



Data Analytics Software

Corporate Reporting Explanatory Guidance Notes

2025

CONTENTS

1.	INTRODUCTION	3
1.1	Using the Explanatory Guidance Notes.....	3
1.2	Skills and professional scepticism	3
1.3	Exercises and Practice Activities.....	4
1.4	Exam technique – using the data analytics software.....	4
1.5	Audit management tool	5
1.6	Terminology used in the data analytics software	5
1.7	Background to the data analytics software.....	5
1.8	Using the data analytics software for the Corporate Reporting exam	6
1.9	Accessing the data analytics software	7
1.10	Using the Explanatory Guidance Notes.....	7
1.11	The data – Elephant	8
2.	NAVIGATING THE DASHBOARD.....	9
2.1	The Dashboard	9
2.2	The nine modules – an overview	10
3.	THE <i>EXPLORE</i> MODULE (LEVEL 1).....	15
3.1	Introduction	15
3.2	Navigating Explore functions	16
3.3	Searching and interrogating accounting records	21
3.4	The Four Visualisation Tools.....	37
3.5	Account Numbering	61
4.	THE <i>METRICS</i> MODULE (LEVEL 2).....	67
5.	THE <i>REVENUE CASCADE</i> MODULE (LEVEL 3)	73
6.	THE <i>DETECT</i> MODULE – (LEVEL 2).....	78
7.	THE <i>COLLABORATE</i> MODULE (LEVEL 3).....	98
8.	THE <i>INGEST</i> MODULE (LEVEL 3).....	98
9.	THE <i>FLUX</i> MODULE (LEVEL 3)	98
10.	THE <i>SELECT</i> MODULE (LEVEL 3).....	99
11.	THE <i>REPORTS</i> MODULE (LEVEL 3).....	99
	APPENDIX A – ANSWERS TO EXERCISES	100
	APPENDIX B – SKILLS GRID	108

1. INTRODUCTION

1.1 Using the Explanatory Guidance Notes

These Explanatory Guidance Notes explain how to use the key elements of the data analytics software that will be a part of the Corporate Reporting exam.

The data analytics software referred to in these Explanatory Guidance Notes will be the same as that used in the exam. However, in the exam, the data downloaded into the data analytics software will relate to a different company, from a different industry and with different attributes and risks. The company used for the purpose of these Explanatory Guidance Notes is *Elephant Company (Elephant)*.

The data analytics software is commercial software used in practice by many audit firms. It is not educational software. The data used is also that of a real company and can contain many thousands of real transactions.

These Explanatory Guidance Notes only cover a limited number of possible applications of the data analytics software tools, functions and modules. They primarily consider the functions necessary for use in the Corporate Reporting exam, rather than all those that might be used in practice. However, it is important for you to have a general awareness of all the modules in the data analytics software to gain an understanding of the context of the data analysis and functions. Understanding the source and nature of the data and appreciating how the data analytics software functions would apply in professional practice is essential to this context.

You are advised to read these Explanatory Guidance Notes and complete Practice Questions One and Two (found in the Corporate Reporting Question Bank). As well as these guidance notes and Practice Questions, ICAEW has also produced a walkthrough guide (found in the Corporate Reporting Workbook) which explains how you should use the Advance Information to prepare for your exam.

1.2 Skills and professional scepticism

The application of the data analytics software tools to the data may require using key skills including data assimilation, structuring of data, exercising judgement and applying professional scepticism.

These skills may be needed, for example, to identify and investigate unusual patterns and trends from visualisations produced by the data analytics software. Alternatively, they might be needed to identify and investigate a notable, and potentially high risk, transaction.

Once an unusual trend or notable transaction has been identified, the nature of the

investigations could be to consider the underlying causes and any audit risks. For example, having found an issue with one transaction, it may be appropriate to use judgement to widen the search for other similar or related transactions which may exhibit the same risk.

It might not always be possible to clearly identify the nature and rationale of the notable transaction or trend. However, the data may enable you to devise questions for management as audit procedures, to obtain information and explanations which would help you to identify and understand key audit risks.

In using real company data and real-world commercial data analytics software, these skills are intended to replicate and test the knowledge and understanding used in auditing in the workplace.

Applying professional scepticism to the data analytics software and to the data is important. For example, where you have used the data analytics software to analyse data, it is appropriate to apply professional scepticism to question whether that analysis is appropriate, perhaps using other information provided in the Corporate Reporting exam question scenario.

1.3 Exercises and Practice Activities

To practise skills, these Explanatory Guidance Notes contain a series of **Exercises** and **Practice Activities** which you can use to familiarise yourself with how the data analytics software operates. These will give you experience of how the data analytics software may be used by you in the Corporate Reporting exam to identify audit risks, perform analysis, exercise judgement and evaluate the data.

1.4 Exam technique – using the data analytics software

These Explanatory Guidance Notes contain help on how to use the data analytics software in answering Corporate Reporting exam questions which involve interrogating and interpreting the data. They cannot set out every possible approach to answer exam questions – you will need to use your own knowledge, understanding and skills to do this.

For each of the main data analytics software modules, there are **How to Use** tables. These give indicative guidance of how the data analytics software modules can be used in the Corporate Reporting exam from a 'Big Picture' perspective (eg, for review and risk identification) and from a 'Small Picture' perspective (eg, for looking at details and investigating by drilling down to individual transactions at a more granular level). These tables are examples rather than comprehensive lists, but they should provide ideas of how you can use the data analytics software to analyse the data.

There are also **Exam Approach** sections which give advice on ways to use the data analytics software to search and investigate the data in the context of the Corporate Reporting exam.

Familiarity with the data analytics software is essential, but these data analytics skills are intended to enhance and extend, rather than replace, the knowledge and skills gained in all other aspects of the Corporate Reporting learning outcomes and learning materials - <https://www.icaew.com/for-current-aca-students/exam-resources/advanced-level/corporate-reporting-module-study-resources>.

1.5 Audit management tool

The data analytics software is an audit management tool as well as a data analytics tool. The Corporate Reporting exam may require you to consider internal notes in the data analytics software from other members of the audit team. Discussion notes may also be included in the data analytics software which have been sent to, or received from, the client. You should be aware of these audit management features as part of the information available from management in the scenario. However, any notes or discussion added by you to the data analytics software will not be marked as part of your script in the Corporate Reporting exam.

1.6 Terminology used in the data analytics software

The data analytics software may not always use IFRS terminology. For example, 'income' may be used rather than 'revenue'. Other non-IFRS terms may also be used.

1.7 Background to the data analytics software

In practice, the client company's nominal ledger is uploaded into the data analytics software, which can then provide analysis and run analytics tests, producing visual and analytical results. This enables the auditor to identify and evaluate risks, including outliers. It also acts as an audit management tool, facilitating communications within the audit team and with the client.

The raw data uploaded is essentially management accounting information and may be before final adjustments for financial reporting purposes. It is therefore important to be aware that the data provided may not have applied appropriate financial reporting adjustments. For example:

- Depreciation for the year
- Accruals and prepayments
- Deferred or accrued revenue
- Impairments
- Provisions
- Adjustments to inventory values

- Finance charges
- Fair value adjustments
- Current tax or deferred tax
- Lease rentals.

It is therefore important to understand both the double entry from your earlier studies and the financial reporting treatment arising from these types of transactions.

1.8 Using the data analytics software for the Corporate Reporting exam

The data analytics software in the Corporate Reporting exam will form part of one question only.

Advance Information will be issued four weeks before the exam. The Advance Information comprises of two elements:

- 11 months data for a company in the data analytics software; and
- An Advance Information document with scenario and background information

In the exam, candidates will be given access to the data in the data analytics software for the same company for the full 12 months. There will be no changes to the 11 months' data which you will have already had an opportunity to examine in the Advance Information.

Typically, there will be a total of 15-20 marks in the Corporate Reporting exam for the direct use of the data analytics software that cannot be obtained without using it.

The data analytics software contains a series of visualisations which you may be required to interrogate, analyse and interpret. However, **you will not be able to copy visualisations (or any other information) from the data analytics software into the word processing area for your script.** It is therefore important that you demonstrate communication skills in your exam answer to convey your understanding and analysis of the visualisations and data.

1.9 Accessing the data analytics software

When you register as an ACA student, you will automatically be able to access the data analytics data analytics software.

You can also access the dataset used in these guidance notes here:

[Access data analytics software](#)

Having arrived at the dataset dashboard, the initial screen will show the dashboard for the company *Elephant Company*.

When you register for the Corporate Reporting exam, your student number will be passed to the data analytics software provider. When you click on the link to the dataset within an exam, your student number will be recognised and you will be taken to the correct dataset. Once logged into the exam environment you will not have to log in again to access the data analytics software; you will just click on the link to arrive at the dataset dashboard.

Notes:

The data analytics software works on most browsers. However, it is recommended that you do **not** use Safari. If you use a laptop, some visualisations may appear slightly more compressed than shown in these guidance notes or may not show the full screen. It is recommended that you do **not** use an iPad or other tablet or smartphone to access the data analytics software.

It is important that you logout of the data analytics software each time you use it. You should do this by clicking on the icon  at the top right-hand side of the screen. Ensure you always confirm that you wish to logout. Further guidance on logging out can be found at icaew.com/das.

1.10 Using the Explanatory Guidance Notes

These Explanatory Guidance Notes and the data analytics software will use the 12-month Elephant data.

IMPORTANT

When using these Explanatory Guidance Notes, it is important that you have the data analytics software open and have access to the 12-month Elephant data. Use the data analytics software as you go through these Explanatory Guidance Notes to replicate, repeat and practise each of the tasks or steps being described.

It is only by using the data analytics software yourself that you will become familiar with it and learn how to apply the tools and modules to answer the requirements in the Corporate Reporting exam. Practice with the data analytics software is therefore essential.

