# BII WORLD
Engage • Enlighten • Empower

# Modelling with Microsoft 365 & Dynamic Arrays

## The modern angle in Dashboard and Data Visualisation

20 Hours Virtual Learning Experience

09$^{th}$ - 13$^{th}$ September 2024

12:00 - 16:00  Jamaica Standard Time

www.biiworld.com

# COURSE OVERVIEW:

Discover how to "tame" your data and make it work for you!  Learn to synthesise and summarise information into a logical framework. Gain key concepts in reporting and data visualisation best practice for presenting data graphically using tables, charts, reports and presentations.

## Prerequisites

The course material includes extensive use of Excel and participants will gain the maximum benefit from this course if they are already competent spreadsheet users. It is designed for users who do use Excel on a regular basis and are comfortable with using its tools and functions.

At minimum, it is assumed that participants will know how to:

- Navigate confidently in Excel
- Create and use advanced Excel tools and functions

Prior knowledge of Power Pivot, Power Query or Power BI is not required

## Methodology

Many of us struggle to make sense of all the data that is available in this information age.  With such a deluge of reports and statistics which don't mean anything or can't be made sense of, it's no wonder that data is often misinterpreted or not communicated at all.  This course will help you understand how to "tame" your data and make it work for you!  Learn how to synthesise information into a logical framework, summarise it into a meaningful format, and then display the summary into easy-to-read tables and graphs.  Covering dashboard reporting, balanced scorecards, visual design of charts and tables, we will also discuss the new charting and analysis features of Excel 365 and Power BI. **Understanding how Modern Excel tools can help analyse data and create dashboards to communicate your message is a critical skill for Excel users today.**

## What is Modern Excel?

Any version of Excel released from Excel 2010 onward is referred to as "Modern Excel" because it introduced new tools such as **Power Pivot, Power Query and Power BI.** The introduction of these tools was the most exciting thing to happen in the Excel world since the PivotTable!

# LEARNING OBJECTIVES:

During the course, participants will hone their advanced modelling skills and experience designing solutions to real-world examples.

## Participants will:

- Understand the principles of data analysis
- Learn to synthesise and summarise information into a logical framework.
- Know how to use visual effects to improve their reports and presentations
- Explore how to summarise, present and communicate data clearly and concisely
- Consider the principles of good dashboard design and presenting data graphically
- Evaluate the new Modern Excel tools available for data analysis and dashboards
- Discover the tools to analyse data & build reports using your existing Excel tools and skills (and perhaps a few you didn't know you had!)

This course is aimed at managers and other professionals who need to create dashboards and other reports in order to analyse interpret and present information. It is expected that participants should have had some exposure to business, finance and reporting principles. This course builds on students' existing knowledge of Excel tools and functions and incorporates these into complex and dynamic reports and dashboards.

