Testing ROAS and CPA Calculations and Assessing Time Savings on the Smartly Platform

Smartly.io Oy

June 2024

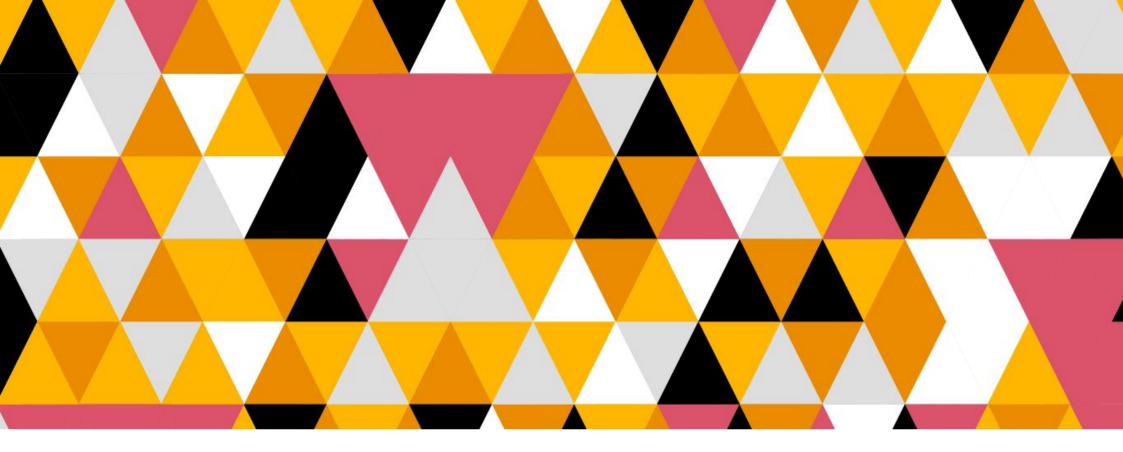


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## Executive summary

## Background

#### **Background information**

Smartly.io Solutions Oy ("Smartly") has developed a technology platform that allows customers to create and manage digital advertising campaigns across a number of social platforms and Google in a single workflow. This allows customers to launch multiple campaigns and ad groups at the same time and provides campaign management and reporting on one platform. Smartly believes that this results in significant time saving for customers and improved performance. Smartly therefore wished to demonstrate accurate reporting of ROAS and CPA as well as time saving features from using the Smartly platform when compared to the native advertising platforms.

PricewaterhouseCoopers LLP UK ("PwC") were engaged by Smartly to undertake testing on the Smartly platform. This work was split into two distinct chapters, one focused on the reporting accuracy and the other on the time saving features of the Smartly platform.

Chapter 1: PwC used underlying data to recalculate Return On Ad Sales (ROAS) and Cost Per Acquisition (CPA) in order to test the accuracy of Smartly's existing calculations, as defined by Smartly.

The detailed procedures for Chapter 1 were as follows:

- 1.1: Ensure relevant data for Smartly's Top 50 customers by advertising spend is captured and included in the analysis
- 1.2: Reconcile platform data (spend/impressions) on a sample basis between Smartly and social platforms
- 1.3: Recalculate a sample of ROAS and CPA (2023 and 2022)

**Chapter 2:** Using the Smartly platform, PwC assessed the amount of time saved when executing specific tasks compared to alternative platforms and tools.

The detailed procedures for Chapter 2 were as follows:

- 2.1: Perform a platform walkthrough to understand the operations of the Smartly platform and determine the functionality in scope for testing
- 2.2: Design a test campaign that accurately reflects the parameters (eg complexity, no. of markets) of a typical Smartly campaign
- 2.3: Observe Smartly and Smartly's clients undertake the steps agreed in test 2 on both Smartly and the native platforms to understand potential time saved

The purpose of this report is to summarise our factual findings following completion of our testing.

#### Limitations

The services will not constitute a financial statement audit or other regulated assurance engagement. In particular, we will not give formal assurance on the Smartly platform. If we were to perform additional procedures or a full financial statement or controls audit of the Smartly platform, other matters might come to our attention that we would report to Smartly.