1.11 The data – Elephant

Elephant is a real company which provides marketing services, mainly to digital businesses based in the UK (domestic) and the rest of Europe (overseas). Customers sign a contract with Elephant for the provision of a specific project. Each project is short term.

Customers are invoiced, and revenue is recognised, when the customer signs to confirm acceptance of a completed project. Overseas customers are sometimes invoiced in their local currency.

A typical marketing contract will comprise a price for concept, design, artwork and brand development. In addition, the contract will specify the selling price for promotional products such as banners, posters and marketing gifts (eg, pens, key rings etc.). The price for promotional products is calculated based on the quantity ordered by the customer.

Costs are incurred by Elephant for each contract, including payroll and cost of sales for promotional products. Also, a large element of cost of sales is in respect of travel, accommodation, motor vehicle costs and consumables. Travel and accommodation mainly relate to expense claims from Elephant staff arising from visiting clients.

Elephant's accounting year end in the data analytics software is 31 December 2018.

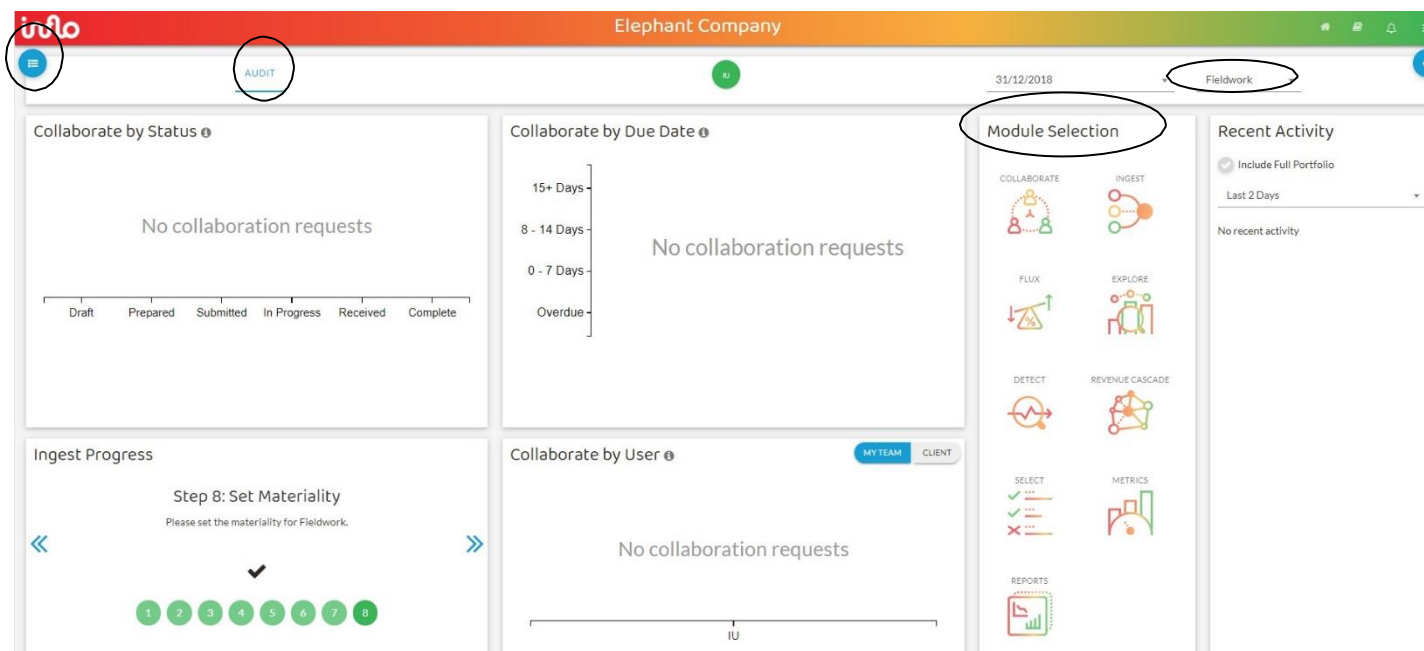
In the Corporate Reporting exam, background details of the company in the scenario will be provided within the Advance Information document. Further information about the company may be provided in the exam.

2. NAVIGATING THE DASHBOARD

2.1 The Dashboard


Having clicked on your link, the initial screen will show the data analytics software's main overview dashboard for *Elephant*.

The data analytics software will open up in the overview dashboard for the engagement, as below:



There are two functions circled in the top left corner.

The blue highlighting in the top left-hand corner shows that **AUDIT** (circled) is currently selected. No other options will be visible to you.

Also circled in the top left-hand corner is the  icon. Clicking on this icon shows the organisations to which you will have access. This will be Elephant for the purposes of the

Corporate Reporting exam practice. There will be a different company for the Corporate Reporting exam (including Advance Information).

At the top of the dashboard, on the right-hand side you can see drop-down menus with the company's year end (only 31/12/2018 is available in the case) and audit stage where different

versions of the datasets have been imported into the software (Planning/Fieldwork/Completion). The Corporate reporting exam will use the **Fieldwork** stage (circled) so always check that this is the stage selected in the drop-down menu.

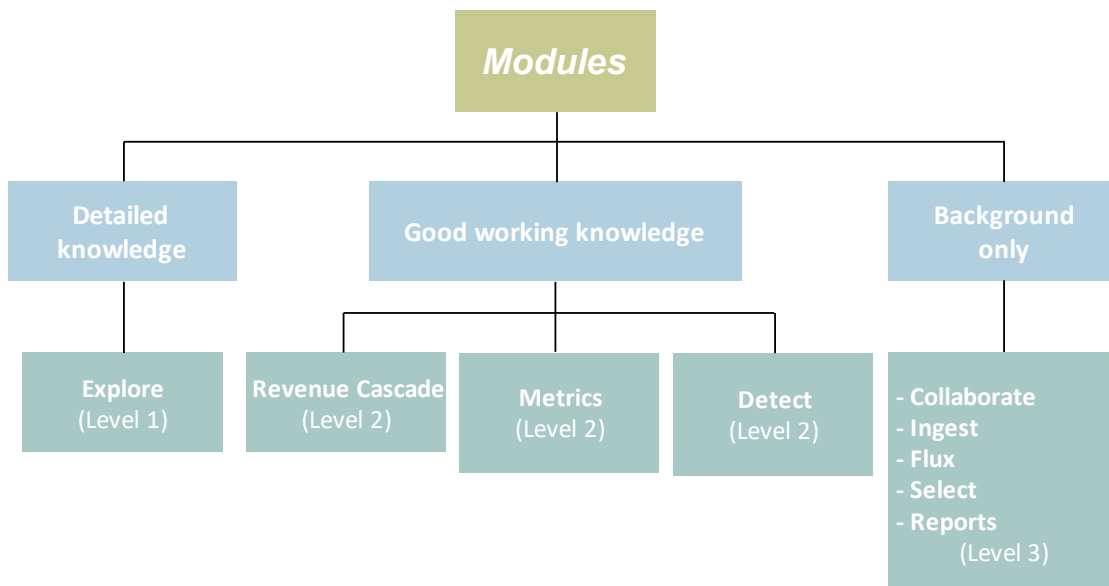
At the top of the dashboard, towards the right-hand side, is the *Module Selection* section (circled), showing symbols below for all the modules. Each module is a specific process in an audit engagement.

2.2 The nine modules – an overview

To navigate into other modules from the dashboard, click on the required module symbol in the *Module Selection* section (circled above) and it will open a dashboard for the selected module.

The following sections of these Explanatory Guidance Notes consider each module in the level of detail appropriate for Corporate Reporting exams.

The following is an overview diagram of the nine modules, showing their relative importance for the Corporate Reporting exam:





The levels of knowledge required of each module in the Corporate Reporting exam are:



Level 1 – Detailed knowledge required – likely to appear in most CR exams





Level 2 – Good working knowledge required


Level 3 – General awareness only (background context)

To gain an initial overview, a brief summary of the modules is set out in the table below. The modules appear in the order in which they would be used chronologically in a real audit.

Module name	Knowledge level needed	Outline description
	<i>Level 3</i>	<p>The <i>Collaborate</i> Module is an audit management tool. It enables secure communication between the auditor and the client. It also enables confidential communications between members of the audit team, with or without client access.</p> <p>Examples of applications of the <i>Collaborate</i> Module include:</p> <ul style="list-style-type: none">• File collaboration and effective workflow management with clients.• Requesting and receiving documents and other evidence from clients.• Tracking and monitoring outstanding requests in real time.
	<i>Level 3</i>	<p>The <i>Ingest</i> Module enables the client to upload and import its trial balance and nominal ledger into the data analytics software.</p> <p>Automated validation checks are then carried out by the audit team to verify and cleanse the data.</p> <p>In practice, the <i>Ingest</i> Module is normally used to set the materiality level and can be used to set performance materiality.</p> <p>You will not have access to this module in the Corporate Reporting exam.</p>

Module name	Knowledge level needed	Outline description
	<p><i>Level 1</i></p>	<p>The <i>Explore</i> Module is a data analytics tool.</p> <p>It enables accounting information to be analysed at various levels of aggregation from financial statement level down to the double entry for individual transactions.</p> <p><i>Explore</i> has two alternative ways of viewing the data. These are called 'Views' and are:</p> <ul style="list-style-type: none"> • 'Financial Statement' view • 'Account' view <p><i>Explore</i> uses datasets to assess expectations and thereby enable risk assessment and risk assignment. It also enables analysis of trends in the data and identification of notable transactions, through four main visual tools:</p> <ul style="list-style-type: none"> • Stacked Bar Charts • Bump Chart • Heat Map • Tree Map
	<p><i>Level 2</i></p>	<p>The <i>Detect</i> Module enables the running of audit tests (routines).</p> <p>There are 24 routines which compare against pre-defined criteria to help detect exceptions.</p> <p>Functions include:</p> <ul style="list-style-type: none"> • Identifying unusual characteristics • Identifying indicators of fraud, management override and unusual behaviour • Visualisations to identify trends