## Title/Department:

- Financial modellers and analysts
- Business professionals who are eager to improve their Excel and Financial Modeling skills
- Finance & Accounting students
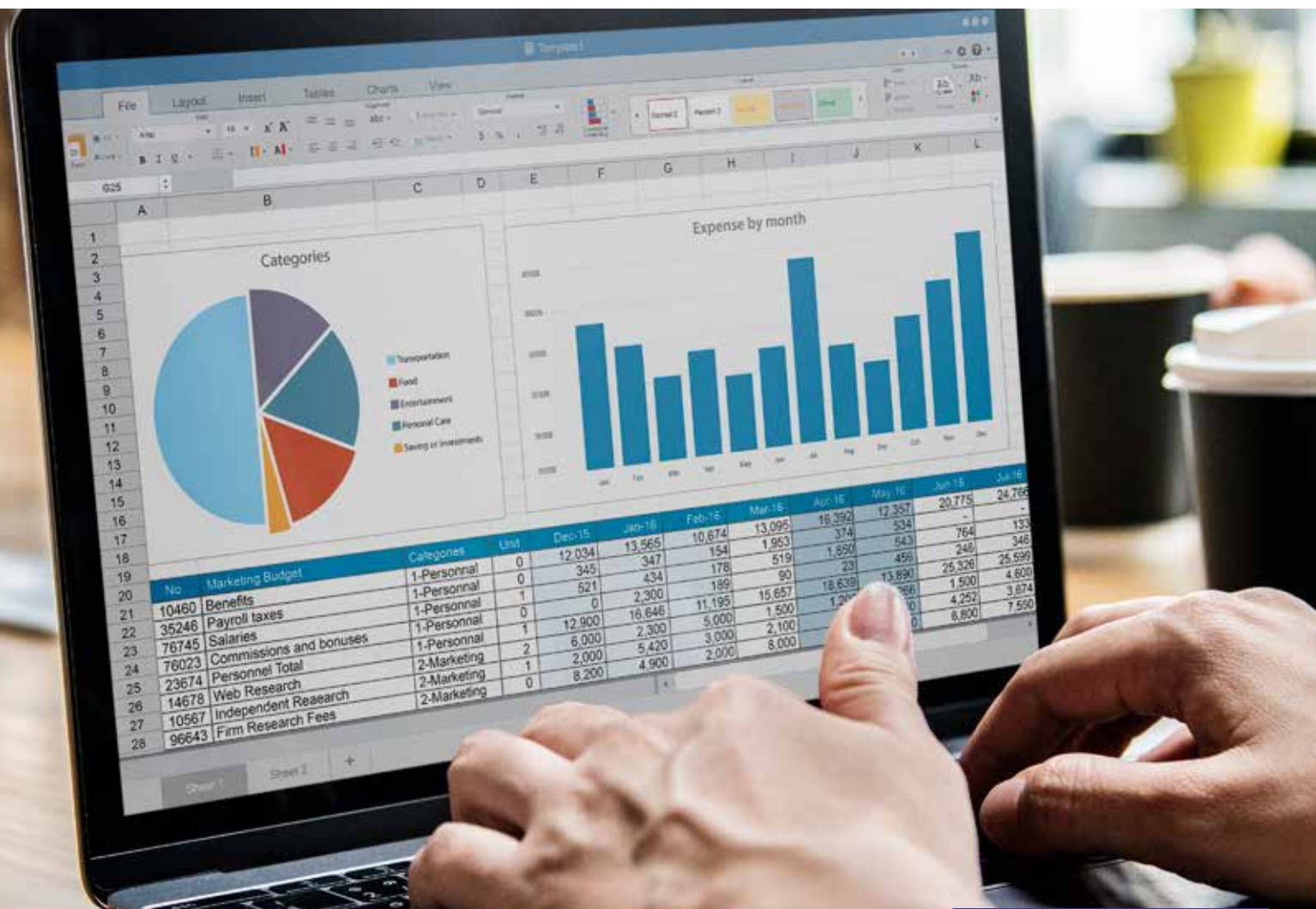
## Instructor:

# Danielle Stein Fairhurst

**… your EXPERT TRAINER for this Course.**

Danielle Stein Fairhurst with over 20 years' experience as a financial analyst, she helps her clients create meaningful financial models in the form of business cases, pricing models and management reports. She has hands-on experience in several industry sectors, including telecoms, information systems, manufacturing & financial services.

Danielle has regular engagements around Australia and globally as a speaker, course facilitator, financial modelling consultant and analyst. In 2021 she was awarded the prestigious Microsoft Most Valuable Professional (MVP) award and regularly commentates "Excel as Esports" battles for the Financial Modeling World Cup (FMWC) on ESPN3. She is on the judging panel for the 2021 Financial Modelling Innovation Awards and is on the Diversity Council for the ModelOff Financial Modeling World Championships

Specialisations:
- Financial modelling, Budgeting & Forecasting
- Data Analysis, Business Cases & Pricing Models
- Management Reporting & Dashboards

## Day 1:

### Day 1: Using Modern Excel for Data Analysis

**12:00 - Pre-Course Intro**

### Module 1 :

### Tool selection

- Evaluation of Excel vs. other BI alternatives, including Power Pivot in terms of speed, usability and cost
- How Microsoft competes in the BI, data analysis and dashboard space

### Using Excel for Big Data

- Learn how Excel fits into the world of big data
- Awareness of software capabilities
- Looking forward to the future of Excel

### Break

### Module 2 :

### What's new in Excel 2019 / 365

- Technical differences between versions
- Considerations when building data models for users of different versions

### Shortcuts

- Speed up your data manipulation in Excel with the use of shortcuts
- Becoming an Excel master user without touching the mouse!