PwC has relied on representations by Smartly. These include the fact that all relevant records have been made available to PwC for the purpose of the engagement, and that all reports/information provided were complete and accurate.

## Executive Summary: Chapter 1

#### **Chapter 1: Recalculation of ROAS and CPA**

#### **Procedure Review:**

PwC conducted procedures to test the accuracy of Smartly's calculations for Return On Ad Sales ('ROAS') and Cost Per Acquisition ('CPA') Key Performance Indicators ('KPIs').

Smartly confirmed ROAS and CPA use the following calculations:

ROAS: Revenue (Revenue gained during the advertising campaign)/ Spend (Spend in advertising across the Smartly platform)

CPA:Spend (Spend in advertising across the Smartly platform) / Conversions (Specific goal achieved by an advertiser during the campaign e.g. product sale)

We obtained internal underlying data inputs used by Smartly to perform the calculations for ROAS and CPA. We selected a sample of campaigns which equated to 22% of total spend from managed service clients in order to compare spend and impression input data between social platforms and Smartly in order to confirm data accuracy.

For a sample of ten Smartly customers, PwC then recalculated ROAS and CPA and reconciled the KPIs back to the original data that Smartly shared.

#### **Key Results:**

- All ten tested samples were recalculated in line with the individual customer's reporting requests.
- The ROAS and CPA calculations for eight out of the ten samples were calculated in accordance with the industry standard ROAS and CPA definitions.
- For the remaining two samples, variations of ROAS and CPA were being calculated. PwC confirmed that this had been agreed with the customer and that calculations were being performed in line with these agreed variations.
- PwC also tied input data used for the ROAS/CPA calculations (spend and impressions) to third party sources for a sample of campaigns.
- The results of the test need to be considered in light of the limitations laid out below.

#### **Chapter 1 Limitations:**

As part of the data input testing, PwC was able to agree impression & spend data back to third party sources (primarily other social platforms). PwC were unable to tie revenue and conversion figures to third party sources as this data is entered manually or uploaded through data integration into Smartly platform directly by the customer.

One limitation of this testing is the potential presence of sampling risk. Sampling risk arises when the sample selected for testing may not accurately represent the entire population being tested. In this specific case, PwC recalculated the metrics for only ten out of the Top 50 list of customers by advertising spend for ROAS and CPA.

## Executive Summary: Chapter 2

#### **Chapter 2: Time Saving testing**

#### **Procedure Review:**

PwC conducted a walkthrough with Smartly to understand the processes for setting up, managing, and reporting a campaign on Smartly.

Based on the information provided by Smartly, PwC understood what a standard client advertising campaign and report looked like, testing this against current campaigns booked through Smartly. PwC then developed a dummy campaign and drafted instructions for the set up, optimisation and reporting of this campaign so that it could be delivered on both Smartly and the native platforms, and ultimately enable direct comparison of the time taken to set up campaigns on both.

Finally, the dummy campaign and report were set up in Smartly clients' native platforms and Smartly accounts to determine the potential time saved for this example.

#### **Key Results:**

- Using Smartly for campaign set up, optimisation, and reporting resulted in time savings compared to using native platforms.
- PwC and Smartly developed a dummy campaign mirroring the complexity of Smartly's current clients. It was more than three times faster to set up and optimise and report on the dummy campaign using Smartly than doing it separately on the three selected native platforms individually.
- Campaign set up and optimisation for the dummy campaign took 68
  minutes compared to 223 minutes to perform the same tasks on the
  native platforms. Similarly reporting took 5 minutes, significantly less
  than the 16 minutes it took to perform the same activities on the native
  platforms.
- The results of the test need to be considered in light of the limitations laid out below.