Module name	Knowledge level needed	Outline description
	<p><i>Level 2</i></p>	<p>The 'Revenue Cascade' Module is a tool to visualise and interrogate relationships in the revenue/receivables cycle to highlight transactions diverging from expectations. It takes 100% of the revenue cycle transactions that were uploaded and maps them to the expected business cycle, visualising and stratifying the data population. It identifies notable or unusual transactions to assess risk and evaluate the impact on earnings quality. It can be used to reduce or replace techniques such as sampling.</p>
	<p><i>Level 3</i></p>	<p>The <i>Select</i> Module automates sample selection from a population of transactions. It is designed to complement other audit practices, procedures and processes and enable a collaborative approach to testing with the client's management.</p>
	<p><i>Level 2</i></p>	<p>The <i>Metrics</i> Module automatically prepares metrics, ratios, key performance indicators (KPIs), and financial performance indicators from the uploaded nominal ledger data. Additional information can also be uploaded to enable further metrics to be determined.</p> <p>The metrics can be benchmarked against other organisations and against industry specific standards.</p>
	<p><i>Level 3</i></p>	<p>The <i>Reports</i> Module combines testing results and visuals into a final report with supporting content.</p> <p>The report relates to the audited entity and is designed to add value for the client.</p>

Module name	Knowledge level needed	Outline description
<p data-bbox="266 447 321 468">FLUX</p> 	<p data-bbox="495 453 594 485"><i>Level 3</i></p>	<p data-bbox="662 373 1347 478">The <i>Flux</i> Module allows analytical procedures to be applied to trial balance data ingested at the planning, fieldwork or completion stages of the audit.</p> <p data-bbox="662 520 1341 625">The auditor can set expectations of monetary and/or percentage changes versus comparative figures or at an individual account/category of accounts level</p> <p data-bbox="662 667 1351 804">Unusual movements are then flagged or further audit investigation. Clients can be invited to comment on the specific flagged movements withing the <i>Flux</i> module.</p>

3. THE *EXPLORE* MODULE (LEVEL 1)

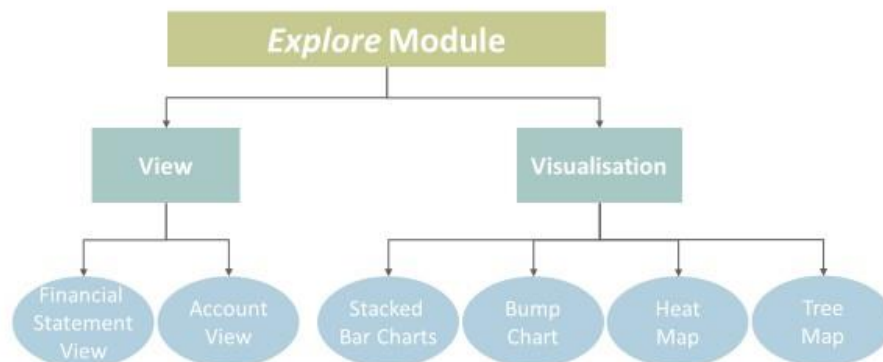
3.1 Introduction

The *Explore* Module is a data analytics tool. It can be used for a variety of audit procedures including: risk assessment; analytical procedures; and detailed testing.

The *Explore* Module also enables an analysis of trends in the data and identification of notable transactions, through four main visualisation tools.

For the Corporate Reporting exam, the *Explore* Module is by far the most important of all the modules available.

This following is an overview diagram of the *Explore* Module:



This section examines the various tools and functions available in the *Explore* Module and shows how to navigate through its main dashboard.

This section will show you how to:

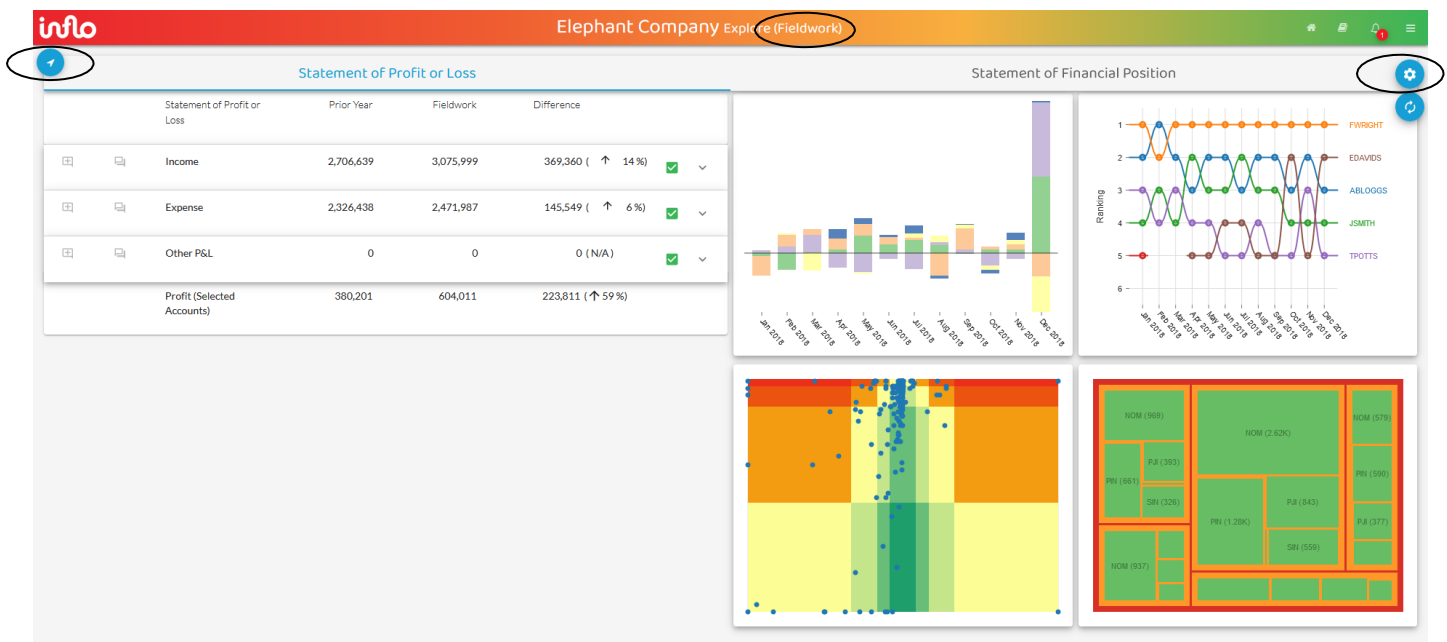
- Navigate through the functions of the *Explore* Module, using the available icons (section 3.2).
- Search and investigate the accounting records (section 3.3). This section will illustrate how to access accounts and drill down to individual transactions using either the:

- 'Financial Statement View'; or
 - 'Account View'.
- Use the four main visualisation analysis tools (section 3.4):
 - Stacked Bar Charts
 - Bump Chart
 - Heat Map
 - Tree Map

3.2 Navigating Explore functions

3.2.1 The Explore Dashboard

The *Explore* dashboard is shown below.




NOTE

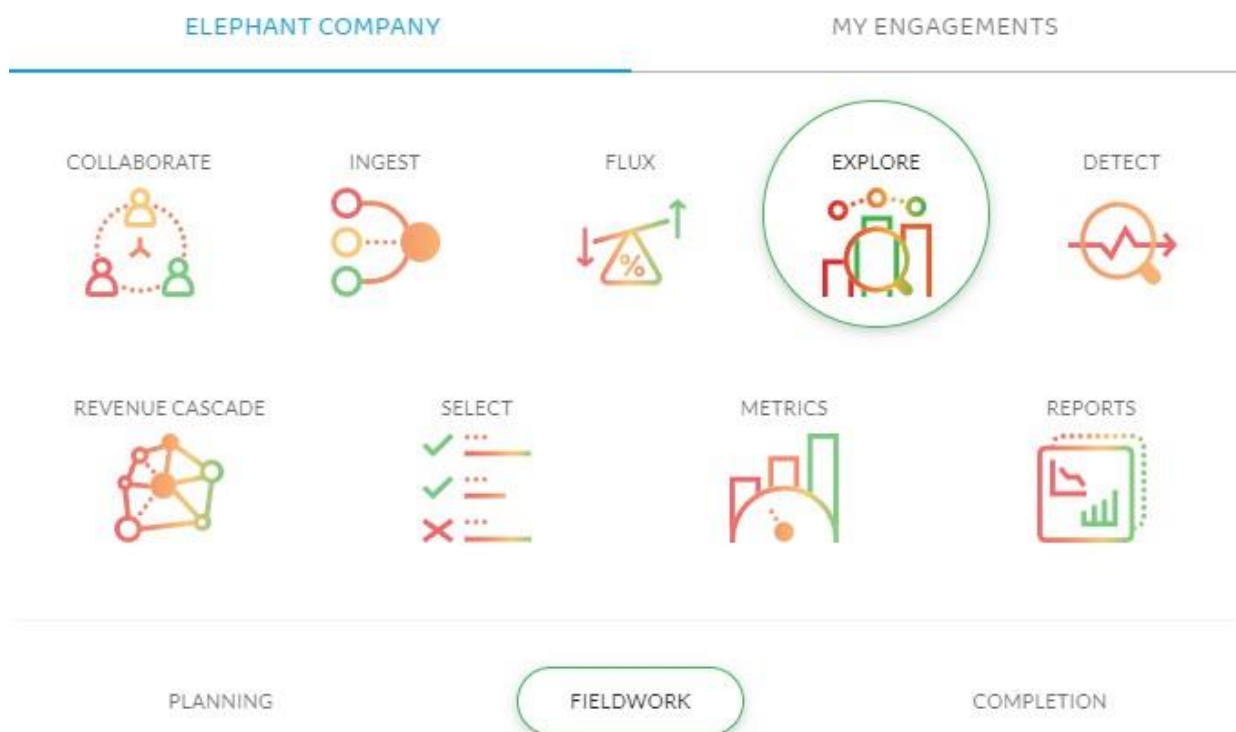
The *Explore Module* (and all other modules) should open in the **Fieldwork** stage (circled centre top above). It should always remain in this stage. See below for how to correct this if not the case.

