



APIs – It's not that difficult NOW

Actually Data and Breast Cancer Now for IOF Tech Conference



Who are we?



Anthony Fawkes – Independent database consultant

- Been in the sector for about 15 years
- Lisa Fields Senior Database Officer
 - Been in the sector for 20+ years
- Jemima Marchant Smith Supporter Engagement Manager
 - Been in the sector for 5 years

All in all – We're passionate about data and processes and people



Who are you?



Sorry there is audience participation in this presentation!

- Fundraisers
- Database People
- Finance People
- Senior Management
- Consultants

Have any of you used Power Query Before?





What we're going to cover

- What is an API
- What APIs are available
 - Online Giving Platforms
- JustGiving Front End API
 - How to get it
 - JustGiving Backend API
- CASE STUDY FOR BREAST CANCER NOW
 - Challenge
 - Solution
 - Next Steps



What is an API

An API is

What you need to bear in mind





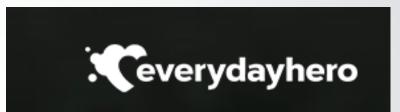




Example Organsational APIs







engaging NETWORKS



JustGiving APIs



- How to get it Data APIs need turning on by support and a login to Charity account – <u>developer.justgiving.com</u>
- DOCUMENTATION
 - Front end <u>https://api.justgiving.com/docs/</u>

Data APIs - <u>https://dataapi.justgiving.com/docs/</u>

Front End API	DATA API	Differences / Notes
<u>GetFundraisingPages</u>	<u>pagesCreatedWithDates</u>	Front end has user story back office doesn't
<u>GetCharityById</u>		
<u>RetrieveDonationDetails</u>		
<u>GetCharityDonations</u>	paymentsListWithDates	Two Stage process tell me the list of payments
<u>GetFundraisingPageDetails</u>	<u>getPaymentById</u>	Give me the transactions in a payment



CASE STUDY - BREAST CANCER NOW



- Challenge
 - Data Team (Pages)
 - Manual Processes
 - Fundraisers not aware of the impact of being involved in the process
 - Fragmented Process
 - Supporter Care (Gift Imports) 1.5 days
 - Inherited laborious / overly complex process
 - Used MS Access and split the output into at least 6 exports
 - When it broke only 1 person who knew how to fix it and couldn't be modified for new changes within the organisation
 - Take up to 1.5 days to complete 1 import (Just JG) Was just about getting data from CSV to CRM
- DOUBLE THE WORKLOAD DUE TO THE MERGE



CASE STUDY – BREAST CANCER NOW



Solution

- Split Process
 - (Page Creation) 2 teams involved + Fundraisers
 - (Payments)
 - (Gift Aid)
- Why Excel
 - Latest Version of Excel has **power query** embedded into it.





Why is Power Query useful

- It replaces the need for macros as it works through a series of steps
- Has its own language (M code)
- Has its own JSON parser (a structure of data returned from APIs)

AutoSave (Off) File Home Page Layout Formulas Data Reviev Insert Things you can do B 🔲 Queries 8 P Ē : Propertie From From Table/ Recent Existing Refresh From 🗟 Edit Links All ~ Text/CSV Web Range Sources Connections Queries & Coni From File > From Database From <u>A</u>zure D Е G From Online Services From SharePoint Online List Remove Columns From Other Sources From Microsoft Exchange Online <u>t</u> From Dynamics 365 (online) Combine Queries Launch Power Query Editor... From Facebook 4 Data Source Settings... From Salesforce Objects Duery Options 14 From Salesforce Reports 15 ХI Book1 xlsm - Power Query Editor 16 View File Home Transform Add Column 17 × â 🚠 Properties Data Type: Text 🔻 Ħ Advanced Editor 🔟 Use First Row as Headers 🤊 Close & Choose Remove Refresh Keep Remove ¹₂ Replace Values 🔠 Manage 🔻 Preview -Columns - Columns Load -Rows Rows Column By Close Query Manage Columns Reduce Rows Sort Transform fx = Excel.Workbook(File.Contents("C:\Users\AnthonyFawkes\Documents\Book1.xlsm"), null, true) ABC Name Queries A^B_C Kind 🝷 🧮 Data 1r A^B_C Item 💌 🏷 Hidden -1 Sheet1 Table Sheet1 Sheet FALSE



🚡 New Source 🔻

🚴 Recent Sources 🔻

New Query

Get Data from almost anywhere including the web

🔚 Merge Queries 🔻

TAppend Queries 🔻

Combine

L Combine Files

Manage

Parameters

Parameters :