### Break

### Module 3 :

### Structured Reference Tables

- Structural referencing versus cell referencing
- Advantages of tables
- Analysing data more quickly and efficiently using structured reference table

### PivotTables for Analysis

- How to summarise using PivotTables
- Hierarchies and grouping
- Time intelligence
- Slicers and timelines for interactivity in Dashboards

**At each step during the course, participants build and practice each formula, tool and technique and will build their own dashboards to take away for future use.**

### Post-Session Q &A

### 14:00 – End of Day1

## Day 2:

### Day 2: Advanced Modelling Tools

#### 12:00 – Review of Day 1

### Module 4

### Essential Excel tools & functions

- Overview of must-know standard Excel tools and functions for data analysis
- Extracting insights from data using various tools and functions

Creating a robust formula

- Nest functions together to create succinct and robust formulas
- When and when not to nest functions
- Understanding and auditing complex nested functions

### Break

### Module 5

### Dynamic Arrays as a Modelling Tool

- The most useful array functions for modelling

- Selecting the right function (arrays vs. traditional formulas)
- Nesting functions with arrays

### Break

### Module 6

### Modelling Best Practice and Design

- Principles of financial modelling best practice
- Designing a layout to incorporate spill ranges
- Dangers of working with array functions

### sPost-Session Q &A

### 16:00 – End of Day2

## Day 3:

### Day 3: Power Excel Tools

#### 12:00 – Review of Day 2

### Module 7

### Power Excel Tools

- Introduction to Power Pivot, Power Query and Power BI.

- Evaluation of Excel vs. other BI alternatives in terms of speed, usability and cost
- Looking forward to the future of Excel

### Break

## Day 3:

### Module 8

### Get and Transform your data

- Extracting and cleansing data with Power Query
- Introduction to the M language
- Gathering data with connections

### Break

### Module 9

### Which chart?

- Choosing the correct chart to use to display different data
- How to quickly display messages from your findings

- Tell a story with your charts

Selecting the correct chart to display data

- Getting your message across most effectively by choosing the correct medium of display
- Using actual data, create a dashboard to tell your story most as effectively as possible

**At each step during the course, participants build and practice each formula, tool and technique and will build their own dashboards to take away for future use.**

### Post-Session Q &A

### 16:00 – End of Day 3

## Day 4:

### Day 4: Dashboards and Data Visualisation

### 12:00 – Review of Day 3

### Module 10

### Purpose and benefits of Dashboards

- History and definition of dashboard reports
- Why dashboards are so popular
- Common mistakes when building a Dashboard
- Critique of poorly built dashboards
- Rules for dashboard design

### Break

### Module 11

### Visual Design

- Design principles for effective graphic data presentation
- Dos and don'ts for visual design
- Dashboards versus infographics

### Principles of dashboard design best practice

- Dashboard layout, colour choice and display principles
- The Z reading pattern
- Data to ink ratio

### Break

## Day 4:

### Adding icons and images to dashboards

- Quick and easy ways to add automated colour and icons to your reports
- Tips and tricks for adding images
- When NOT to use icons and images
- Effective use of colour and logos

**At each step during the course, participants build and practice each formula, tool and technique and will build their own dashboards to take away for future use.**

**Post-Session Q &A**

**16:00 – End of Day4**

## Day 5:

**Day 5 – Visualisation with Power BI**

**12:00 – Review of Day 4**

**Module 13**

### Dashboarding with Power BI

- Creating visuals in Power BI Desktop
- Getting new data and refreshing the dashboard
- Publishing a report to the cloud service

**Break**

**Module 14**

### Creating a Model Dashboard in Power BI – Part 1

- Using provided data, create your own dashboard in Power BI based on a financial model

**Break**

**Module 15**

### Creating a Model Dashboard in Power BI – Part 2

- Using provided data, create your own dashboard in Power BI based on a financial model

**At each step during the course, participants build and practice each formula, tool and technique and will build their own dashboards to take away for future use.**

**Post-Session Q &A (Day 1 – 5)**

**14:00 – End of Day5 & Course**

" This training utilises the latest features of Modern Excel and Power BI available in Excel for Microsoft 365 or 2021, so it is essential that you have the latest versions of this software installed prior to the training. "

# FAQs

**Does BII Online Virtual Training have the same value as traditional classroom training?**

Yes, BII Online Virtual Training offers participants; same training system as in-person, i.e face-to-face engagement with instructors, course material, interactive participation of all delegates, and personal support that they would expect to find in a traditional classroom.