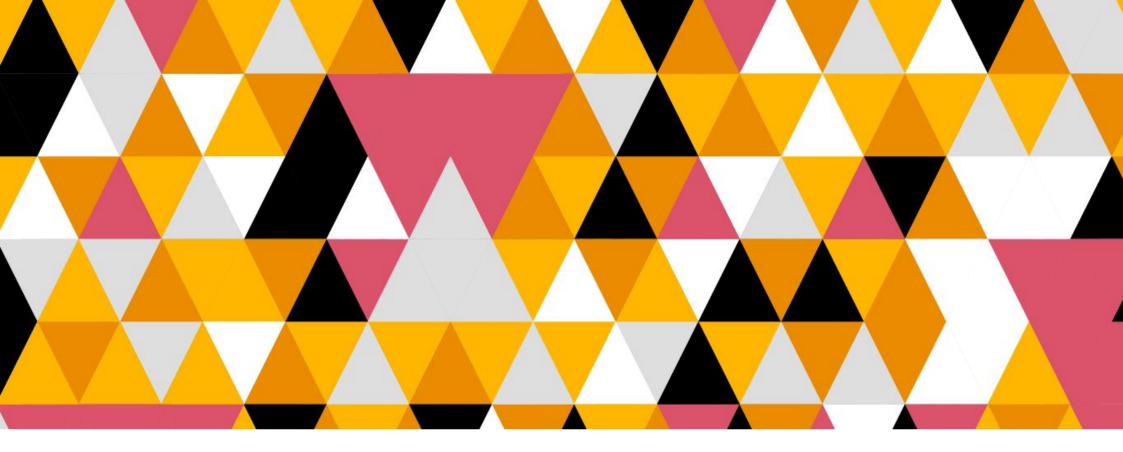
#### **Chapter 2 Limitations:**

As part of the time saving chapter, PwC didn't take into account the time taken to integrate the native advertising and analytical platforms into Smartly. Further, the testing was based on a dummy campaign of moderate complexity. It is possible that more complex campaigns (additional territories, number of optimisations, volume of creative variations, etc) could result in more time savings. Similarly, simpler campaigns may result in less time savings.

The time saving chapter focused solely on campaign set up, optimisation and reporting, therefore we were unable to test time-saving benefits for the following areas;

- User Management: Single Sign On to connect and manage user access
- Billing: Manage and reconcile billing through a single interface
- Multivariate Testing: Complete statistical tests to reinforce long term campaign strategy
- Integrations: Integrate additional vendors and 1st party data
- Al assists: Workflow accelerators that are being rolled out
- Upper Funnel Activation: Brand campaign planning and measurement

The detailed testing observed by PwC was limited to a few hours and performed by Smartly clients and employees. A more comprehensive testing approach would include a wider range of campaigns over a longer period of time and performed by users that have varying degrees of experience and may have resulted in different time savings.



## Detailed work performed

### Chapter 1: Recalculation of ROAS and CPA

PwC obtained the data used by Smartly to calculate both Return On Ad Sales ('ROAS') and Cost Per Acquisition ('CPA') Key Performance Indicators ('KPIs') in order to test the accuracy of Smartly's existing calculations. Smartly confirmed that they utilise the following calculations for ROAS and CPA:

ROAS:	Revenue (Revenue gained during the advertising campaign) / Spend (Spend in advertising across the Smartly platform)
CPA:	Spend (Spend in advertising across the Smartly platform) / Conversions (Specific goal achieved by an advertiser during the campaign e.g. product sale)

PwC conducted walkthroughs with the Smartly team to understand the end-to-end process of calculating ROAS and CPA. Then PwC selected a sample of ten customers from the top 50 by advertising spend in order to recalculate ROAS and/or CPA and picked further samples to test that relevant input data could be matched back to third party datasets.

#### **Key Observations (1 of 3)**

#### Procedure

## 1.1 Ensure that all relevant data for Smartly's top 50 customers by advertising spend is captured and included in the analysis

#### **Key observations**

#### Overview

PwC obtained from Smartly a list of Smartly's KPI analysis for its top 50 customers by advertising spend for the period between January 1 2022 to December 31 2023. In order to understand how Smartly filtered for the Top 50 customers by advertising spend, PwC organised a virtual walkthrough during which Smartly also explained the rationale behind any exclusions and inclusions from the top 50 by advertising spend.

