world scenarios
- ▣ Most widely used class of predictive modelling
- ▣ Response to offer – Yes/No
- ▣ Brand preference – iPhone/Samsung/Sony

Module 5: Time Series Analysis



10 Time Series Modelling

- AR models
- MA models
- ARIMA
- ARCH
- GARCH
- Time Series regression
- Exponential smoothing

- ▣ Set of models of forecasting sales, financial indices, economy indices
- ▣ Inflation rate ,GDP are predicted using time series modelling
- ▣ Nifty/Sensex future values can be estimated
- ▣ Complex financial models are developed using ARCH & GARCH

Module 6: Unsupervised Multivariate Methods



10 Segmentation and data reduction

- k-means clustering (algorithm and selection of best cluster solution)
- Principal component analysis
- Principal component regression
- Factor analysis
- Multidimensional scaling

- ▣ Provide exploratory segments of customer, stores & agents
- ▣ PCA/Factor Analysis are powerful techniques for dimension reduction and scoring models
- ▣ PCA is used to resolve multicollinearity problem in regression models

Module 7: Data Mining



10 Machine Learning Algorithms

- Naïve Bayes
- Support vector machines
- Decision tree
- Random Forest algorithm
- Neural networks
- Association rules
- Introduction to KNIME and RATTLE

- ▣ New generation algorithms
- ▣ Multiple methods can be used to decide best predictive model
- ▣ Discover hidden pattern which may not be revealed by classical methods

