

**R&D Tax Claim**

# Powr of You Ltd.

Company number: 08839843

UTR: 4086702227

Year ended on 31 December 2019

Contents

[1. Introduction 3](#_Toc56750287)

[2. Company Background 3](#_Toc56750288)

[3. Relevant R&D Scheme 3](#_Toc56750289)

[4. Summary of R&D Projects 3](#_Toc56750290)

[5. Baseline Technology 4](#_Toc56750291)

[6. Scientific / Technological Uncertainties 5](#_Toc56750292)

[7. How the Uncertainties Were Overcome 6](#_Toc56750293)

[8. How the Project goes beyond the Current State of Knowledge 8](#_Toc56750294)

[9. Qualifying R&D Expenditure 9](#_Toc56750295)

[10. R&D Tax Claim 9](#_Toc56750297)

[11. Bank & Contact details 9](#_Toc56750299)

# Introduction

This document sets out details relating to the Research & Development (R&D) activities undertaken by Powr of You Ltd (the company) during the accounting year ended 31 December 2019. A detailed explanation of the scheme was given by their accountant to the company’s technical team (competent professionals). This was followed by an examination of individual projects to ascertain whether they meet the relevant tax legislation, the BIS Guidelines and the published HMRC Corporate Intangible Research and Development (“CIRD”) Manual criteria.

# Company Background

Founded in January 2014, the company provides as online data marketplace, which brings the next generation of data analytics to customers and brands.

The company’s platform enables customers to get paid for the data that they already share online, whilst keeping their identity anonymous, and through their revenue share model users can similarly earn rewards and actively manage their online presence.

For brands and research organizations using the platform, the company’s analytics engine examines and refines the data provided by users to help them plug into their consumers’ lives, thus allowing a complete overview of consumer behaviours and trends. The company complies with the United Kingdom ICO Data Protection laws.

# Relevant R&D Scheme

Based on the aggregated FTE employee numbers, turnover and/or total assets, the company meets the SME definition for R&D tax relief purposes.

# Summary of R&D Projects

The company has developed a unique solution for both customers and brands by providing them with unadulterated information regarding consumer needs and patterns. This highly unique platform enables brands to use consumer authenticated and provided, browser, mobile, and productivity data alongside large social media feeds, to analyse and identify trends in customer needs and desires and incorporate those into their products and services.

Significant research and development activities have been, and are continuing to be, undertaken. These activities continue to show solid research-based results, which is evident in the continued development of the products.

For users, they have built a personal insights and data monetization tool to help consumers understand patterns in their online footprint through metrics and graphs.

For brands we’ve built research products that can perform thorough cross-examination of consumer behaviours and provide important analytics related to their trends from data collected through the company’s proprietary technology and algorithms, various digital platforms, devices and technologies including social media, music apps, fitness tracker, productivity tools. This year they have further innovated to bring about instant data and instant analytics offering to help business decision makers keep at-pace with the continually changing digital world.

The company are also using various Application-Programming-Interfaces (APIs), building browser extensions and mobile apps with proprietary algorithm to further expand their data collection sources. Their core analytics engine can make any user data anonymous while extracting insights from it that are utilised by brands for creating desired products and developing effective marketing strategies.

# Baseline Technology

The company conducted a thorough analysis of the competitive marketplace and studied many different offerings that were available for both the customers and the brands.

Existing competitors relied primarily on indirect methods for collection of large amounts of consumer data through focus groups, survey, website cookies and web scraping. This comprise an inefficient method for analysing consumer behaviour since only a small number of consumers can be contacted / interviewed to gain insights for developing products and strategies for larger audiences. Their target market required large volumes of online consumer data through social media that is live, natural, and unaltered; however, the existing baseline technologies were unable to meet such demands.

Competitors are also looking at intrusive technology to collect consumer data with an “all data” or “no data” approach, where the user has to either provide permission to everything on their devices which makes their solution only viable for a small portion of consumer. This type of technology is now also being barred from the approved mobile app stores.