#### Results

On 6 March 2024, PwC conducted a walkthrough with Smartly. The Global Head of Marketing Science for Smartly explained that the analysis of the top 50 customers by advertising spend only included customers who have their CPA or ROAS data within the Smartly platform. In order to evidence the completeness of the listing, PwC observed the Smartly team extracting the data of top 50 customers by advertising spend from Smartly's systems. PwC then observed the filtering process which ensured that only accounts with ROAS or CPA data were included in the data.

PwC then compared a sample of these ROAS and CPA data sets from the original list of top 50 customers by spend (obtained prior to the walkthrough) and agreed them back to the Smartly platform to ensure they matched.

PwC noted no issues with the walkthrough and data testing.

### Chapter 1: Recalculation of ROAS and CPA

#### **Key Observations (continued)**

#### **Procedure**

#### **Key observations**

1.2 Reconcile platform data (conversions/ revenue/ spend/ impressions) between Smartly and social platforms

#### Overview

In order to ensure the integrity of spend and impression data in the Smartly platform & PwC selected the four largest campaigns by spend which made up 22% of the total spend from Smartly's managed customers, with the goal of reconciling spend and impressions data to a third party source (a social platform).

On 16 February 2024, PwC observed a screenshare of the sampled campaigns which included key metrics such as impressions, and spend, in both the Smartly platform and one social platform which ensured that Smartly was consistently and accurately pulling data from that social platform.

#### Results

PwC observed that spend and impressions data were consistent and matched between Smartly and a social platform for the sampled campaigns.

#### Limitations

PwC were unable to tie back revenue and conversions figures to a third party. Both figures are inputted into the platform by the customer directly.

#### Limitations

When we asked Smartly if either revenue or conversions can be amended by a Smartly employee Senior Marketing Science Partner from Smartly stated "Regular employees have no access to change the revenue and conversion numbers in our production databases (which the reporting view also uses). The dev teams working with part of the product, naturally have access to the production databases where we store these revenue and conversion numbers in order to be able to develop and work with the product. However, every employee in these dev teams is forbidden to manipulate the data, unless the customer formally requests it in writing (for example, in the scenario of customer sending wrong s2s data for some day, they might request us to fix it in written format)". This has not been tested.

1.3 Recalculate a sample of ROAS and CPA (2023 and 2022)

#### Overview

To recalculate CPA and ROAS, PwC selected ten Smartly customers from 2022 and 2023 using the *Top Customer Performance Analysis 11/03* report (top customers refere to the 50 highest spending Smartly clients that report on either CPA or ROAS). The selection included a combination of customers using ROAS and/or CPA metrics.

PwC then cross-referenced these calculations with the original data extracted from the Top Customer Performance Analysis 11/03.

During the testing, it was observed that some Smartly customers utilised personalised KPIs specific to their business, such as ROAS or CPA equivalents. To gain a better understanding of these KPI variations, PwC conducted several walkthroughs with the Global Head of Marketing Science and Senior Marketing Science Partner.

## Chapter 1: Recalculation of ROAS and CPA

#### **Key Observations (continued)**

#### **Procedure**

#### **Key observations**

1.3 Recalculate a sample of ROAS and CPA (2023 and 2022)

Continued...

#### Results

PwC noted that eight out of ten samples matched back to the original data set, when reviewing the industry ROAS and CPA calculations.

For the remaining two samples, the reperformance did not initially agree to Smartly ROAS and CPA calculations. However, Smartly presented evidence from the two customers confirming that they were using adjusted ROAS and CPA KPIs at their customer's behest.

Examples of these adjustments are:

- 1.Reporting ROAS as a \$ amount rather than as a percentage, reflecting the revenue on every dollar spent.
- 2. Reporting CPA after adjusting for additional costs that are not typically included in CPA calculations.

