



The analysis of large data volume demands the use of modern tools in order that the analysis is done in a very effective way. People from the Statistics, IT, Risk Management and Control Departments as well as Financial Controllers and Analysts need to gain new skills in order to be able to respond to the new demands for controlling, monitoring and assessment of risks in Cyprus.

PowerPivot is a new ADD-IN in Microsoft Excel 2010 & 2013. PowerPivot allows the user to connect to a database and use its related tables to analyze the data. The user may also create new fields in the tables in order to calculate new data based on existing data in the tables. It uses a new programming language (DAX) which is quite easy to use especially for experienced users of Excel Formulae and Functions.

The PowerPivot Add in is a revolution in data analysis since (compared

with "traditional" Pivot Tables) it allows the use of many related tables for data analysis and it also provides fast processing due to the use of In-Memorystorage which is much faster.

Analyzing data using PowerPivot and programming in DAX

Code: ED20B12

Duration: 21 hours

Start Date: Tuesday, 13/10/2020

Participants Profile: The course is suitable for candidates who deal with data analysis, programmer, people from Information Technology department, Financial Controllers and Accountants.

Prerequisites for participation: Participants should have a very good knowledge of Excel and especially of Pivot Tables and Formulae and Functions. Prior to participating in this course, participants are encouraged to take up an Excel Expert course.

Training Language: Greek

Training Material: The training manual is in the English Language.

Course Objectives:

Upon completion the participants will be able to use the Power Pivot tool to:

- Create Data Models
- Import and manipulate data
- Create and edit relationships
- Create Reports
- Graph Data
- Use DAX Functions
- Build Hierarchies

Τα προγράμματα εγκρίθηκαν από την ΑνΑΔ. Οι επιχειρήσεις που συμμετέχουν με εργοδοτούμενούς τους, οι οποίοι ικανοποιούν τα κριτήρια της ΑνΑΔ, θα τύχουν της σχετικής επιχορήγησης.







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Venue: WEBINAR

Participation Cost

The cost incudes the course notes and certificate.

Dates and Times:

Dates	Times
Tuesday, 13/10/2020	08.15-16.00
Tuesday, 20/10/2020	08.15-16.00
Friday, 23/10/2020	08.15-16.00

	Total Cost	HRDA Subsidy	Net Cost
For participants enti- tled the HRDA subsi- dy	700 euro	357 euro	343 euro
For Unemployed or participants not entitled the HRDA sub-	Please Conta	ct us	

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Analyzing data using PowerPivot and programming in DAX

Module 1. Introduction to PowerPivot

Using a PivotTable on an Excel table

Using PowerPivot in Microsoft Office 2013

- Adding information to the Excel table
- Creating a data model with many tables
- Understanding relationships
- Understanding the data model
- · Querying the data model

The PowerPivot add-In

Using OLAP tools and converting to formulas

Understanding PowerPivot for Excel 2013

Creating a Power View report

Module 2. Using the unique features of PowerPivot

Loading data from external sources

Creating a PowerPivot PivotTable

Using the DAX language

- · Creating a calculated column
- Creating a calculated field
- Computing complex aggregations like Distinct Count
- Refreshing the PowerPivot data model

Module 3. Introducing DAX

Understanding DAX calculations

- DAX syntax
- DAX data types
- INSIDE DAX DATA TYPES

- DAX values
- INTELLISENSE

Understanding calculated columns and fields

- Calculated columns
- Calculated fields
- DIFFERENCES BETWEEN CALCULATED COLUMNS AND CALCULATED FIELDS

Choosing between calculated columns and measures

• CROSS-REFERENCES

Handling errors in DAX expressions

- Conversion errors
- Arithmetical operations
- Error or Missing Values
- EMPTY VALUES IN EXCEL
- Intercepting errors

Formatting DAX code

HELP WITH FORMATTING DAX

Common DAX functions

- Aggregate functions
- Logical functions
- Information functions
- Mathematical functions
- Text functions
- Conversion functions
- Date and time functions
- Relational functions

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Using basic DAX functions

Module 4. Understanding data models

Understanding the basics of data modelling

- Producing a report without a data model
- Building a data model

More about relationships

Understanding normalization and denormalization

Denormalizing within SQL queries

- The PowerPivot query designer
- When to denormalize tables

Understanding over-denormalization

Understanding OLTP and data marts

- Querying the OLTP database
- Data marts, facts, and dimensions
- Star schemas
- Which database is the best to query?

Using advanced relationships

- Connecting Excel to a SharePoint Excel data Model
- Creating a Power View report
- Managing the PowerPivot data refresh

Module 5. Loading data

Understanding data sources

Loading from a database

- Loading from a list of tables
- Loading relationships

- Selecting related tables
- Loading from a SQL query
- Loading from views

Opening existing connections

Loading from Access

Loading from SQL Server Analysis Services

- Using the MDX editor
- Handling of keys in the OLAP cube
- Loading from a tabular database

Loading from SharePoint

Using linked tables

Loading from Excel files

Loading from text files

Loading from the Clipboard

Loading from a report

Loading from a data feed

Loading from Windows Azure Marketplace

Suggest related data

Refreshing connections

Module 6. Understanding evaluation contexts

Introduction to evaluation contexts

- Understanding the row context
- THERE ARE ALWAYS TWO CONTEXTS

Testing your evaluation context understanding

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- Using SUM in a calculated column
- Using fields in a calculated field

Creating a row context with iterators

Understanding FILTER, ALL, and context Interactions

Working with many tables

- Row contexts and relationships
- Filter context and relationships
- Introducing VALUES
- Introducing ISFILTERED and ISCROSSFILTERED

Evaluation contexts recap

Creating a parameter table

Module 7. Understanding CALCULATE

Why is CALCULATE needed?

