# **Complete Excel Tutorial: Business Development Analyst Skills Showcase**

Here's a comprehensive step-by-step Excel tutorial to analyze the datasets and demonstrate your skills for the Etihad Business Development Analyst role.

## **📋 Setup & Data Preparation**

### **Step 1: Import and Organize Data**

1. Open Excel and create a new workbook
2. Import the datasets:
   * Go to Data > Get Data > From File > From Workbook
   * Select the generated Excel file
   * Import all 4 sheets: Sales\_Performance, Sales\_Actions\_Log, Market\_Intelligence, Sales\_Planning
3. Create a Dashboard sheet for your main analysis

## **📊 PART 1: RASK ANALYSIS & REVENUE MAXIMIZATION**

### **Step 2: Create RASK Performance Dashboard**

#### **2.1 Pivot Table Analysis**

excel

1. Select Sales\_Performance data

2. Insert > PivotTable > New Worksheet

3. Build this structure:

- ROWS: Market, Segment

- COLUMNS: Date (Group by Years and Months)

- VALUES: RASK (Average), Revenue (Sum)

4. Name this sheet "RASK\_Analysis"

#### **2.2 Conditional Formatting for Opportunities**

excel

1. In the RASK pivot table:

- Select the RASK values

- Home > Conditional Formatting > Color Scales

- Choose Red-Yellow-Green scale

2. Add Data Bars for Revenue column:

- Conditional Formatting > Data Bars > Gradient Fill

#### **2.3 Create RASK Trend Charts**

excel

1. From the pivot table:

- Insert > Line Chart

- Show RASK trends by Market over time

2. Add a Combo Chart:

- Primary Axis: RASK (Line)

- Secondary Axis: Revenue (Column)

### **Step 3: Revenue Opportunity Identification**

#### **3.1 Calculate Performance Gaps**

excel

In Sales\_Performance sheet, add columns:

1. "RASK\_Gap" formula:

=([@RASK] - AVERAGEIFS(RASK, Market, [@Market])) / AVERAGEIFS(RASK, Market, [@Market])

2. "Revenue\_Opportunity" formula:

=IF([@RASK\_Gap] < -0.1, [@Revenue] \* ABS([@RASK\_Gap]), 0)

3. "Performance\_Status" formula:

=IF([@RASK\_Gap] > 0.05, "Above Target", IF([@RASK\_Gap] < -0.05, "Below Target", "On Target"))

#### **3.2 Create Opportunity Dashboard**

excel

1. Insert > PivotTable from Sales\_Performance

2. Structure:

- FILTERS: Performance\_Status

- ROWS: Market, Channel

- VALUES: Revenue\_Opportunity (Sum), Count of Records

3. Add Slicers for Segment and Date

## **🌍 PART 2: MARKET & COMPETITION ANALYSIS**

### **Step 4: Competitive Benchmarking**

#### **4.1 Competitor Analysis Table**

excel

1. Create new sheet "Competitive\_Analysis"

2. Use these formulas to extract competitor data:

Market Share by Competitor:

=SUMIFS(Market\_Intelligence[Market\_Share],

Market\_Intelligence[Competitor], A2,

Market\_Intelligence[Market], B2)

Average Competitor Fare:

=AVERAGEIFS(Market\_Intelligence[Competitor\_Fare],

Market\_Intelligence[Competitor], A2,

Market\_Intelligence[Market], B2)

#### **4.2 Market Share Dashboard**

excel

1. Insert > PivotTable from Market\_Intelligence

2. Structure:

- ROWS: Market, Month

- COLUMNS: Competitor

- VALUES: Market\_Share (Average), Competitor\_Fare (Average)

3. Create a Stacked Column Chart showing market share distribution

#### **4.3 Sparklines for Trend Analysis**

excel

1. Create a table with Markets as rows and Months as columns

2. For each market, insert sparklines:

- Select empty cell next to market name

- Insert > Sparklines > Line

- Select the 12 monthly data points

- Show markers for high/low points

### **Step 5: Economic Correlation Analysis**

#### **5.1 Correlation Matrix**

excel

1. Create correlation table between economic indicators and performance:

=CORREL(

FILTER(Market\_Intelligence[Economic\_Indicator],

Market\_Intelligence[Market]=$A2),

FILTER(Sales\_Performance[Revenue],

Sales\_Performance[Market]=$A2)