The following sections (3.2.2 to 3.2.4) look at the icons which are in the top left-hand and top right-hand corners of the above screen. This will help you navigate around the dashboard.

3.2.2 The Navigation icon

The Navigation icon  in the top left-hand corner of the *Explore* dashboard is important in switching between: (i) modules; and (ii) stages of the audit.

Clicking on the Navigation icon reveals a drop-down box, in the top left-hand corner of the screen as follows:



Towards the top right-hand corner of the above drop-down box, the green circling of the *Explore* Module symbol indicates that you are currently operating in the *Explore* Module. To switch modules, just click on one of the other module symbols and this will take you to the main initial dashboard of that module.

At the bottom of the above screen, the three stages of the audit available in the data analytics software are shown as:

- Planning
- Fieldwork
- Completion

The green circling of the *Fieldwork* stage indicates that the module is currently operating within this stage. Click on the *Fieldwork* button if the data analytics software default is not already in Fieldwork.


IMPORTANT The *Fieldwork* stage is the only one that will be used for the Corporate Reporting exam.

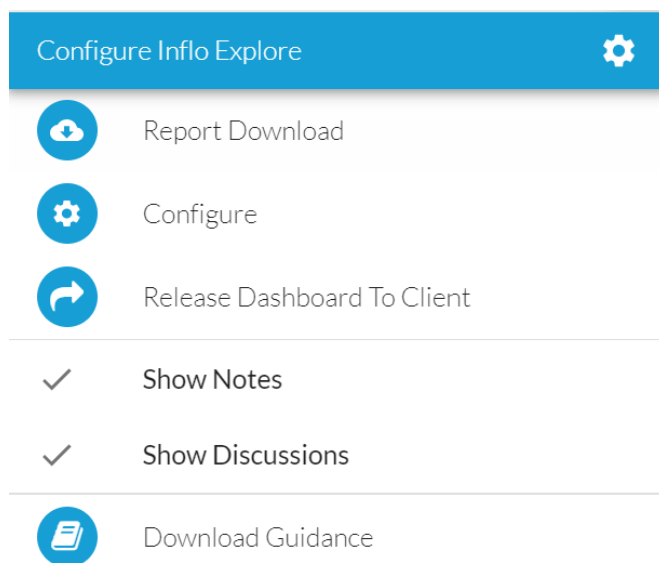
You will not need The *Planning* stage in the Corporate Reporting exam.

The *Completion* stage will not be populated with data for the Corporate Reporting exam, so you should **not** use this facility.

WARNING: Always check that you are working in the *Fieldwork* stage.

3.2.3 The Cog icon

The *cog icon*  is shown in the top right-hand corner of the screen. If you click on the cog icon, a drop-down menu will appear in the top right-hand corner of the screen, as follows:



You do **not** need the **Configure** or **Release Dashboard To Client** functions (nor subheadings: Show Notes; or Show Discussions).

The bottom item in the above list, **Download Guidance**, may be useful in helping you. It provides additional guidance notes on each module which may help you understand, in more detail how the functions work and how they might be useful. The 'Download Guidance' is available as a PDF file which you can save.

Each module also has its own **Download Guidance** (except the Reports Module) to help understand the functions of that module. These can be found in each module as described above.

A word of warning. The 'Download Guidance' within the data analytics software was written for

commercial usage in practice. It was not written for the purposes of the Corporate Reporting exam. You are not therefore expected to use all the functions in the 'Download Guidance' or to read the Download Guidance in detail. However, it contains explanations that may be a useful reference source of additional explanation for a particular function that you may be struggling to understand.

Exam approach

During the exam you will not have time to consult the 'Download Guidance' function in the data analytics software. It is therefore important to practise using the data analytics software so you are familiar with its functions and routines.

If you click on the **Report Download** routine at the top of the above screen it shows the following screen:

Report Configuration

Format	MS Excel
Reconciliation Results	Include
Face Of Financial Statements View	P&L and BS split
Financial Statements Detail	Detailed
Show All Accounts	Include
Notes	Hide
Test Samples	Hide
Prior Year Comparison	Opening
Unusual Movements	Hide

CLOSE DOWNLOAD

The report function is adaptable, but you should not need to change any of the default selections above.


If you click on the green download button in the bottom right corner, it will download the nominal ledger balances into a spreadsheet. The tabs along the bottom of the spreadsheet show balances at the financial statement level and at the financial statement line item level. Within the

spreadsheet for each tab, the balances for each individual account are shown, organised by elements of the financial statements. In an audit context these can be used and adapted as lead schedules. The previous year balances are also shown.


Having downloaded the spreadsheet for the Advanced Information in Corporate Reporting exam you can then carry out analysis of this 11-month data using a spreadsheet in preparation for the exam. It may be helpful for you to analyse the changes between the current year and previous year.

Exam Note: You will **not** be able to use this Report Download routine during the exam to download the 12-month data into a spreadsheet.

3.2.4 The notes icon

The **notes icon**  is located to the left of each category (in 'Financial Statement View') and each account (in 'Account View') on the left-hand side of the screen.

As part of the audit management function, the data analytics software has the notes icon to include an internal note to another member of the audit team. It is used by clicking on the icon

and adding a note. The icon will then show as filled .

Exam approach – recording your answer

In the Corporate Reporting exam any notes you input into the data analytics software are **not** part of your answer script and will not be marked, so this icon should not be used by you to enter your answer or store text. You should **not** therefore add any text using these icons (see also the Discussion icon below).

Furthermore, you will not see any notes you make in the 11-month advance information data in the 12-month real exam data.

3.2.5 The discussion icon

The **discussion icon**  is located to the right of the notes icon.

As part of the audit management function, the data analytics software has the discussion icon to include notes to/from client staff. It is used by clicking on the icon and adding text. The icon will

then change colour to red: ie, .

Again, in the Corporate Reporting exam, anything you input into the discussion box is not part of your script and will not be marked, so this icon should not be used by you to enter or store text. You should **not** therefore add any text using this icon.

3.3 Searching and interrogating accounting records

There are two alternative presentations of the *Explore* dashboard:

- The 'Financial Statement View'
- The 'Account View'

The *Explore* dashboard will initially appear as follows:




































The above dashboard shows the '**Financial Statement View**'.

The above *Explore* dashboard in *Financial Statement View* alternates between: (i) the Statement of Profit or Loss and (ii) the Statement of Financial Position.



At the top of the above screen there is the choice of selecting either: (i) Statement of Profit or Loss; or (ii) Statement of Financial Position. The blue highlighting shows that the **Statement of Profit or Loss** (circled) has currently been selected.

Income, Expense and Other P&L are shown as overall totals on the left-hand side of the above dashboard, which are the basic aggregated totals from the Statement of Profit or Loss. The four quadrant diagrams (more about them later) on the right-hand side of the screen show different visualisations of the data relating to the Statement of Profit or Loss.

The down arrow  indicates that further detail is available. Clicking anywhere on that line (except on the notes, discussion or tick box icons) expands each category further. An example for Expenses is as follows:

		Expense	2,326,438	2,471,987	145,549 ( 6%)		
		Payroll Expenses	1,286,455	1,332,324	45,869 ( 4%)		
		Cost of Sales	809,659	881,464	71,805 ( 9%)		
		Distribution Costs	0	0	0 (N/A)		
		Administrative Expenses	230,324	248,324	18,000 ( 8%)		
		Other Expenses	0	9,875	9,875 (N/A)		
		Depreciation Costs	0	0	0 (N/A)		

Alternative presentation of the Explore dashboard – the ‘Account View’

Each of the alternative presentations of the *Explore* dashboard can be selected by clicking on the switching icon  in the top right-hand corner (circled). Clicking on the  icon switches in and out of the ‘Financial Statement View’ to show the following alternative dashboard – the ‘Account View’:



Instead of all accounts being divided into the two financial statements (Statement of Profit or Loss; and Statement of Financial Position) there are now six account groupings across the top: Asset, Liability, Equity, Income, Expense, Other P&L.


The *Account View* currently shows **Assets** (circled in the top left-hand corner above). The four quadrants on the right visualise these asset accounts.

Exam approach – Which ‘View’ to use

The choice of which ‘View’ to use is a question of judgement and is dependent on the nature of the question. For example, the ‘Financial Statement View’ enables you to scan account totals and comparatives at the financial statement line item level (eg, PPE or trade payables) before drilling down further. So, if the question identifies trade payables as a key risk area, it would be appropriate to start with this trade payables total in the ‘Financial Statement View’.