CALCULATE examples

- Filtering a single column
- Filtering with complex conditions

Using CALCULATE inside a row context

Understanding circular dependencies

CALCULATE rules

Understanding ALLSELECTED

Module 8. Using hierarchies

Understanding hierarchies

- When to build hierarchies
- Building hierarchies
- · Creating hierarchies on multiple tables

Performing calculations using hierarchies

Using parent/child hierarchies

Module 9. Using Power View

What is Power View?

Power View basics

- Using the Filters pane
- Decorating your report

Understanding table, matrix, and cards

- Using the matrix visualization
- Using the card visualization
- Using a table as a slicer

Using charts

- Using the line chart
- Using the pie chart

Understanding drill-down

Using tiles

Understanding multipliers

Using Power View effectively

- Using the scatter chart
- Using maps



A department of

EDIT-C

Vocational & Professional Training Provider

Registration Form

Seminar Title: ED20B12: Analysing Data Using PowerPivot and Programming in DAX

Start Date: Tuesday, 13/10/2020

			•			
A. Organization's	details (if ap	oplicable)				
Company/Organizat	ion:		Size:	□Small	□Medium	□Large
Economic Activity:			Telephone:		Fax:	
Address:			Postal Code:			
Person responsible f	or the		Email:			
registration:			Direct Telephone:			
B. Participant's de	tails (1)					
□Mr □Ms	Name		Surname			
Title/ Job Position:			Email:			
Job description:			Telephone/Mobile:		Fax:	
Reasons for particip seminar:						
Please fill this section □Fasting □Vegetar		special requests for the lunch provice	led (only in the case	that lunch is ir	icluded)	
☐ They will particip	ate to the ser	minar more than one participants (In	this case please fill	in the second p	page as well)	
C. Participation		NAR IS PREPAID (at least three	days before the st	art of the com	inar)	
Please invoice □The		•	Number (if applicab		illiai <i>)</i>	
		luman Resources Development Author	`	•	€ 343	
		·	, , ,		€ 700	
Pol participants not entitled the numan resources bevelopment Authority subsidy (TRDA).						
Cheques must be issued to EDITC Ltd and payment can be made directly through deposit to the account of the company Account Number : 115-01-068696-01						
IBAN:CY19 0050 0115 0001 1501 0686 9601 SWIFT/BIC:HEBACY2N						
D. Terms and c	onditions	for participation on EDITO	seminars			
accept any régistration	ons received in	for participation in the seminars at least 5 less than 5 working days before the start	of the training program			
2. Written cancellations received 5 working days before the start of the training program are accepted and in the case where a payment has been made by the client, the full amount is reimbursed to the client. Cancellations that do not meet the above term are invoiced. The client may replace the participant						
(s) provided that they meet the criteria for participation on this program. 3. The company has the right to cancel or postpone a training program up to one day before the start date of the program. All prepayments are returned to clients.						
4. All registrations are strictly prepaid except credit customers. EDITC will not allow the entry of participants in the class unless their financial obligations have been settled.						
5. EDITC will inform the client upon receipt of the application form. Written confirmation for the implementation of the training program will be sent within 3-5 days before the start date of the seminar. In exceptional cases written confirmation may be sent one day before the start of the program.						
Participants are encouraged to contact the company in case they did not receive the confirmation. 6. Participants with less than 75% attendance cannot be subsidized by the HRDA and in this case the participants (or their company) will have to pay the						
amount of the subsidy (in addition to their own payment amount). 7. In case of subsidized programs by the HRDA all the required forms of HRDA must be sent to EDITC before the start of the training program. EDITC will not allow the entry of participants in the class unless the HRDA forms have been submitted to EDITC. 8. Certificates of participation will be given to participants after the completion of the course provided that their financial obligations and obligations regarding HRDA forms are settled. Otherwise certificates will be mailed as soon as the above obligations are settled.						
□We agree with the above terms and conditions						
Signature:		Date:				
-						
Stamp (in case of co	mpany):					





Registration Form

B. Participant's De	B. Participant's Details (2)					
□Mr □Ms	Name		Surname			
Title/ Job Position:			Email:			
Job description:			Telephone/Mobile:		Fax:	
Reasons for participating on the seminar:						
Please fill this section if there are special requests for the lunch provided (only in the case that lunch is included) □Fasting □Vegetarian □Vegan						
B. Participant's De	tails (3)					
□Mr □Ms	Name		Surname			
Title/ Job Position:		<u> </u>	Email:			
Job description:			Telephone/Mobile:		Fax:	
Reasons for participating on the seminar:						
Please fill this section if there are special requests for the lunch provided (only in the case that lunch is included) □Fasting □Vegetarian □Vegan						
B. Participant's De	etails (4)		l			
□Mr □Ms	Name		Surname			
Title/ Job Position:			Email:			
Job description:			Telephone/Mobile:		Fax:	
Reasons for participating on the seminar:						
Please fill this section if there are special requests for the lunch provided (only in the case that lunch is included) □Fasting □Vegetarian □Vegan						
B. Participant's De	tails (5)					
□Mr □Ms	Name		Surname			
Title/ Job Position:			Email:			
Job description:			Telephone/Mobile:		Fax:	
Reasons for participating on the seminar:						
Please fill this section □Fasting □Vegetari		special requests for the lunch provid	ed (only in the case	that lunch is in	cluded)	
□We agree with the	e above tern	ns and conditions				
Signature:		Date:				
Stamp (in case of cor	mpany):					