**What are main features of your online courses? Are they on-demand? Is it different content from the in-person offering?**

The content of the virtual training is similar to the in-person sessions and customized presentation makes it a richer online learning experience. As always, we will share presentation materials with attendees for later reference.

The online courses are not on-demand and recordings cannot be purchased. They are set on scheduled dates, live with an instructor and co-host via webinar software. While the day is shorter than an in-person session (4hrs vs 8hrs), timing are adjusted to accommodate attendees in different time zones and allow more time for one-on-one conversations via the Q & A.

**What are the technical requirements for participation in a virtual course?**

All you need to participate in virtual training are:
• Desktop or Laptop or Tablet Computer, and Internet connection
• Webcam
• Headset with built-in microphone

**Can I attend an online training session if I have a Macintosh computer?**

Yes, Our Online training systems does allow Macintosh computers, PCs, and computers running Linux to easily enter any of our online training sessions.

**What type and version of browser will I need for online classes?**

It is recommended that you use the latest version of Firefox, Chrome or Internet Explorer for Windows and Firefox or Safari for Mac. Each of these is available for free download and also suggested you have the PDF Reader

**How do I have access to the trainer for questions?**

As in the classroom, you will see the trainer in front of you and have the opportunity to ask questions at any time - all via audio and video transmission.

**Is there a mute option within an online training session to minimize background noise from my audio connection?**

Yes, the Mute button will display to the right of your name as you hover your mouse over your name shown in the Participants panel on the top, right side of the Web conferencing screen.

**What if I miss few sessions of the online training program?**

The training will be simultaneously recorded which will be provided to you as per request & requirement

**Do I get a Certificate at the end?**

Yes, you will get a PDF version of your certificate of completion

---

mithun.siddartha@biiworld.com                    www.biiworld.com

# Modelling with Microsoft 365 & Dynamic Arrays

## 09 - 13 Sep 2024 | 12:00 - 16:00 Jamaica Time

**BII World Limited**
9616 45th Avenue
Northwest, Edmonton, AB
T6E 5Y9, **Canada**

Please complete this form and mail it back to
**mithun.siddartha@biiworld.com**

Event Code: **OL FN 04**

## Delegate Details

1. Name: Mr/Mrs/ Ms ...............................
..............................................................
Job Title: ..................................................
Email: .......................................................

2. Name: Mr/Mrs/ Ms ...............................
..............................................................
Job Title: ..................................................
Email: .......................................................

3. Name: Mr/Mrs/ Ms ...............................
..............................................................
Job Title: ..................................................
Email: .......................................................

## Company/Organisation Detail

Name: ........................................................
Person to Contact:......................................
Email: ........................................................
Address: ....................................................
..................................................................
City: ..........................................................
Country: ....................................................
Contact No: ...............................................
Type of Business: ......................................
Website: ....................................................

## Payment Details

**METHOD:** CREDIT CARD ☐ OR WIRE TRANSFER ☐

Please debit my
Visa ☐    Eurocard /Mastercard ☐    Amex ☐    Diners club ☐

Card Billing Address:...................................
Street: ..........................City.....................
Zip/Postal: .................................................
Card Holders Name: ...................................
Email Address: ...........................................
Card Holders Signature: .............................
Card Number
☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐

Credit Card CVV2/ CVC / CID Number:
Visa / Mastercard ☐☐☐    Amex (4-digit code
(3-digit code on the back)    on the front) ☐☐☐☐
Valid from: ☐☐ / ☐☐    Expiry Date: ☐☐ / ☐☐
I agree to BII debiting my card

### Authorization and Acceptance of Sales Contract & Terms & Conditions

I hereby declare I am authorised to sign this contract and terms & conditions in the name of the company/organisation:

Name:..........................................................
Date:............................................................
Signature:...................................................