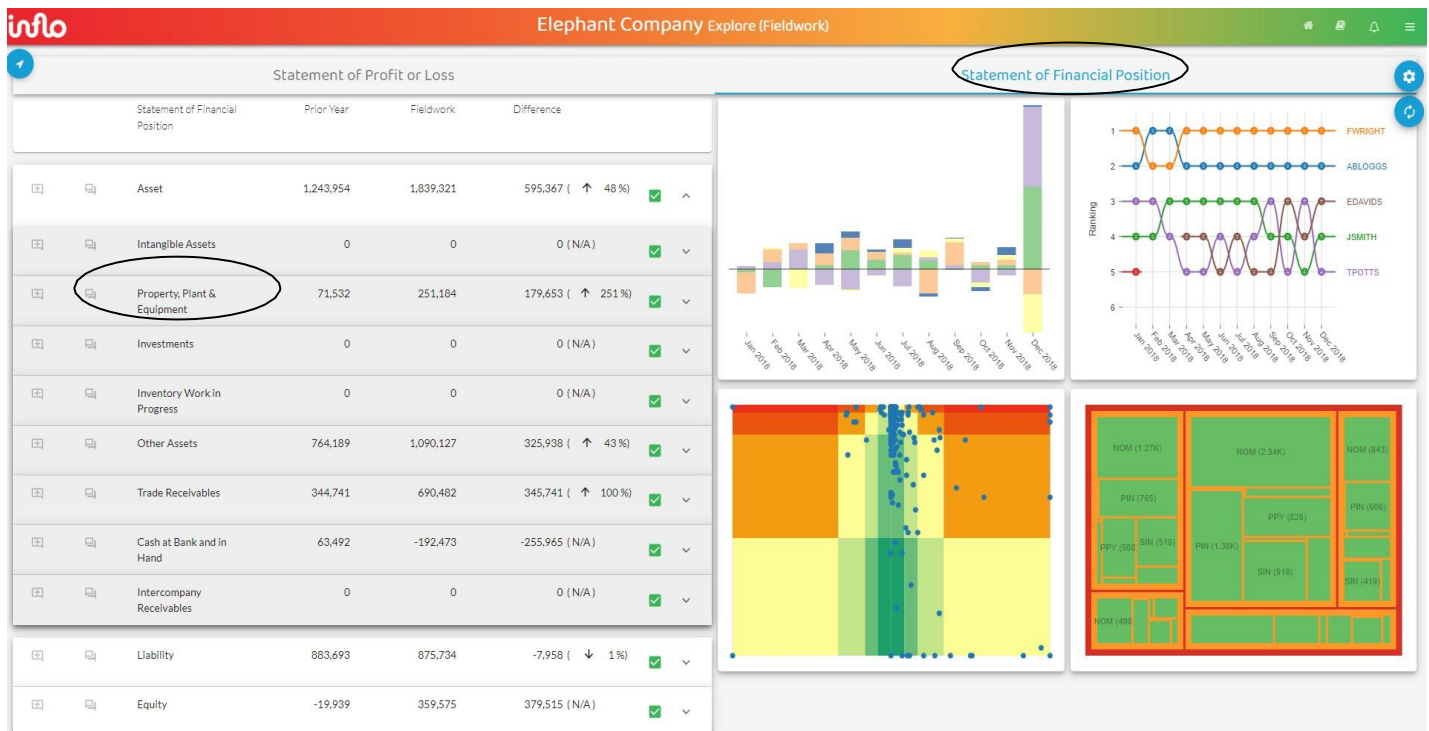
The ‘Account View’ gives a more detailed list (for example, all the sub-accounts making up assets, including office equipment, fixtures & fittings, receivables control account etc.). This will make it easier to drill down to an individual transaction, particularly if you know the sub-account where it is recorded.

'Financial Statement View'

Clicking on the switching icon  again will return you to the first of the above two presentations, the 'Financial Statement View' (Statement of Profit or Loss and Statement of Financial Position). If you now click on the **Statement of Financial Position** at the top of the screen it will switch to blue (circled below) and show Statement of Financial Position items. The four quadrant diagrams will also change to reflect visualisations relating to Statement of Financial Position amounts.

The left-hand side of the screen now shows the totals headed: Asset, Liability and Equity. These are aggregated totals of many Statement of Financial Position accounts and, on their own, show little.

However, if you click on **Asset**, the drop-down on the left-hand side of the screen will now show the total of each of the main asset accounts (starting with intangible assets) as follows:



Having clicked on **Asset**, the drop-down box now shows the analysis of assets according to each class of account (ie, grouping of accounts). **Property, Plant & Equipment** (circled) has been selected as one example of a group of accounts that forms part of the total for assets. This would normally correspond to one financial statement line item (ie, PPE).

For each group of accounts, such as PPE, the left-half of the above dashboard shows: (i) the prior year figure (ii) the current year figure (*Fieldwork*); and (iii) the absolute change and % change (*Difference*). This is a useful tool for identifying risks arising from changes and seeking information and explanations from management to gain an understanding of the reasons behind

unexpected changes.

Exam approach - professional scepticism

It is important to look at changes from the prior year figure in the context of the information provided in the Corporate Reporting exam scenario. This may reveal unexpected changes which have occurred; or conversely expected changes that have not occurred. In this context, professional scepticism should be applied to both the data in the data analytics software and to management explanations of changes given in the scenario. It is important to note that the current year data (in Fieldwork) is management accounting information, which may not include final adjustments or follow financial reporting regulations.


For PPE, the data in the above table shows a significant change from £71,532 to £251,184, which is an overall increase of £179,653 or 251% (subject to rounding). Given that the increase is significantly above the materiality level of £30,000, this is an area of potentially high audit risk that requires further investigation. As a first step in such an investigation, an analysis of the accounts making up the PPE total needs to be identified to establish the underlying cause of the increase.

Clicking on PPE generates a further drop-down box showing the PPE total (£251,184 on the top line) and, below that, all the separate types of PPE comprising that total. The analysis of PPE according to each account, is therefore shown as follows:


































































☰	🗨	Property, Plant & Equipment	71,532	251,184	179,653 (↑ 251%)	✓	^
☰	🗨	Land, buildings & improvement	207,711	336,837	129,126 (↑ 62%)	✓	
☰	🗨	Machinery & equipment	-140,342	-115,231	25,111 (N/A)	✓	
☰	🗨	Motor Vehicles	4,163	29,578	25,415 (↑ 611%)	✓	
☰	🗨	Other property, plant & equipment	0	0	0 (N/A)	✓	
☰	🗨	Assets under construction	0	0	0 (N/A)	✓	
☰	🗨	Investment properties	0	0	0 (N/A)	✓	

This analysis shows that the largest absolute increase is **Land, buildings and improvement** which has risen by £129,126 (or 62%).

However, the largest percentage increase is **Motor Vehicles**, which has risen by 611%. Whilst the absolute increase for motor vehicles of £25,415 is below the materiality level, it is sufficiently close to the materiality threshold of £30,000 to warrant further investigation.

To investigate further, it is necessary to drill down to the individual transactions which have given rise to these changes. To do this, click on the switching icon  in the top right-hand corner of the screen to obtain the 'Account View'. Then make sure that **Asset** is selected in the top left-hand corner.

This produces the following, in the left half of the screen. This shows all asset accounts at a more detailed level. So, for instance, there is a separate account for each bank account.

Asset					
ACCOUNT	PRIOR YEAR	FIELDWORK	DIFFERENCE		
  11010 - Motor Vehicle 1	5,550	30,965	25,415 ↑ 458 %		
  11015 - Motor Vehicle 1 Depreciation	-1,388	-1,388	0 N/A		
  12020 - Plant Equipment	1,311	1,311	0 0 %		
  13010 - Fixtures & Fittings	24,278	50,736	26,457 ↑ 109 %		
  13020 - Office Equipment	183,432	286,101	102,669 ↑ 56 %		
  13025 - Office Equipment Depreciation	-141,653	-116,542	25,111 N/A		
  20010 - Bank, Current Account	-2,424	189,528	191,952 N/A		
  20011 - Tracker Account	95	95	0 ↑ 0 %		
  20012 - Bank account 2	650	715	65 ↑ 10 %		
  20014 - Bank account 3	23,106	53,104	29,998 ↑ 130 %		
  20017 - Overseas bank account	100	100	0 0 %		
  20021 - Invoice Finance account	54,578	-425,414	-479,992 N/A		
  20030 - Petty Cash	400	400	0 0 %		
  20040 - Credit card	-13,013	-11,000	2,013 N/A		
  21010 - Receivables Control Account	364,641	610,382	245,741 ↑ 67 %		
  21020 - Overseas Receivable	0	100,000	100,000 N/A		
TOTAL SELECTED	1,243,954	1,839,321	595,367 ↑ 48 %		

ADD COMPARISON GROUPING

The screenshot above only shows some asset account balances but, if you scroll down, you can see the remainder and the total for assets is shown at the bottom.

Drilling down to individual transactions

In 'Account View' there are two methods to identify the individual transactions in the account selected for investigation:

Method 1

Asset		1.84M	Liability	876K	Equity	360K
		(↑ 47.9%)		(↓ 0.9%)		(↓ 1903.3%)
Asset						
ACCOUNT		PRIOR YEAR	FIELDWORK	DIFFERENCE		
<input type="checkbox"/>	<input type="checkbox"/>	11010 - Motor Vehicle 1	5,550	30,965	25,415 ↑ 458 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	11015 - Motor Vehicle 1 Depreciation	-1,388	-1,388	0 N/A	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	12020 - Plant Equipment	1,311	1,311	0 0 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	13010 - Fixtures & Fittings	24,278	50,736	26,457 ↑ 109 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	13020 - Office Equipment	183,432	286,101	102,669 ↑ 56 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	13025 - Office Equipment Depreciation	-141,653	-116,542	25,111 N/A	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20010 - Bank, Current Account	-2,424	189,528	191,952 N/A	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20011 - Tracker Account	95	95	0 ↑ 0 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20012 - Bank account 2	650	715	65 ↑ 10 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20014 - Bank account 3	23,106	53,104	29,998 ↑ 130 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20017 - Overseas bank account	100	100	0 0 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20021 - Invoice Finance account	54,578	-425,414	-479,992 N/A	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20030 - Petty Cash	400	400	0 0 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	20040 - Credit card	-13,013	-11,000	2,013 N/A	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	21010 - Receivables Control Account	364,641	610,382	245,741 ↑ 67 %	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	21020 - Overseas Receivable	0	100,000	100,000 N/A	<input type="checkbox"/>
		TOTAL SELECTED	5,550	30,965	25,415 ↑ 458 %	<input type="checkbox"/>

ADD COMPARISON GROUPING


To select the Motor Vehicle 1 account

1. Click the top box (circled) to deselect all ticks (ie *unselect all*). This makes all the ticks disappear.
2. Tick the account 11010 for Motor Vehicle 1 box (circled above) to produce the green tick showing just this one account has been selected.