Below shows the recalculations of ROAS and CPA:

#	Customer	Year	KPI metric	Variance	Variance
1	Customer 1	2022	ROAS	0%	-
2	Customer 2	2022	CPA/ROAS	-0.2%	0%
3	Customer 3	2022	ROAS	0%	-
4	Customer 4	2022	CPA	+	0%
5	Customer 5	2022	ROAS	-0.1%	-
6	Customer 6	2023	CPA	-	-0%
7	Customer 7	2023	CPA	-	0%
8	Customer 8	2023	CPA	-	0%
9	Customer 9	2023	CPA	-	0%
10	Customer 10	2023	ROAS	-0%	-

<sup>1</sup> PwC CPA recalculation has been adjusted for the inclusion of the additional costs as requested by the customer

<sup>2</sup> PwC recalculation has been updated to be Revenue per dollar spent for this customer, as requested by the customer

### Chapter 2: Time Saving testing - Overview

PwC tested the time saved using the Smartly platform in comparison to using alternative platforms and tools to build, optimise and report on a campaign on social media platforms.

#### **Procedure**

# 2.1 Perform a platform walkthrough to understand the operations of the Smartly platform and determine the functionality in scope for testing

#### **Key observations**

#### **Overview**

PwC performed a walkthrough to understand the key processes in place when using Smartly to set up, manage and report social campaigns. The primary goal of this process was to understand the design of the Smartly platform, understand where Smartly believed time savings had been achieved with comparison to native platforms (eg. through automation, reduction of repetitive actions, etc.), and finally determine which processes could be directly compared between Smartly and native platforms to ensure any time saving test was fairly designed.

#### Results

Smartly demonstrated a number of features of the platform in the walkthrough. Through this process, two in scope processes were identified that were both critical to running social media advertising campaigns, while also being directly comparable with native platforms (and thus able to be tested). These two areas are:

- 1. Campaign set up and optimisation; and
- 2. Reporting

PwC noted that a number of other processes that form part of the social media advertising process have not been included for two primary reasons:

- They are not central to the social media advertising process; or
- b) The processes were not directly comparable with the processes at native platforms.

Details of the areas not included in scope have been outlined in the Limitations section of the report on page 6.

Having identified the in scope areas for testing, PwC agreed with Smartly to create a real-world social advertising campaign scenario and determine the step by step approach to running this campaign on both Smartly and a selection of native platforms. PwC would then observe the time taken to take these steps.

2.2 Design a test campaign that accurately reflects the parameters (eg complexity, no. of markets) of a typical Smartly campaign

#### **Overview - Campaign Set up and Optimisation**

PwC made enquiries to management to understand and define a "typical campaign" to form the basis of the time saving test. Campaigns can vary significantly from very simple, single creative, single platform, single territory campaigns, to much more complex campaigns spanning multiple territories across multiple platforms and with various tailored creatives. Campaigns can also be optimised during the campaign to various degrees and choice of reporting metrics may also vary.

PwC sought to understand these various options, looking at KPIs (performance, brand awareness, e-commerce), target audience, budget, channels and platforms, as well as creative assets. PwC worked with one of Smartly's clients to understand what a typical campaign and optimisations would look like, this included confirming markets the client typically runs in and number of platforms they use. The aim was to ensure that the campaign under consideration was representative of the client's usual practices.

#### **Key Observations (continued)**

#### **Procedure**

#### Key observations

2.2 Design a test campaign that accurately reflects the parameters (eg complexity, no. of markets) of a typical Smartly campaign

#### **Results - Campaign Set up and Optimisation**

Based on walkthroughs with Smartly, PwC created a complex dummy campaign which included both campaign set up and optimisation. In this scenario, a real-world client campaign was executed on Smartly and three native platforms. The campaign involved initial set up for 3 markets and included up to four optimisation iterations, with the same set up replicated on both the native platforms and Smartly for comparison. The final campaign details can be found below.