)

2. Use Conditional Formatting > Color Scales to highlight strong correlations

## **💰 PART 3: SALES STRATEGY EFFECTIVENESS**

### **Step 6: ROI Analysis**

#### **6.1 Action Impact Dashboard**

excel

1. Create PivotTable from Sales\_Actions\_Log:

- ROWS: Action\_Type, Market

- VALUES: ROI (Average), Actual\_Revenue\_Impact\_Percent (Average), Incremental\_Revenue (Sum)

2. Calculate Efficiency Score:

=([@[Incremental\_Revenue]] / [@[Cost\_of\_Action]]) \* [@[Actual\_Revenue\_Impact\_Percent]]

#### **6.2 What-If Analysis for Future Actions**

excel

1. Set up scenario table:

- Action Type | Expected Impact | Estimated Cost | Expected ROI

2. Use Data > What-If Analysis > Data Tables

- Row Input: Different cost scenarios

- Column Input: Different impact scenarios

- Formula: = (Impact \* Baseline\_Revenue - Cost) / Cost

#### **6.3 Waterfall Chart for Revenue Impact**

excel

1. Create data for waterfall:

- Starting Revenue

- Each action's incremental revenue (positive)

- Cost of actions (negative)

- Ending Revenue

2. Insert > Waterfall Chart

- Format positive values as green, negative as red

## **📈 PART 4: ADVANCED DATA MODELING**

### **Step 7: Power Query Data Integration**

#### **7.1 Combine Multiple Data Sources**

excel

1. Data > Get Data > Combine Queries > Merge

2. Merge Sales\_Performance with Market\_Intelligence:

- Primary Key: Market, Date

- Join Kind: Left Outer

3. Create calculated columns:

- "Revenue\_per\_Competitor\_Capacity" = [Revenue] / [Competitor\_Capacity]

- "Fare\_Premium" = [Yield] / [Competitor\_Fare]

#### **7.2 Create Calendar Table**

excel

1. Create new table with dates:

- Date | Year | Quarter | Month | Weekday | IsHoliday

2. Use formula: =YEAR([@Date]) etc.

3. Create relationships with all date-based tables

### **Step 8: Power Pivot Data Model**

#### **8.1 Set Up Data Model**

excel

1. Power Pivot > Add to Data Model for all tables

2. Create relationships:

- Sales\_Performance[Market] ↔ Market\_Intelligence[Market]

- Sales\_Performance[Date] ↔ Calendar[Date]

3. Create Measures:

- Total Revenue: =SUM(Sales\_Performance[Revenue])

- Average RASK: =AVERAGE(Sales\_Performance[RASK])

- YoY Growth: =[Total Revenue] - CALCULATE([Total Revenue], SAMEPERIODLASTYEAR(Calendar[Date]))

#### **8.2 DAX Calculations for Advanced Metrics**

excel

1. Market Share Growth:

Market Share Growth =

VAR CurrentShare = [Current Market Share]

VAR PreviousShare = CALCULATE([Current Market Share], SAMEPERIODLASTYEAR(Calendar[Date]))

RETURN CurrentShare - PreviousShare

2. Rolling Average RASK (3 months):

3M Avg RASK =

AVERAGEX(

DATESINPERIOD(Calendar[Date], LASTDATE(Calendar[Date]), -3, MONTH),

[Average RASK]

)

## **🎯 PART 5: EXECUTIVE DASHBOARD**

### **Step 9: Create Comprehensive Dashboard**

#### **9.1 Key Performance Indicators (KPIs)**

excel

Create KPI cards using these formulas:

1. Total Revenue: =SUM(Sales\_Performance[Revenue])

2. Average RASK: =AVERAGE(Sales\_Performance[RASK])

3. Market Share: =AVERAGE(Market\_Intelligence[Market\_Share])

4. Action ROI: =AVERAGE(Sales\_Actions\_Log[ROI])

5. Forecast Accuracy: =AVERAGE(Sales\_Planning[Forecast\_Accuracy])

Format with:

- Conditional formatting for above/below target

- Trend arrows using Wingdings symbols

#### **9.2 Interactive Dashboard Elements**

excel

1. Insert Slicers for:

- Market

- Date Range

- Segment

- Channel

2. Connect all slicers to all pivot tables and charts

3. Create Timeline control:

- Insert > Filters > Timeline

- Connect to Date field

#### **9.3 Dynamic Charts and Visualizations**

excel

1. Performance by Market (Map Chart):

- Insert > Maps > Filled Map

- Use Market and Revenue data

2. RASK Trend Analysis:

- Combo chart with RASK (Line) and Revenue (Column)

3. Action Impact Matrix:

- Scatter plot with ROI vs Revenue Impact

- Bubble size = Incremental Revenue

### **Step 10: Automated Reporting Features**

#### **10.1 Data Validation for Scenario Analysis**

excel

1. Create dropdowns for scenario selection:

- Data > Data Validation > List

- Source: Optimistic, Base, Conservative

2. Create scenario table with different assumptions

3. Use CHOOSE/MATCH formulas to switch scenarios:

=CHOOSE(MATCH(ScenarioCell, ScenarioList, 0),

OptimisticValue,

BaseValue,

ConservativeValue)

#### **10.2 Macro for Automated Reporting**

excel

1. Developer > Record Macro

2. Name: "RefreshDashboard"

3. Steps to record:

- Refresh All Queries

- Update All Pivot Tables

- Recalculate Workbook

4. Assign macro to a button on dashboard

## **🔧 BONUS: Advanced Excel Features**

### **Step 11: Advanced Formulas Demonstration**

#### **11.1 XLOOKUP for Data Integration**

excel

= XLOOKUP(

[@Market]&TEXT([@Date],"YYYY-MM"),

Market\_Intelligence[Market]&TEXT(Market\_Intelligence[Month],"YYYY-MM"),

Market\_Intelligence[Competitor\_Fare],

"No Data"

)

#### **11.2 FILTER Function for Dynamic Analysis**

excel

= FILTER(

Sales\_Performance,

(Sales\_Performance[Market]=SelectedMarket) \*

(Sales\_Performance[RASK] < RASK\_Target) \*

(Sales\_Performance[Date] >= START\_DATE)

)

#### **11.3 LET Function for Complex Calculations**

excel

= LET(

TotalRevenue, SUM(Sales\_Performance[Revenue]),

TotalCost, SUM(Sales\_Actions\_Log[Cost\_of\_Action]),

IncrementalRev, SUM(Sales\_Actions\_Log[Incremental\_Revenue]),

(IncrementalRev - TotalCost) / TotalCost

)

## **📋 Final Dashboard Structure**

Your completed Excel file should have these sheets:

1. Dashboard - Main executive summary with KPIs
2. RASK\_Analysis - Revenue per available seat kilometer deep dive
3. Market\_Intelligence - Competition and market share analysis
4. Sales\_Effectiveness - ROI and action impact analysis
5. Data\_Model - Power Pivot relationships and measures
6. Scenario\_Analysis - What-if modeling for future planning

## **🎯 Key Skills Demonstrated**

✅ Advanced Excel: PivotTables, Power Query, DAX, Data Modeling  
✅ Business Acumen: RASK optimization, revenue maximization, competitive analysis  
✅ Analytical Skills: Statistical analysis, trend identification, opportunity spotting  
✅ Communication: Clear dashboards, executive summaries, data visualization  
✅ Strategic Thinking: Scenario planning, ROI analysis, market intelligence

This comprehensive tutorial will help you create an impressive Excel portfolio that directly addresses the Etihad Business Development Analyst job requirements!