Module 8: Big Data Analysis



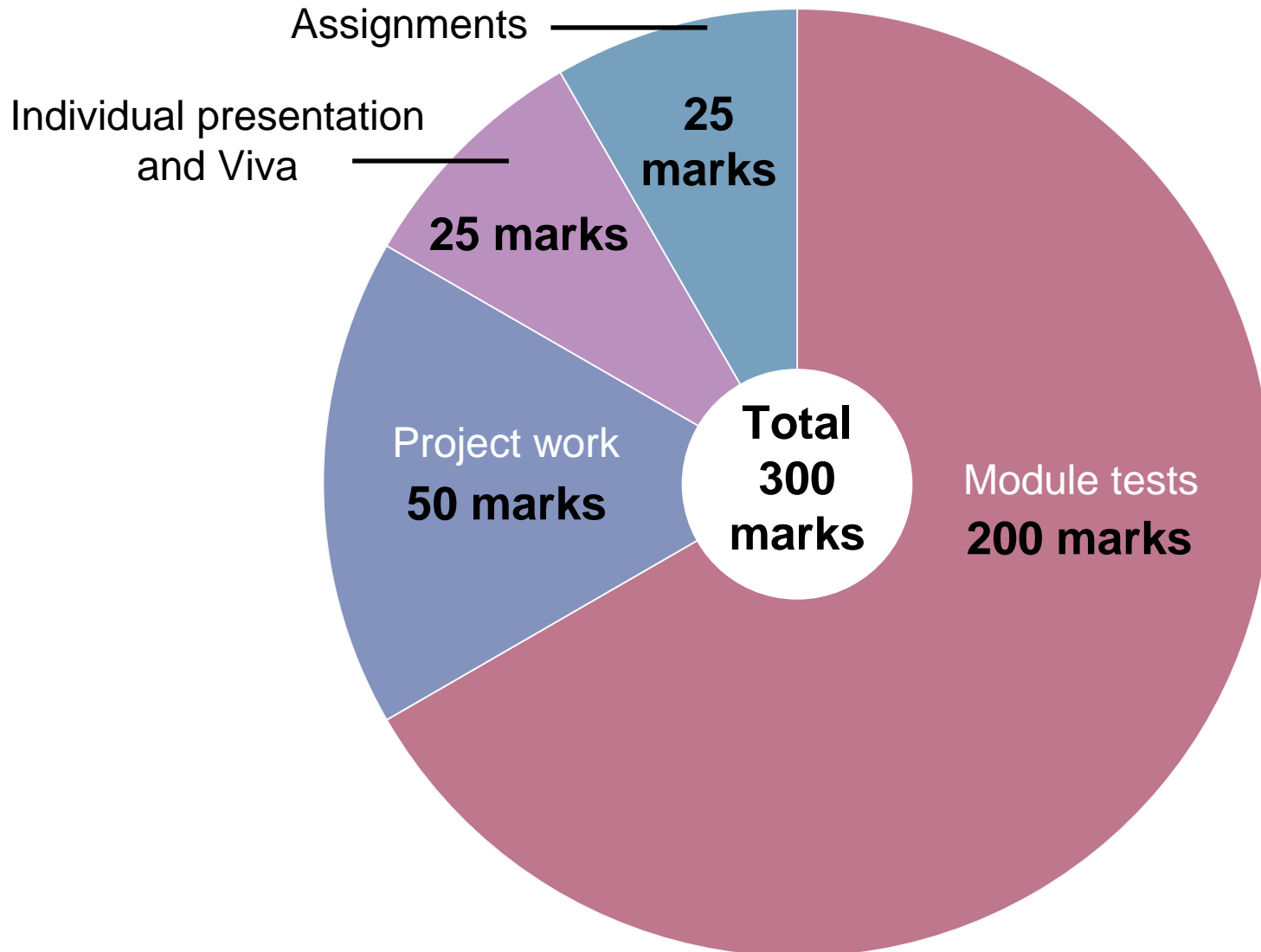
10 Big Data Analytics

- Hadoop Introduction
- R-Hadoop Integration

10 Sentiment analysis of Facebook and Twitter data (Text Mining)

- ▢ Volume & velocity of the data is humungous
- ▢ Platform for analytics implementation in cloud environment
- ▢ Combines unstructured data with structured data

Assessment



Eligibility Criteria



- Must have studied Mathematics at 10+2 level (or during Graduation years)
- Final Year Graduation/Graduate/Post Graduate/Ph.D students from any background
- Currently Pursuing Post Graduation/Ph.D from any background
- Working Professionals from any background

Course Duration: 7 months

Our team



Vinayak Deshpande
CMD & Partner (UK)



Ashmi Davda
Counsellor



Nanda Satpute
Trainer (Scotland)



Kanchan Kulkarni
Trainer (Jersey, UK)



Priyanka Sakhardande
Trainer (Mumbai)



Hemal Thakker
Mentor & Partner (UK)



Sheetal Joshi
Director (India)



Deepti Poojary
Trainer (Pune)



Lavita Singhanian
Trainer (Mumbai)



Snigdha Pain
Trainer (Kolkata)

About eduQual



- Awarding Organisation based in the UK
- It is a body with courses endorsed by 'Training Qualifications UK' (TQUK), an Ofqual-recognised awarding organisation
- Offer qualifications that are SCQF credit-rated by the Scottish Qualifications Authority (SQA)
- In addition, many UK universities allow holders of EduQual Diplomas to join the latter stages of their Bachelors and Masters degree programmes

About eduQual



- Certified courses of many leading institutes
 - London School of Marketing
 - Thadomal Sahani Centre for Management (Mumbai)
 - Online Education Hub
 - Premier Academy of Learning
- Sankhya Analytics, LLP (UK) has partnered with Eduqual to provide Data Science learning to aspiring students and help achieve international certification

