

# Employee Data Analytics Using Excel



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# Agenda

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# Introduction

Here are three introduction lines:

- "Unlock workforce insights with Employee Data Analytics in Excel."
- Make data-driven decisions by tracking key metrics, analyzing performance, and visualizing trends.
- Optimize talent management, retention, and productivity using Excel's powerful analytical tools."



# Usage Of Excel

Here are some common uses of Excel:



## Data Management:\*

- 1. Data entry and storage
- 2. Data analysis and filtering
- 3. Pivot tables and summarization

## Financial Calculations:\*

- 1. Budgeting and forecasting
- 2. Financial modeling and planning
- 3. Investment tracking

## Reporting and Visualization:\*

- 1. Charts and graphs
- 2. Dashboards and scorecards
- 3. Pivot charts and tables

## Productivity

- 1. Data entry and storage
- 2. Data analysis and filtering
- 3. Pivot tables and summarization

## Statistical Analysis:\*

- 1. Regression analysis
- 2. Trend analysis
- 3. Hypothesis testing

## Business Intelligence:\*

- 1. Data visualization
- 2. Business forecasting
- 3. Predictive analytics

## Education and Research:\*

- 1. Data collection and analysis
- 2. Survey and questionnaire analysis
- 3. Research data management

So these are the some of the usage about the Excel

# Definition Excel

Microsoft Excel is a spreadsheet software program that allows users to:

Store, organize, and analyze data

Perform calculations and modeling

Create charts, graphs, and reports

A powerful tool for data management, financial analysis, and visualization.



# Types of Employees Data in Excel

Here are common types of employee data tracked in Excel:



## Personal Details:

- 1. Employee ID
- 2. Name
- 3. Date of Birth
- 4. Address
- 5. Contact Information

## Performance Metrics:

- 1. Performance Ratings
- 2. Goals and Objectives
- 3. Training Completed
- 4. Attendance Record
- 5. Evaluations

## Performance Metrics:

- 1. Promotions
- 2. Transfers
- 3. Training and Development Programs
- 4. Certifications
- 5. Education History

## Separation/ Retirement:

- 1. Date of Departure
- 2. Reason for Leaving
- 3. Separation Type
- 4. Final Pay
- 5. Benefits Continuation

## Job Information:

- 1. Job Title
- 2. Department
- 3. Manager
- 4. Job Description
- 5. Date of Hire

## Compensation and Benefits:

- 1. Salary
- 2. Bonus
- 3. Benefits (e.g., health, retirement)
- 4. Leave Balance
- 5. Compensation History

## Work Schedule:

- 1. Work Hours
- 2. Shift Schedule
- 3. Time-Off Requests
- 4. Vacation Balance
- 5. Overtime Hours

## Other:

- 1. Emergency Contact Information
- 2. Diversity and Inclusion Data
- 3. Employee Engagement Survey Results
- 4. Disciplinary Actions
- 5. Recognition and Awards

# EXCEL Data preparation techniques

Here are essential data preparation techniques in Excel:

Cleaning

Validatio  
n

Transfor  
-mation

Standar  
-dization

Filtering

Sortin  
g

Groupin  
g

Mergin  
g

Power  
query

Mastering these techniques will help you efficiently prepare and analyze data in Excel.



# Data Analytics Techniques

Here are common data analytics techniques in Excel:

- ◆ Descriptive Analytics
- ◆ Inferential Analytics
- ◆ Predictive Analytics
- ◆ Data Mining
- ◆ Statistical Techniques
- ◆ Excel Functions
- ◆ Power BI and Add-ins
- ◆ Best Practices



# Valuation Of Excel

Valuation in Excel: Calculating asset/investment value using financial formulas/functions:

PV, FV, NPV, IRR, XNPV

Determines investment worth, business value, asset value, stock price & loan value.

## Financial Valuation

1. Present Value (PV): =PV(rate,nper,pmt,fv)
2. Future Value (FV): =FV(rate,nper,pmt,pv)
3. Net Present Value (NPV): =NPV(rate,values)
4. Internal Rate of Return (IRR): =IRR(values)
5. Discounted Cash Flow (DCF): =PV(rate,nper,pmt,fv)

## Stock valuation

1. Dividend Discount Model (DDM): =PV(rate,nper,pmt,fv)
2. Gordon Growth Model: =PV(rate,nper,pmt,fv)/ (1+growth)
3. Price-to-Earnings (P/E) Ratio: =Market Price / Earnings

## Business Valuation

1. Enterprise Value (EV): =Market Cap + Debt - Cash
2. Equity Value: =Market Cap
3. Debt-to-Equity Ratio: =Total Debt / Totality

## Valuation Matrices

1. Return on Investment (ROI): =Gain / Cost
2. Return on Equity (ROE): =Net Income / Total Equity
3. Debt Service Coverage Ratio (DSCR): =EBIT / Debt Service

## Excel Functions

1. XNPV (discounted cash flows)
2. XIRR (internal rate of return)
3. PMT (loan payments)
4. IPMT (interest portion of loan payments)
5. PPMT (principal portion of loan payments)

## Shortcut

1. FV: Ctrl+Shift+F
2. PV: Ctrl+Shift+P
3. NPV: Ctrl+Shift+N

# Conclusion About Excel

Microsoft Excel is a powerful tool for data management, analysis, and visualization. With its extensive range of formulas, functions, and features, Excel enables users to:

- Manage and analyze large datasets
- Create insightful charts and reports
- Perform financial calculations and valuations (PV, FV, NPV, IRR, XNPV)
  - Automate tasks and workflows
  - Make informed business decisions

Its capabilities in data preparation (cleaning, transformation, validation), data analytics (descriptive, inferential, predictive), and valuation (financial, stock, business) make Excel an indispensable tool for professionals, analysts, and decision-makers.

Thank you