Method 2

Asset						
	ACCOUNT	PRIOR YEAR	FIELDWORK	DIFFERENCE		
		11010 - Motor Vehicle 1	5,550	30,965	25,415 ↑ 458 %	
		11015 - Motor Vehicle 1 Depreciation	-1,388	-1,388	0 N/A	
		12020 - Plant Equipment	1,311	1,311	0 0 %	
		13010 - Fixtures & Fittings	24,278	50,736	26,457 ↑ 109 %	
		13020 - Office Equipment	183,432	286,101	102,669 ↑ 56 %	
		13025 - Office Equipment Depreciation	-141,653	-116,542	25,111 N/A	
		20010 - Bank, Current Account	-2,424	189,528	191,952 N/A	
		20011 - Tracker Account	95	95	0 ↑ 0 %	
		20012 - Bank account 2	650	715	65 ↑ 10 %	
		20014 - Bank account 3	23,106	53,104	29,998 ↑ 130 %	
		20017 - Overseas bank account	100	100	0 0 %	
		20021 - Invoice Finance account	54,578	-425,414	-479,992 N/A	
		20030 - Petty Cash	400	400	0 0 %	
		20040 - Credit card	-13,013	-11,000	2,013 N/A	
		21010 - Receivables Control Account	364,641	610,382	245,741 ↑ 67 %	
		21020 - Overseas Receivable	0	100,000	100,000 N/A	
	TOTAL SELECTED	1,243,954	1,839,321	595,367	↑ 48 %	

ADD COMPARISON GROUPING

In the above screen, click on the  icon (circled above) in the top right-hand corner of the dashboard. Clicking on this icon shows the following screen:

Select Categories (Asset)

Intangible Assets ✓ Development costs ✓ Patents, licences & trade marks ✓ Goodwill ✓	Property, Plant & Equipment ✓ Land, buildings & improvement ✓ Machinery & equipment ✓ Motor Vehicles ✓ Other property, plant & equipment ✓ Assets under construction ✓ Investment properties ✓	Investments ✓ Investments in subsidiaries ✓ Investments in joint ventures ✓ Investments in associates ✓ Other investments ✓	Inventory Work in Progress ✓ Raw materials and supplies ✓ Work in progress ✓ Finished goods and goods for resale ✓
Other Assets ✓ Other receivables ✓ Prepaid expenses ✓ Accrued income ✓	Trade Receivables ✓ Trade receivables ✓	Cash at Bank and in Hand ✓ Cash at bank ✓ Cash in hand ✓ Short-term investments ✓	Intercompany Receivables ✓ Intercompany trade receivables ✓ Intercompany loans receivable ✓

[CONFIRM](#)

Initially all the boxes will be live with green ticks as above. Clicking on the green ticks of all the accounts that you do **not** want to investigate deselects them, leaving the remaining accounts with green ticks that we are interested in. Clicking the top line in a box, removes all ticks in that box.

This leaves green tick(s) next to the account(s) we are interested in, which will be only Motor Vehicles in our example as follows:

Select Categories (Asset)

Intangible Assets <input type="checkbox"/>	Property, Plant & Equipment <input checked="" type="checkbox"/>	Investments <input type="checkbox"/>	Inventory Work in Progress <input type="checkbox"/>
Development costs <input type="checkbox"/>	Land, buildings & improvement <input type="checkbox"/>	Investments in subsidiaries <input type="checkbox"/>	Raw materials and supplies <input type="checkbox"/>
Patents, licences & trade marks <input type="checkbox"/>	Machinery & equipment <input type="checkbox"/>	Investments in joint ventures <input type="checkbox"/>	Work in progress <input type="checkbox"/>
Goodwill <input type="checkbox"/>	Motor Vehicles <input checked="" type="checkbox"/>	Investments in associates <input type="checkbox"/>	Finished goods and goods for resale <input type="checkbox"/>
	Other property, plant & equipment <input type="checkbox"/>	Other investments <input type="checkbox"/>	
	Assets under construction <input type="checkbox"/>		
	Investment properties <input type="checkbox"/>		
Other Assets <input type="checkbox"/>	Trade Receivables <input type="checkbox"/>	Cash at Bank and in Hand <input type="checkbox"/>	Intercompany Receivables <input type="checkbox"/>
Other receivables <input type="checkbox"/>	Trade receivables <input type="checkbox"/>	Cash at bank <input type="checkbox"/>	Intercompany trade receivables <input type="checkbox"/>
Prepaid expenses <input type="checkbox"/>		Cash in hand <input type="checkbox"/>	Intercompany loans receivable <input type="checkbox"/>
Accrued income <input type="checkbox"/>		Short-term investments <input type="checkbox"/>	

CONFIRM

Then click on Confirm (circled) in the bottom right-hand corner.

This will then show as below (in the left half of the screen) only the accounts relating to Motor Vehicles as follows:

Asset					
ACCOUNT	PRIOR YEAR	FIELDWORK	DIFFERENCE		✓
11010 - Motor Vehicle 1	5,550	30,965	25,415 ↑ 458 %		✓
11015 - Motor Vehicle 1 Depreciation	-1,388	-1,388	0 N/A		✓
TOTAL SELECTED	4,163	29,578	25,415 ↑ 611 %		☰

ADD COMPARISON GROUPING

This shows the Motor Vehicle 1, cost account (11010) and the Motor Vehicle 1 depreciation account (11015).

A clear concern is that no depreciation charge for motor vehicles has been made for the year. This may be because final adjustments have not been made and these need to be considered during audit completion.

However, let us just focus on the Motor Vehicle 1, cost account, rather than depreciation. To do this we click on the green tick next to 'Motor Vehicle 1 Depreciation', which deselects this account, leaving the Motor Vehicle 1 account as the only account selected with a green tick.

With either Method 1 or Method 2, to identify the individual transactions in the selected account (Motor Vehicles 1 in this case) click on the transactions icon ☰ (circled) in the bottom right-hand corner of the above screen.

This then shows the following screen for account 11010 Motor Vehicles 1, Asset Transactions:

Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM061351	Adj Q1 Suspense	5,000	0	11010	31/03/2018	FWRIGHT	NOM - Nominal Journal	11/05/2018 11:32:48
NOM062037	Adj Q2 Suspense	9,000	0	11010	30/06/2018	FWRIGHT	NOM - Nominal Journal	10/08/2018 14:38:12
NOM062459	Adj Q3 Suspense	11,111	0	11010	30/09/2018	FWRIGHT	NOM - Nominal Journal	16/11/2018 16:00:04
NOM062460	Suspense clear out	304	0	11010	31/10/2018	FWRIGHT	NOM - Nominal Journal	17/11/2018 10:12:32


Show 10 lines



CANCEL CREATE TEST

The icons in the top right-hand corner of the above screen, give the ability to *Download all transactions, Select and Filter*.

You do **not** need to use the **Select** routine for the Corporate Reporting exam.

The green icon in the bottom right corner allows tests to be created. However, you do **not** need to use this for the Corporate Reporting exam.

The **Filter** icon  is very useful to isolate and investigate a particular: month of transactions; document type; or user. If you know all three of these attributes of a transaction, then the filter routine can apply these simultaneously to funnel down your search. This is important where there are a large number of transactions in one account.

Clicking on the  icon reveals the **Download** icon . This can be used to download all transactions from a selected account(s) into a spreadsheet. If you click on the download icon in the top right corner of the above screen it will show the screen below.

Configure Download

Results will include any transaction where any line of the transaction matches all of your filters.

Accounts

To filter by general ledger accounts, please select one (or more) accounts from the list:

- All accounts
 Custom accounts

INCLUDE



Users

To filter by the user creating the transaction, please select one (or more) user from the list:

- All users
 Custom users

INCLUDE

Document Types

To filter by the document type, please select one (or more) from the list:

- All types
 Custom types

INCLUDE

Effective Date

Please select the range of effective dates you wish to filter:

All dates

Created Date

Please select the range of created dates you wish to filter:

All dates

Created Weekday

To filter by the day of week that a transaction was created, please select one (or more) days of the week from the list:

- All days
 Custom days

INCLUDE

Created Hour

To filter by the hour of the day that a transaction was created, please select one (or more) hours of the day from the list:

- All hours
 Custom hours

INCLUDE

Net Value

To filter by the net value of the debit and credit, please enter a value:

- All values
 Custom values

Exclude

CANCEL

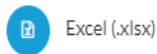
NEXT

Each of the above filters can then be used to narrow down your search. For example, in the first row for 'Accounts' click on 'Custom accounts' (circled) which changes the blue dot from 'All accounts' to 'Custom accounts'. Then click on the drop-down arrow in the top right corner (circled). Then scroll down and select the account that you wish to download.

Similar procedures can be used to filter for: Users; Document types; Dates etc.

Having made any relevant selections of filters, click on the green NEXT button in the bottom right corner which reveals the following screen:

Select Format



CANCEL

Clicking on the Excel button will provide a spreadsheet for downloading. The spreadsheet will show details of all transactions for the selected account(s), containing the same details as are available in the data analytics software transaction screen. You can then analyse the data in the account using the spreadsheet as appropriate (eg. ordering by size).