Platform	Markets	Initial set up	Optimisation 1	Optimisation 2	Optimisation 3	Optimisation 4
Smartly		14 line items created across the three native platforms	54 creatives and line items created across the three native platforms	14 line items created across the three native platforms	Deletion of 1 line item on Native platform 3	Another 6 line items and creatives added on Native platform 3
Native platform 1	France, UK, Australia	4 line items created	6 creatives and line items created	Another 5 line items and creatives added	No other optimisations	No other optimisations
Native platform 2		5 line items created	24 line items and creatives added	Another 4 line items and creatives added	No other optimisations	No other optimisations
Native platform 3		5 line items created	24 line items and creatives added	Another 4 line items and creatives added	Deletion of 1 line item	Another 6 line items and creatives added

#### **Key Observations (continued)**

#### **Procedure**

## 2.2 Design a test campaign that accurately reflects the parameters (eg complexity, no. of markets) of a typical Smartly campaign

#### **Key observations**

#### **Overview - Reporting**

PwC worked with Smartly and one of their clients and conducted an analysis to determine the structure of a "typical report" with Smartly. This was done to establish a testing procedure that could accommodate the varying nature of advertising campaign reports, ranging from single campaigns with a single metric to multiple campaigns with multiple dimensions and metrics. PwC gained insights into the typical characteristics of Smartly's reporting, ensuring that the reports being evaluated was representative of usual practices.

#### **Results - Reporting**

Three distinct types of reports were generated for the purpose of this test, spanning across multiple native platforms and Smartly. The objective was to gain a precise understanding of the time savings achieved when using the Smartly platform.

Below are the agreed advertising campaign reporting types for our time saving test;

- Market reporting: The aim of this report was to generate a single report for a specific time period, covering one campaign across two
  countries. The report included metrics such as impressions, currency, amount spent, clicks, CPC (Cost Per Click), and CPA (Cost
  Per Acquisition).
- Cross platform reporting: The primary focus of this report was to extract a consolidated report from two native platforms, targeting a single market. The report encompassed key metrics impressions and amount spent.
- Multiple creative reporting: The main objective of this report was to generate a single report for a specific campaign, with a
  breakdown of dimensions based on the 43x creatives used in the campaign. The report included the following metrics; impressions,
  clicks, spend, and conversions.

#### **Procedure**

#### **Key observations**

2.3 Observe Smartly and Smartly's clients undertake the steps agreed in test 2.2 on both Smartly and the native platforms to understand potential time saved

#### **Overview - Campaign set up and Optimisation**

A client of Smartly's were asked by Smartly to take the step by step actions to set up and optimise the agreed campaign on the Smartly platform, with PwC observing. PwC then observed the time taken by Smartly to take the same actions on the native platforms, recording the time spent setting up and optimising the campaign.

#### **Results - Campaign set up and Optimisation**

The table below shows the length of time it took to set up the campaign across the native platforms:

Native platforms	Time taken to set up campaign in native platform
Total campaign set up in the Native platforms 1, 2 and 3	223 minutes
Campaign set up and optimisations for native platform 1	51 minutes
Campaign set up and optimisations for native platform 2	54 minutes
Campaign set up and optimisations for native platform 3	118 minutes

The table below shows the length of time it took to set up the same campaign on the Smartly platform:

Smartly Platform	Time Taken to Set Up and Optimise Campaign in Smartly (minutes)	Time Difference Between Smartly and Native Platforms (minutes)	Time Difference Between Smartly and Native Platforms (%)
Total Campaign Set Up for Native Platform 1, 2 and 3	68 minutes	-155 minutes	30%
Campaign Set Up and optimisation for native platform 1	15 minutes	-36 minutes	29%
Campaign Set Up and optimisation for native platform 2	28 minutes	-26 minutes	52%
Campaign Set Up and optimisation for native platform 3	25 minutes	-93 minutes	21%

#### **Key Observations (continued)**

#### **Procedure**

## 2.3 Observe Smartly and Smartly's clients undertake the steps agreed in test 2.2 on both Smartly and the native platforms to understand potential time saved

#### **Key observations**

#### **Results - Campaign set up and Optimisation**

Our results showed that it was more than 3 times faster (223 minutes versus 68 minutes) to set up and optimise the test campaign on Smartly than doing it separately on the three selected native platforms individually. The total time spent using Smartly was 68 minutes, in contrast to a total of 223 minutes required on the native platforms.

