HR Analytics

LEARNING OBJECTIVE:

- Learn to combine, clean and analyze large HR datasets using Excel and Power BI.
- Learn to calculate the ROI of HR policies and activities.
- Learn to conduct basic strategic workforce planning (SWP), succession and scenario planning within your organization.
- Present data-driven insights to key stakeholders by building custom HR dashboards in Power BI.
- Gain hands-on experience working with and analyzing HR data.
- Understand the dynamics of absenteeism and calculate the direct cost involved.

MODULE 1: STRATEGIC WORKFORCE PLANNING

01: Strategic Workforce Planning

- Explain the importance of Strategic Workforce Planning
- Understand the key workforce characteristics
- Describe the basic guidelines in HR analytics

▶ 02: Strategy & Data Driven Decision Making

- Analyse the link between the business and HR
- Utilize the Business Model Canvas
- Describe the role of HR within the organization

▶ 03: Measuring Performance & Potential

- Explain the purpose of HR data/metrics
- Understand the key workforce characteristics
- Describe the basic guidelines in HR analytics

▶ Bonus: The Workforce Crisis in 2030

Describe how simulations work in scenario planning

- Understand how technology impacts the workforce
- Explain how we can prevent a future workforce crisis

MODULE 2: STRATEGIC WORKFORCE PLANNING PART II

04: The HR3P Model in Excel - Part I

- Create a visualization of the HR3P model
- Use the random function to aid in visualization
- Understand how to select top talents in the workforce

▶ 05: The HR3P Model in Excel - Part II

- Understand the meaning behind skewed performance
- Utilize PivotTables to generate new HR3P insights
- Usage of colors to visualize PivotTables

▶ 06: The HR3P Model in Excel - Part III

- Create a visualization of succession planning
- Use Potential and Performance in succession planning
- Use the HR3P model in succession planning

▶ 07: Creating a Workforce Map

- Explain the importance of HR reporting
- Describe what is meant by the quantity of employees
- Understand the key variables in HR dashboards

▶ 08: Workforce Scenario Analysis

- Explain the importance of scenario planning
- Understand the ID-principle in scenario planning
- · Describe the different steps in scenario planning

MODULE 3: LINKING HUMAN RESOURCES TO ROI

▶ 09: Financial HR - Part I

- Explain how to quantify the workforce
- Understand how to calculate ROI
- Describe activity-based costing

▶ 10: Financial HR - Part II

- Understand the ROI of L&D
- Explain how to visualize the payback period
- Describe how to calculate a payback period

▶ 11: Costs of Absenteeism

- Calculate the direct costs of absenteeism
- Understand the dynamics behind absenteeism
- Calculate the indirect costs of absenteeism

▶ 12: Calculating ROI

- Understand the different Utility Models
- Calculate the ROI of selection procedures
- Estimate project benefits using literature and testing

► Bonus: Explainer Cost Analysis Tool

- Understand what capital expenditure entails
- Describe the different types of costs in HR projects
- Use the Cost Analysis Tool to estimate HR projects cost

MODULE 4: DATA ANALYSIS IN EXCEL

▶ 13: HR Analytics in Excel - Part I

- Understand how to pick a problem that is relevant
- Describe how to select relevant data
- Explain how you can measure an outcome

▶ 14: HR Analytics in Excel – Part II

- Understand how to check data for errors
- Describe how to create a new variable from existing data
- · Comprehend how to clean HR data

▶ 15: HR Analytics in Excel - Part III

- Understand how to speed up your Excel worksheets
- Utilize the VLookup functionality
- Comprehend how to create new research questions based on the data

▶ 16: HR Analytics in Excel - IV

- Understand how to filter based on activity levels
- Utilize trend lines in charts
- Learn how to answer research questions

▶ 17: Statistics in Excel - Part I

- Comprehend the maturity levels in HR analytics
- Explain the wall of Boudreau
- Understand the complexity between causality and correlation

▶ 18: Statistics in Excel - Part II

- Explain the importance of scenario planning
- Understand the ID-principle in scenario planning
- Describe the different steps in scenario planning

▶ 19: Statistics in Excel - Part III

- Perform a T-test
- Perform a correlation analysis in Excel
- Interpret the outcomes of different analyses in Excel

▶ Bonus: Efficient & Inefficient Metrics

Describe the analytics ascendency model

- Understand when metrics are inefficient
- Explain why efficient metrics should be automated

MODULE 5: DASHBOARDING IN EXCEL

▶ 20: Tables in Excel - Advanced

- Explain how to create a table in Excel
- Redesign tables for visualization purposes
- Describe the basic guidelines in HR analytics

▶ 21: Building your First Dashboard

- Utilize PowerPivot Tables
- Create your first dashboard
- Understand how you can use slicers to filter data

▶ 22: Dates in Pivot Tables & Dashboards

- Create a date of birth variable in Excel
- Understand "slice & dice"
- Describe the limitations of dashboards in Excel

MODULE 6: CONNECTING HR DATA USING POWER BI

► 23: Data Structures

- Transform different dates into a singular format
- Utilize the VLookup function to merge HR data
- Combine PivotTables and visualization techniques

▶ 24: Connecting Transactional Data

- Understand how transactional data works in Power BI
- Connect transactional data with filters
- Create different PivotTables utilizing Power BI

▶ 25: Structuring and Modelling Data



- Create an HR data model
- Structure the HR data model
- Prepare the HR data model for analysis

▶ Bonus: Data Editing in Power BI

- Learn how to clean and transform your data with the Query Editor
- Understand more advanced data sources and transformation
- Clean irregularly formatted data

▶ Bonus: The Beauty of Data Visualization

- Explain why design is important in reporting
- Describe how to put insights into perspective
- Describe the basic principles of information design

MODULE 7: VISUALIZING AND PUBLISHING HR DATA USING POWER BI

▶ 26: Visualizing HR Data - Part I

- Explain what steps you should take when designing a dashboard
- Understand how to show descriptive statistics in PowerBi
- Utilize the most prevalent dashboard elements

▶ 27: Visualizing HR Data - Part II

- Build a HR dashboard in Power BI
- Understand key design principles in design
- Ultilize color in Power BI

▶ 28: Publishing HR Reports Using Power BI

- Understand how to share your dashboard with others
- Learn how to use your HR dashboard in Phone View
- Describe how to embed your HR report in e-mails

▶ Bonus: Data Visualization in Power BI



- Learn how to visualize Matrixes and Tables
- Understand gauges and single-number cards
- Visualize hierarchies and charts