Exam Note: You will be able to use this routine when preparing for the real Corporate reporting exam using the Advance Information 11 month data. However, you will **not** be able to use this routine to download 12-month transaction data into a spreadsheet during the real Corporate Reporting exam.

Returning to the earlier screen (for account 11010 Motor Vehicles 1, 'Asset Transactions') the analysis of transactions reveals a potential audit risk, as a suspense account has been used for all four transactions in account 11010. They have been entered on four different dates in the year.

The total of the four entries is £25,415, which reconciles to the year-on-year difference in the Motor Vehicle 1 account on the earlier screen and, as such, represents the additions to motor vehicles in the year.

In the Corporate Reporting exam, it may be that the nature of the risk can be understood from the transactions identified. Alternatively, as in this case, it is not clear why a suspense account has been used. A Corporate Reporting exam question could therefore require you to set out relevant questions to obtain information and explanations from management in relation to these transactions.

To help identify who to ask about these transactions, the above screen shows the User ID indicating that they were all entered by F Wright.

Before making enquiries of management, however, if you click on a transaction ID in blue (circled) in the top left-hand corner of the above screen for the first transaction of £5,000, you


will see the double entry as follows:

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
NOM061351	11010	5,000	31/03/2018	NOM - Nominal Journal	Adj Q1 Suspense	FWRIGHT		11/05/2018 11:32:48
NOM061351	990	-5,000	31/03/2018	NOM - Nominal Journal	Adj Q1 Suspense	FWRIGHT		11/05/2018 11:32:48

This shows that the credit entry corresponding to the debit entry in the Motor Vehicles 1 account is in Account number 990, which is the suspense account.

The Motor Vehicle 1 account has only a small number of transactions, but it is important to be able to investigate accounts with many more transactions.

Exam approach – when to use Method 1 and Method 2

Method 2, using the  icon, is normally more appropriate where you wish to select groupings of accounts (eg, all PPE accounts), rather than one individual account (eg, Motor Vehicles). Method 1 is more appropriate when wishing to select specific individual account(s) identified by the question or which you have identified as relevant.

Exam approach – understanding transaction information

It is important that you are familiar with, and understand, the way that individual transactions are presented in the data analytics software. Some key points are:

- It is important that you understand which accounts are being debited and credited. In the above transaction, if you hover your cursor over each account code in the data analytics software, it will show that 11010 is 'Motor Vehicles 1'; and 990 is 'Suspense Account'.
- The Effective Date is the date that the transaction occurred or relates to. This should drive the period in which the transaction is recognised. The Created Date is the date that the transaction was posted.
-

Exam approach – 'risks and procedures' questions

In the Corporate Reporting exam, data analytics could be included in a question asking you to justify key audit risks and describe the related audit procedures. You would not be expected to interrogate all the balances and transactions to find all the relevant issues.

However, you may be expected to identify key transactions in an account

which give rise to audit risks and also locate any similar or related transactions to the one initially identified (eg, in the same account or related to the same risk).

Exam approach – describing transactions

IMPORTANT – In the Corporate Reporting exam, you will not be able to cut and paste from the data analytics software into the word processing area of your script. Once you have identified a transaction, it is therefore important that you describe it in sufficient detail to demonstrate to the examiner that you have identified the correct transaction and evidence .

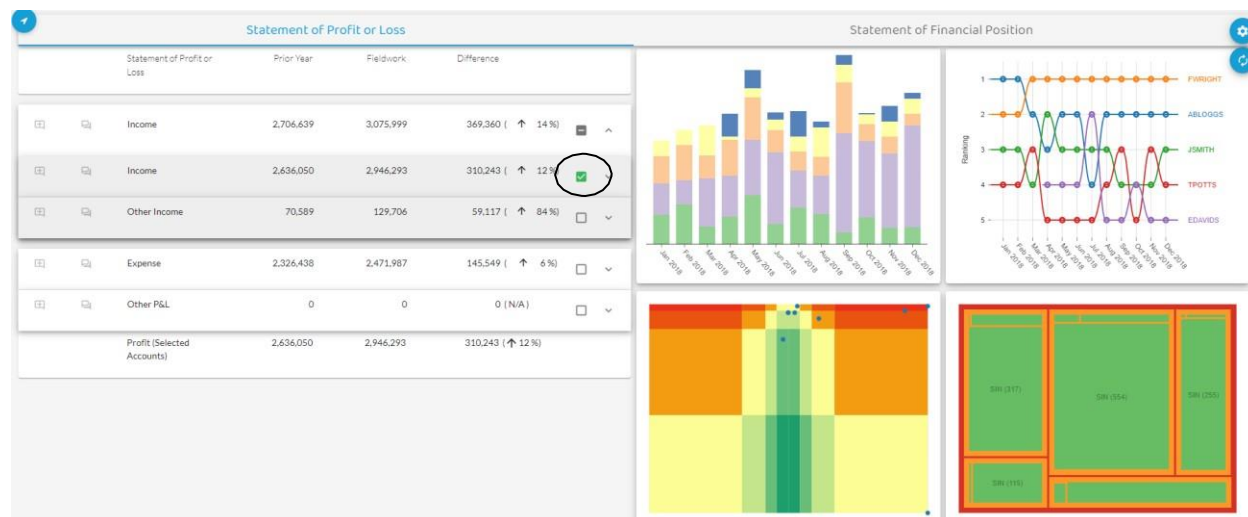
Exercise 1

- Using the 'Account View', review all the account totals under Administrative Expenses and identify which of these accounts is a potential audit risk. Explain and justify why each account identified may be an audit risk.
- Review the transactions in the 'Computer Software' account 73040 (which is one of the Administrative Expenses account codes). Identify the transactions which may give rise to key audit risks and set out suitable questions to seek information and explanations from management.

The solution is in **Appendix A**.

3.4 The Four Visualisation Tools

The *Explore* Module has four main visualisation analysis tools which are shown in four quadrants in the right half of the main *Explore* Module dashboard as follows:



These four visualisations are named as follows:

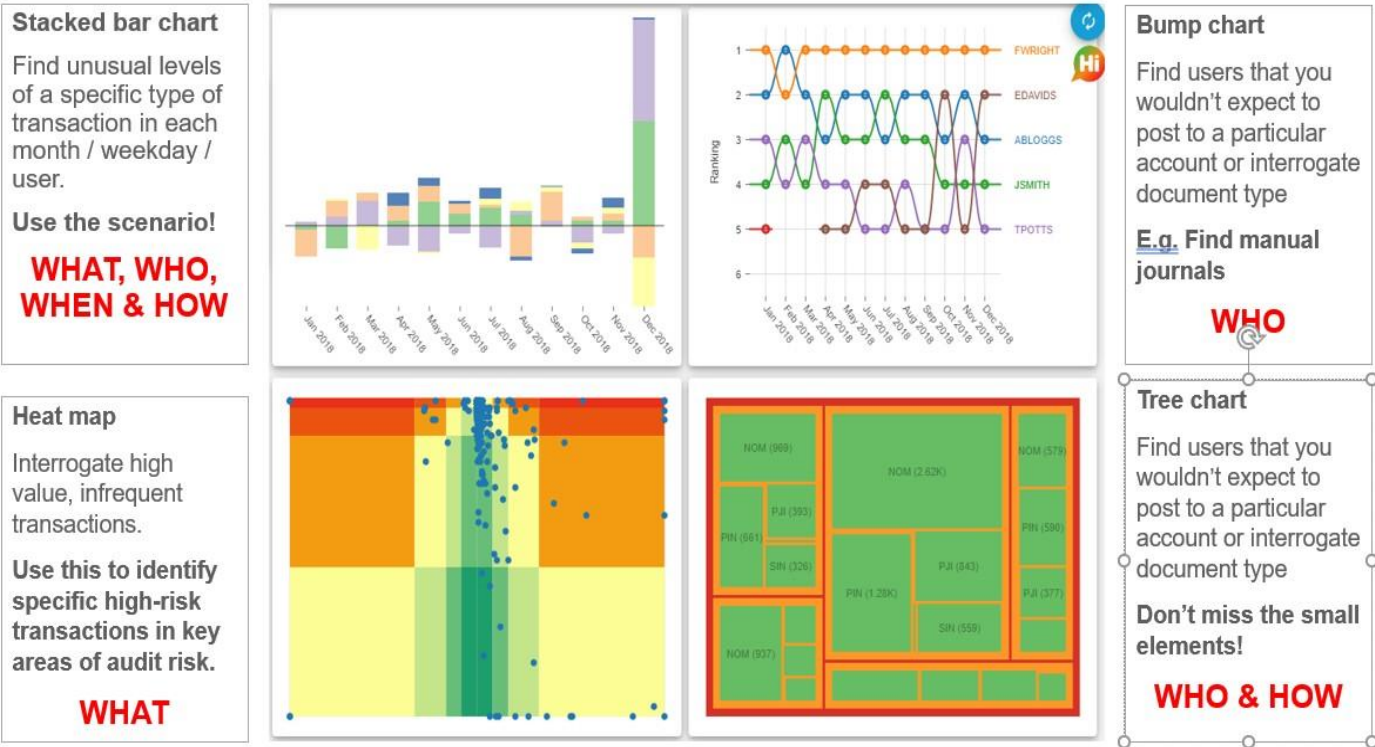
- Stacked Bar Charts (top left)
- Bump Chart (top right)
- Heat Map (bottom left)
- Tree Map (bottom right)

In Financial Statement View, the data selected for the visualisation analysis above is the **Income** account which is indicated by the green tick (circled) next to Income and there are currently no other accounts selected.

Each visualisations tool is a different view of the same data. In this case, it is the Income account. Each of these visualisations is considered in the following sections.