Lastly the time to get actionable insights from these data sets make it difficult for brands to keep up with the pace of change in the digital landscape. Specifically, the creation of the instant data and instant analytics services has been a huge step forward in research technique built by the company.

# Scientific / Technological Uncertainties

There are several scientific/technological uncertainties within these projects where knowledge of whether the project/activity was technologically feasible, or how to achieve it in practice, was not readily known by a relevant competent professional.

The main uncertainties are detailed below:

1. Will it be possible to create a personal identity for the digital world which will enable users to port their data as an asset class?
2. How can we optimize the microservices infrastructure to minimize DB connectivity issues and timeout errors, at scale?
3. How can we analyse a user’s usage activity (sites, search terms, purchases, interests) to personalize their browsing experience better and provide them info that they need?
4. Will it be possible to extend the instant data capture to mobile devices to enable real-time data sharing with permission, specifically around app usage data as clients are looking to understand mobile use behaviour instantly on iOS devices too?
5. How can we extend our Qualify tool to go beyond browsers and look at app usage data to improve the quality of the research participants for each study?
6. Would it be possible to create a dynamic model to categorize websites?
7. How can we improve the iOS and Android browsing apps to allow users to browse easier, faster, and safer on their devices?

# How the Uncertainties Were Overcome

The scientific/technological uncertainties outlined above required substantial research & development work and were addressed as follows:

1. We continued and delivered our microservices based infrastructure this year. As we move closer to delivering the portable 'personal identity cloud', we have also realized that the costs of this infrastructure are yet to be manageable enough to deliver individual services. With the microservices update we were able to make the infrastructure modular, however the server configuration is still static to dedicated servers. This is becoming a challenge as we are scaling now to over 20K users globally. The microservices solved the infrastructure issues partially giving us more control and an early view into issues arising, however to continue scaling the personal identity cloud we are now reviewing how to deliver microservices on the cloud infrastructure to manage costs and make it affordable to individuals
2. Our own user and performance testing on the microservices were showing a more stable platform even when a few thousands of users were connecting to the platform concurrently. However, in production we quickly realized that we were running into timeout issues, database connectivity issues and upgrades to the microservices infrastructure were imperative. We found out that the latency was often due to more requests being made to connect to the DB across the globe than we had estimated in our initial tests. We assessed a few options on how to optimize this process and had to rearchitect our microservices to move away from C++ based services to Python Microservices running on AWS Lambda so that concurrent requests would not be an issue. We have been able to cut down timeout and connectivity issues to 0 now, based on this solution and with the cloud infrastructure reliance we are completely future proofed on the scale that we want to achieve. This has been a game changer for us as we have expanded.
3. Based on all the browsing activity we capture we have been working on creating algorithms that can recognize people's needs/wants to offer them better insights and a personalized browsing experience. We have developed ways to extract search keywords, purchase journey details and interest profiles from the browsing habits and are now starting to device insights for users based on that. The difficulty in this analysis is developing the baseline for each person, while also keeping the trends of a population to know 1) what is more or less important for a user; 2) the urgency of that need/want; 3) as well as the potential expiry of it, in order to truly be relevant for the user. For example, a need for a car may be a longer-term search but once done then develops a need for car insurance. While a need for a flavour of a soda may outlast the immediate need if it develops into a habit for the user. Distinguishing the frequency, length and the intensity of the interests is the part of the algorithm we are continuing work on.
4. We have been successful at developing the instant data capture this year to be available on mobile phones for app usage behaviour, installed apps and phone specifications - all with user permission. Optimizing the experience and ensuring that the user had the ability to uninstall the app immediately after opting into a specific study was key to maintaining the instant data proposition and we were successful in doing so on Android. In parallel we started our efforts in iOS devices, though it has proven to be more difficult as there are a lot more restrictions on the operating system even if we have user permission. We have identified a way to develop a proxy solution that provides us the calls made for Wi-Fi connections. We have been able to automate the creation of the virtual servers for this solution to run. However there are still two hurdles we are still researching: 1) there are apps that don't work if the proxy solution is on so we need to test out and develop an exception list of apps to exclude that traffic so that the user's phone use experience does not have to change. 2) We need to find a way to simplify the setup or automate it, so user onboarding is simplified in the process
5. After the introduction of Qualify as a screening tool for research based on browsing behaviour, we had clients enquiring about the possibility of a similar quality filter on mobile devices. We have now assessed both Android and iOS operating systems for solution and been able to develop the tool for Android. Based on a user's installed apps, last used and installed date we can help screen participants for research. We have been able to further vet participants to check for robotic or new user behaviour such as system apps only or not meeting a minimum threshold of activity to ensure we are able to identify fraudulent users. Research for iOS is still in progress to see if we can bring a similar solution to Apple phones
6. Developing a website and app categorization taxonomy is a key challenge in processing the big data that we are capturing about user behaviour. Over time we have gathered over 8 million hosts and continue to get between 100,000 to 250,000 new additions every quarter. Having previously relied on existing categorization APIs we had to halt the practice as the number of websites with fault results based on manual review was over 60%. To develop a new taxonomy we've developed an approach that begins with extracting domain and sub-domain from the URLs we capture, gathering metadata from the hosts, cleaning up for minimal data and stop words and also accounting for translations in some cases for non-English sites to then create the training data set for our Machine Learning model. We have developed and trained that model on the categorizations we have done manually and are now getting accuracy levels of 83% in predicting categorization for new hosts we come across. This is further being adjusted as we get more training data as well. We have not yet begun implementing the same model for categorization apps and search keywords however and that is goal for the upcoming year.
7. Having launched Mango browser in the past year, we've continued to enhance the security features on the browser and are also developing ways to bring personalized research opportunities to the users without sharing any of their data with anyone. We have also updated the user onboarding and browsing UI to make it easier for them to seamlessly transition into using the browser. We have seen tremendous feedback from iOS users especially and are continuing to see long usage times and retention from these users.