**1-2 Delegate Fee** ☐ **USD 1199** Per Delegate

**3 & more** Delegate Fee ☐ **USD 1099** Per Delegate

USD 20 administration charge and any applicable withholding or any other tax or fee will be applied

**TERMS & CONDITIONS:**

**1.** Payment terms: BII World LTD requires the full payment of the invoiced amount within 7 working days from the issue date of the invoice. BII World LTD reserves the right to refuse entry to any client who does not pay the invoice in full and on time. The registration fee includes: Training documentation and admission to all training sessions.

**2.** Cancellation by client: The client has the right to cancel his/her participation in the event. Cancellation must be received by BII World LTD in writing either by mail or fax. If the client cancels the event, he/she will get two options:

**A. CREDIT NOTE:** Choose 2-year credit note, BII World LTD will send all the schedule training event details throughout the year. Delegate has the right to choose and attend any of the training programs (valid 2 years).

**B- NOMINATION:** In this option delegate can nominate/refer someone from his/her group/company to attend the particular training program on behalf of the actual delegate.

3. Cancellation by BII World LTD : While every reasonable effort is made to adhere to the advertised program, circumstances can arise which may cause changes in the program, including but not limited to changes in the content, date(s), or special features of the planned event. Such circumstances include but are not limited to acts of terrorism, war, extreme weather conditions, compliance with government requests, orders and legal requirements, failure of third-party suppliers to timely deliver, and failure to register the minimum target number of attendees for a given event. BII World LTD reserves the right to change the content, date(s), and/ or special features of an event, to merge the event with another event, or to postpone it or cancel it entirely as appropriate under the circumstances. Client agrees that BII World LTD shall not be liable for any cost, damage or expense which may be incurred by client as a consequence of the event being so changed, merged, postponed or cancelled and client agrees to hold BII World LTD harmless and to indemnify BII World LTD in case of liability caused by any such changes, mergers, postponements or cancellations.

4. Cancellation of the event: In case BII World LTD cancels an event, then client can choose any of the below mentioned options:

(a) BII World LTD will refund full payment to the client within 15 business days.
(b) Client can choose the credit option for 2 years, for more details please read term no-2 part (a)

5. Postponement of the event : In case BII World Ltd postpones the event to a new date, then client can choose any of the below mentioned options.

(a) The client can attend the course on the postponed dates.
(b) Client can choose the credit option for 2 years, for more details please read term no-2 part (a)

6. Client's identification information. By signing of this sales contract and these terms and conditions the client gives full right to BII World LTD to share the client's identification information, i.e. client's name, address, email addresses, phone numbers and names of representatives and website with other clients who participated in the same event. The client has the right to opt out of this clause by written notice to BII World LTD.

7. Governing law: This contract shall be governed by and construed in accordance with the laws of the Province of Alberta, Canada. Any disputes arising under or in connection with this registration form shall be settled before the competent court in Canada.

8. Indemnification: To the fullest extent permitted by the law, you agree to protect, indemnify, defend and hold harmless BII World LTD, its owners, managers, partners, subsidiaries, affiliates, officers, directors, employees and agents, from and against any and all claims, losses or damages to persons or property, governmental charges or fines, penalties, and costs (including reasonable attorney's fees) (collectively "the Claims"), in any way arising out of or relating to the event that is the subject of this contract, and regardless of negligence, included but not limited to, Claims arising out of the negligence, gross negligence or intentional misconduct of BII World LTD employees, agents, contractors, and attendees; provided, however, that nothing in this indemnification shall require you to indemnify BII World LTD Indemnified parties for that portion of any Claim arising out of the sole negligence, gross negligence or intentional misconduct of BII World LTD parties.

9. Other currencies. In case that client requests payment in other than official currency (USD), BII World LTD reserves the right to apply 5% currency risk surcharge to the actual exchange rate.

10. Other Conditions: Any terms or conditions contained in the client's acceptance which contradict or are different from the terms and conditions of this registration document shall not become part of the contract unless individually negotiated with BII World LTD and expressly accepted by BII World LTD.