Data source

settings

Data Sources

Stick files and tables together with ease

Create New Columns



Power Query Gotcha's



- Oath2 APIs
- SOAP APIs
- remember to not enable background tasks
- Data Model
- Refreshing the query
- SAME AS POWER BI
- Microsoft have been investing in this area of their business for ages



BREAST CANCER-Power Query and JustGiving Data NOW the research NOW the research

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8			e All Page Data sheet - this would be	based on the reports in the AD	O Process folder				Refresh	All Pages	5					
9		A box will appear saying that the	•								-					
10			ne active pages for coding and save it	to a folder					Сору Ас	tive Pages	5					
11	7	This is now circulated to fundrais	sers to code up the pages.													 ✓ []
12			If a page should not be coded in R	E then please add CARE to all Cu	ustom Codes (Columns	s C-H)										
13	8	Once the pages have been coded	d import you can load them back in h	nere												
14			The filename should be todays dat	e if not change this date:		10/10/20	019		Refresh C	Coded Pag	es					
15			The CARE pages from the Import F	ile												
16	9	Now we need to export this code	ed pages ready for importing into RE						Export pa	ages for RI	E					
17	10	File to import will be called today	ys date with "_PagesToImport" eg:	JG_2019-07-29_PagesToIm	nport											
18																
19		Manually update the All Coded F	Pages tab to fill in any missing codes	for the coded pages												
20			IIS IS ONLY REQUIRED IF THERE ARE		CARE IN THEM				Сору С	ARE Pages	6					
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API Security



	Access Web content X	Demc
Anonymous	https://api.justgiving.com/72470144/v1/fundraising/	
Windows	User name	
Basic	Password	
Web API	Select which level to apply these settings to	
Organizational account	https://api.justgiving.com/	
	Back Connect Cancel	



CASE STUDY - BREAST CANCER NOW



- Improvements
 - Supporter Care
 - Improved working life (Time Efficient)
 - Doesn't take a morning now
 - User Friendly processes and not complicated
 - Most team members can do the process (Any team member can now process this data)
- CODING NOW PUSHED BACK TO FUNDRAISING TEAMS WHO ARE THE EXPERTS ON THEIR FUNDRAISERS
 - Database Team 0.5 hour
 - Mechanism to catch pages on "Wrong" Charity Account
 - Increased knowledge
 - Gift and Gift Aid Imports will be automated using scheduler (previously taken around 1.5 days)
 - Better Collaboration for CARE and BCN Data Teams
 - Not reliant on external support



Practical Support



Web Support

- Microsoft <u>https://support.office.com/en-gb/article/Introduction-to-Microsoft-Power-Query-for-Excel-6e92e2f4-2079-4e1f-bad5-89f6269cd605</u>
- Amazon <u>https://www.amazon.co.uk/Power-Query-BI-Excel/dp/1430266910</u>
- Blog <u>https://blog.crossjoin.co.uk/category/power-query/</u>



How Actually Data can help



Excel Training Refresher (formulae and top tips) Formulae Top Tips Excel Training Advanced Pivot Tables Advanced formulae

Power Query basics One to One support for a specific business task or process



Next Steps



Check what version of Excel you have Document your current process

*Please speak to your IT Teams if required to install software



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Info

New

Open

Save

Save As

Print

Share

Export

Close

Account

Options

Save as Adobe PDF

How to find out your version of Excel



Book1 - Excel

User Information	Product Information	About Microsoft Excel	? ×
Anthony Fawkes anthony@actuallydata.com Change photo About me	Office	Microsoft® Excel® 2013 (15.0.4815.1000) MSO (15.0.4815.1000) 64-bit Part of Microsoft Office Professional Plus 2013 Product ID: 00216-27961-76428-AA234 View the Microsoft Software License Terms	
About me Sign out Switch Account Office Background: Stars \checkmark Office Theme: Dark Gray \checkmark	Product Activated Microsoft Office Professional Plus 2013 This product contains Image: Stress of the stress of	Portions of International CorrectSpell [™] spelling correction system © 1993 by Lend Hauspie Speech Products N.V. All rights reserved. The American Heritage® Diction English Language, Third Edition Copyright © 1992 Houghton Mifflin Company. El version licensed from Lernout & Hauspie Speech Products N.V. All rights reserved. Reference, fourth edition: Adobe® Portable Document Format version 1.5, © 1985 Adobe Systems Incorporated. All rights reserved. Microsoft® Office Proofing Tools © 2012 Microsoft Corporation. All rights reserved.	nary of the lectronic . PDF 5-2003
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Questions







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Thanks



Thank You