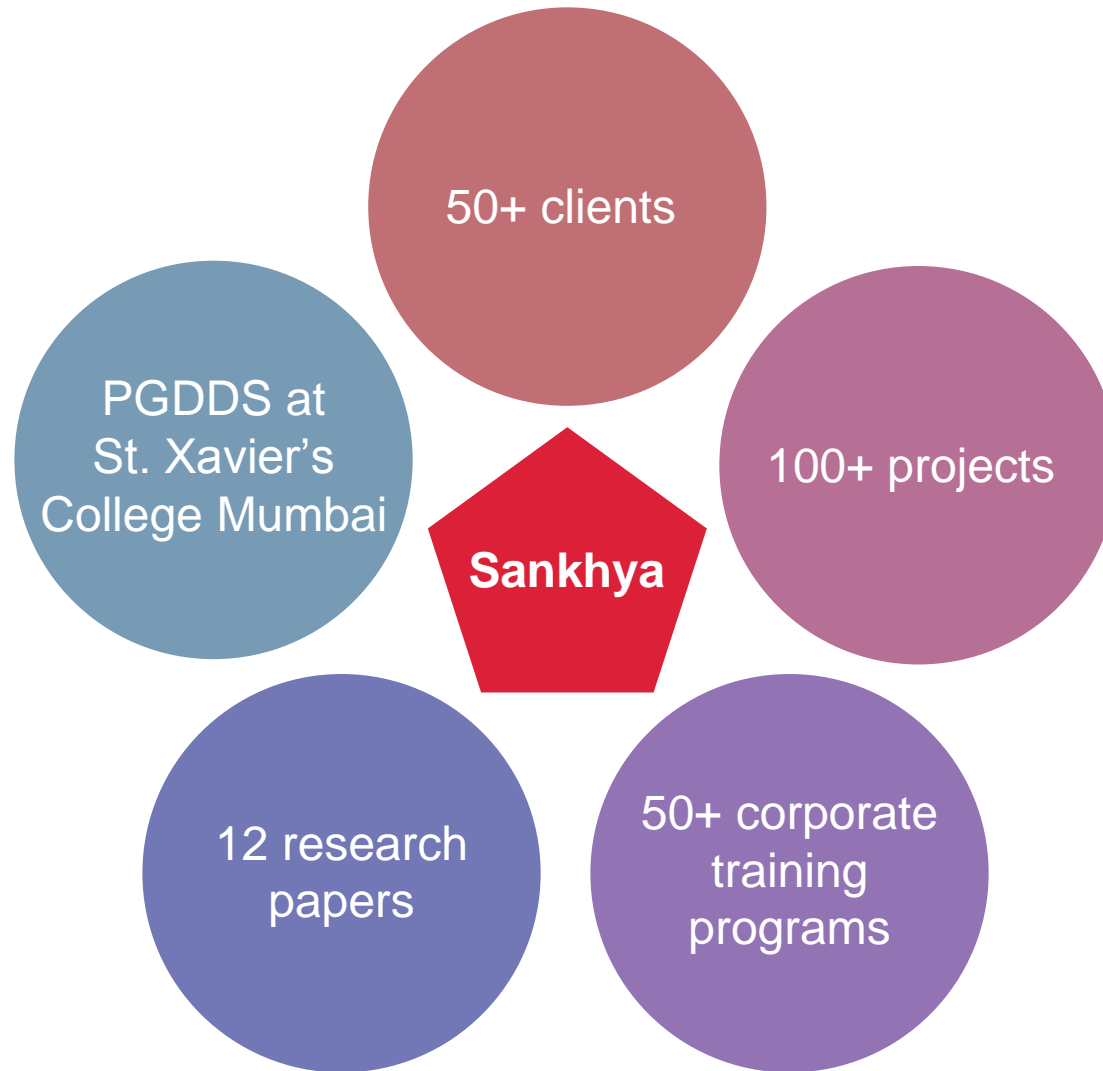
About Sankhya



- We are a knowledge process outsourcing firm based in Mumbai and London, providing training and consulting in the field of Advanced Analytics
- Our vision is to empower our Data Science students to leverage the power of data and make data-driven decisions in business and research
- Our promoter team has a cumulative experience of 40+ years
- We offer a high level of expertise in the subjects of Statistics coupled with efficiency in R, SAS and SPSS
- Our clientele include reputed organisations across industry verticals: BFSI, FMCG and Pharmaceutical



Sankhya's Legacy





Sankhya's Esteemed Clientele



Contact Us

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