# How the Project goes beyond the Current State of Knowledge

Although significant research and development work is ongoing, many elements are now complete and production ready. The unique functionality has allowed the company to recruit a growing volume of consumers and win new business from a number of research companies, brands and agencies who are starting to adopt the technology.

**Advance in scientific/technological knowledge or capability**

|  |  |
| --- | --- |
| Does the project/activity | Comments |
| Extend overall knowledge or capability in a field of science or technology. | Yes |
| Create a process, material, device, product, or service which incorporates or represents an increase in overall knowledge or capability. | Yes |
| Make an appreciative improvement to an existing process, material, device, product, or service. | Yes |
| Use science or technology to duplicate the effect of an existing process, material, device, product, or service in a new or appreciably improved way. | Yes |

# Qualifying R&D Expenditure

The resources deployed on the R&D elements of this project are detailed below:

## Year ended 31 December 2019

* Staff time costs £97,346
* Subcontractor costs (@ 65%) £1,868
* **Total £99,214**

# R&D Tax Claim

The company would like to claim tax relief for the R&D activities as follows:

## Year ended 31 December 2019

* Adjusted loss £45,400
* Qualifying R&D Expenditure £99,214
* Revised loss to surrender £174,378
* **R&D Tax claimed @ 14.5% £25,284.86**

The company would like this tax credit to be paid to the bank account as detailed below.

# Bank & Contact details

## Bank details for BACK transfer of tax rebate

Account Name: Powr of You Ltd

Bank: TransferWise

Sort Code: 23-14-70

Account Number: 61284781

## Contact details

Should you have any questions about his R&D tax claim, please contact:

Shruti Malani Krishnan

Director, Powr of You Ltd

074490 22218

shruti@powrofyou.com