The dummy campaign created for the testing showed time savings but in recognition of the fact that not all campaigns will have the same scope or parameters as the dummy campaign, PwC identified the key areas of the dummy campaign where time savings were noted. These included:

- 1. Logging into platforms: In the testing, users were able to access multiple platforms through a single login on Smartly, eliminating the need to log in separately to each native platform. The testing does not cover the time taken for the initial account set up.
- 2. Duplication of campaigns: Once a campaign has been set up, Smartly allowed for duplication of campaigns, enabling users to quickly replicate existing campaigns. This eliminated the need for users to manually recreate campaigns on each native platform.
- 3. Catalogues and feeds in the Smartly platform: The ability of users to upload creative assets and content to a centralised location on Smartly meant that users did not have to upload the content separately for each platform or campaign. Therefore in the testing users were able to add content to campaigns from this centralised location rather than upload it to each platform or campaign. The testing did not include the initial uploading of the data.

Testing limitations are outlined in the Executive Summary on page 6.

## Chapter 2: Time Saving testing - Reporting

#### **Key Observations (continued)**

#### **Procedure**

# 2.3 Observe Smartly and Smartly's clients undertake the steps agreed in test 2.2 on both Smartly and the native platforms to understand potential time saved

#### **Key observations**

#### **Overview - Reporting**

PwC requested one of Smartly's clients perform the step-by-step actions required to set up the agreed-upon reports on the native platforms, while PwC observed the process. PwC then observed the time taken by Smartly to perform the same actions on the Smartly platforms, documenting the time spent in creating these reports.

#### **Results - Reporting**

The table below shows the length of time it took to create each report across the native platforms;

Native platforms	Time taken to set up report in native platform	
Total reporting set up in the Native platforms	15:46 minutes	
Market reporting	7:54 minutes	
Cross platform reporting	4:12 minutes	
Multiple creative reporting	3:40 minutes	

The table below shows the length of time it took to set up the same reports on the Smartly platform:

Smartly Platform	Time taken to create reports in Smartly (Minutes)	Time Difference Between Smartly and Native Platforms (minutes)	Time Difference Between Smartly and Native Platforms
Total reporting set up for native platforms in Smartly	5:17 minutes	-10:35 minutes	32%
Market reporting	2:33 minutes	-5:21 minutes	30%
Cross platform reporting	1:15 minutes	-3:03 minutes	28%
Multiple creative reporting	1:29 minutes	-2:11 minutes	38%

## Chapter 2: Time Saving testing - Reporting

#### **Key Observations (continued)**

#### **Procedure**

## 2.3 Observe Smartly and Smartly's clients undertake the steps agreed in test 2.2 on both Smartly and the native platforms to understand potential time saved

#### **Key observations**

#### **Results - Reporting**

PwC found that using Smartly instead of native platforms resulted in a time savings of more than three times (15:46 minutes versus 5:17 minutes). The total time spent on Smartly was 5 minutes and 17 seconds, while the native platforms required a total of 15.46 minutes. The specific details of the time taken are recorded on the previous slide.

The dummy campaign created for the testing showed time savings but in recognition of the fact that not all campaigns will have the same scope or parameters as the dummy campaign, PwC identified the key areas of the dummy campaign where time savings were noted. These included:

- Currency changes: The testing showed users were able to make use of Smartly's built-in currency conversion capabilities,
  whereas on some native platforms, this had to be manually calculated using a seperate currency conversion tool after pulling the
  report. Please note the accuracy of Smartly's currency conversion has not been tested.
- 2. Moving across advertising accounts in the same platform: Users were able to add multiple advertising accounts simultaneously in Smartly, whereas native platforms only allowed one account to be pulled at a time.
- 3. Logging into platforms: In the testing, users were able to access multiple platforms through a single login on Smartly, eliminating the need to log in separately to each native platform. The testing does not cover the time taken for the initial account set up.

Testing limitations are outlined in the Executive Summary on page 6.