An overview

Before looking at the detail it is worth taking an overview of the four visualisations. This is represented by the following diagram:



Selecting the most appropriate visualisation to use in answering a question is a key judgement. Keep the above overview in mind as you work through the following sections on the detail of the visualisations in order to keep perspective.

WHAT – refers to the transactions. These visualisations focus on **what** transactions have been posted.

WHO – refers to the users. These visualisations focus on who has posted the transactions.

WHEN – refers to the month in which the transaction occurred.

HOW - refers to the documents. These visualisations focus on how the postings of transactions have been made.


The above classification WHAT, WHO, WHEN and HOW is a slight oversimplification and represents only a starting point for using visualisations, as they all can be used to drill down to all aspects of transactions. However, it may help when selecting the most appropriate visualisation based on the issues highlighted in the exam scenario.

Exam Approach – Finding the Exit

Exiting from *visualisations*

For navigation of the data analytics software, it is important to know how to move between visualisations. This involves knowing how to exit each visualisation screen quickly, so time is not wasted in the exam. This is easily done by clicking the CANCEL button in the bottom left corner of each visualisation screen. (Note: you may need to scroll down to find it if you are studying on small screen or a laptop screen).

Exiting from *modules*

To exit from any module, select the  icon in the top left corner of the opening screen of the module that you are currently in. This will then show the icons for all the other modules. Click on the module that you wish to transfer into.

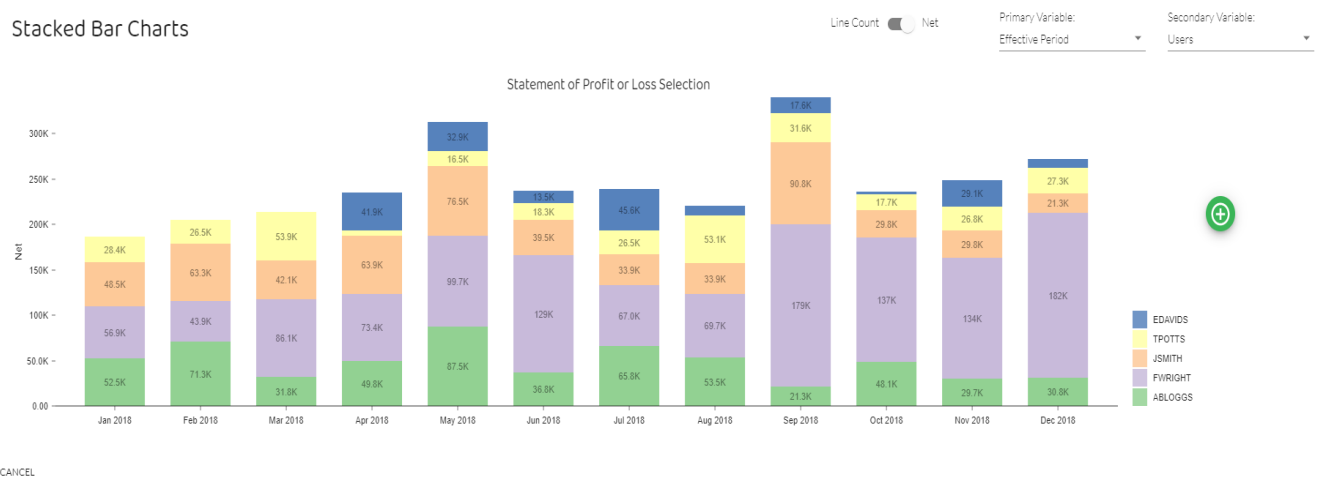
Exiting – Saving your work

If you make changes to one of the Explore visualisation diagrams (eg, you change a variable) and then exit to another visualisation within Explore, then the changes will be saved in the first visualisation when you return to it (if you do not leave Explore).

BUT if you make changes to one of the Explore visualisation diagrams (eg, you change a variable) and then exit **to another module** (eg, Metrics), then your changes will **NOT** be saved in the visualisation in the *Explore* module when you return to it.

3.4.1 Stacked Bar Charts

To navigate into the **Stacked Bar Chart** visualisation (still with just **income** selected in the '*Financial Statement View*'), just click on the Stacked Bar Chart quadrant in the above diagram. This then shows the screen below:



The Stacked Bar Chart visualisation shows the transactions selected (income transactions in this case) occurring in the period according to two variables: (a) the primary variable; and (b) the secondary variable. These can be accessed and changed using the drop-down boxes in the top right-hand corner of the above screen.

The primary variable selected in the above diagram is the '*Effective Period*' (ie the months of the year); and the secondary variable selected is '*Users*' (ie the person posting the transaction).

The Stacked Bar Chart, when set up using these variables, therefore shows the value of the income transactions entered by each person in each month.

The variables available to be selected (for either the primary or secondary variable) are the following:

- Effective Period
- Accounts
- Users
- Created Hour
- Created Weekday
- Document Type

The variables available to be selected can be identified and accessed from the drop-down menu by clicking the arrows in the top right-hand corner next to Primary Variable and Secondary Variable. Click on the relevant variable to select it.

It is possible to select the same variable for primary and secondary variables if you just wish to concentrate on one aspect (eg *Effective Period* for monthly sales). Normally, however, the two variables selected are different.

Which pairs of variables to select is a question of judgement, which is informed by the nature of the risks that you are trying to identify. However, some ideas are:

Users

A particular employee may be seen as a risk, for example because:

- the types of transactions the user is processing appear inappropriate for their role;
- there are inadequate controls over the user (eg, no segregation of duties);
- there are questions over the person's competence;
- the person has just joined the company;
- the person is about to leave the company;
- there are questions over the person's integrity and there may be an identified fraud risk.

Some of these issues may be identified in the scenario of a Corporate Reporting exam question. For example, the scenario may provide additional information about one or more users (eg their role, seniority, competence).

The data analytics software then enables the transactions of each user to be identified and analysed separately.

Created Hour

Transactions occurring outside normal working hours may be considered as higher risk (eg because not all internal controls may be operating 24 hours a day) or at least subject to question. In terms of pairing variables, combining 'Created Hour' with the 'Users' variable shows who is working outside normal hours most frequently.

Created Weekday

Similarly, transactions occurring outside the normal working week (Monday to Friday for European entities) may be considered as higher risk or questionable.

Document Type

'Document Type' could identify high risk items such as sales credit notes. In terms of pairing, combining 'Document Type' with the 'Users' variable shows who is generating credit notes to the highest value. A small accounts team may mean that some users are completing a wide range of transactions that should be subject to segregation of duties (eg sales invoices, receivables, cash receipts, credit notes).

The 'Line Count' and 'Net' slider at the top of the above screenshot is currently set at 'Net'. This means the blocks are showing the *value* of transactions for the pairing of variables selected. If this is changed to 'Line Count' the blocks will show the *number* of transactions for the pairing of variables selected.

The transactions to be analysed by the Stacked Bar Chart visualisation can be changed by selecting and deselecting accounts using the green ticks in the main *Explore* Module dashboard.

Exam approach – document references

You should be familiar with the abbreviations for different document types used by the data analytics software. They are referred to in modules and visualisations. For Elephant they are as follows:

Abbreviation	Document
NOM	Nominal journal
PIN	Purchase invoice
SIN	Sales invoice
PPY	Purchase payroll
SRC	Sales receipt
PJI	Purchase journal invoice
SCR	Sales credit record
PCR	Purchase credit record
PJC	Purchase journal credit
SJI	Sales journal invoice
MJ*	Manual journal

* Elephant does not have any manual journal entries.

Note: For other companies than Elephant, the above abbreviations for documents may vary

slightly and other types of document may be available.

Practice Activity

To familiarise yourself with the Stacked Bar Chart, carry out the following practice activities.

- (1) Select the '*Financial Statement View*'. For 'Income', select a variety of different pairs of Primary Variables and Secondary Variables and:
 - note the way the visual information presents changes and consider what the information means for each pairing.
 - reflect on how the various pairings may indicate different audit risks.
 - change the slider from 'Net' to 'Line Count' and evaluate how the nature and validity of the visual information presented may have changed.

- (2) Repeat the practice activities in (1) above for:
 - Trade receivables
 - Trade payables

Identifying individual transactions

Where a concern has been identified, then clicking the relevant block in the bar chart will show the individual transactions making up that section of the chart.

For example, in the above screenshot, if an auditor is concerned about cut-off and the amount of transactions that F Wright has posted in December then click on the December block for F Wright in the diagram above and the following screen is shown:

Profit and Loss Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates	
SCR001147	54563 - Credit to allow for bank charges.	15	0	51020	31/12/2018	FWRIGHT	SCR - Sales Credit	31/12/2018 14:14:48	✓
SCR001148	55602 - To produce pack shots as requested.	3,275	0	51010	31/12/2018	FWRIGHT	SCR - Sales Credit	31/12/2018 15:53:33	✓
SIN018262	56029 - Retrieve artwork files and release to print.	0	400	51010	23/12/2018	FWRIGHT	SIN - Sales Invoice	23/12/2018 19:20:57	✓
SIN018265	55956 - Design print and delivery of Eukanuba Champion	0	723	51010	23/12/2018	FWRIGHT	SIN - Sales Invoice	23/12/2018 11:07:59	✓
SIN018267	56048 - Create a generic A4 Ariel Powder as briefed.	0	300	51010	23/12/2018	FWRIGHT	SIN - Sales Invoice	23/12/2018 16:00:24	✓
SIN018270	55325 - Retrieve existing artwork and update as briefed.	0	1,800	51020	23/12/2018	FWRIGHT	SIN - Sales Invoice	23/12/2018 14:59:15	✓
SIN018274	56025 - Initial creative stages of Merlin Wave 1	0	5,000	51010	27/12/2018	FWRIGHT	SIN - Sales Invoice	27/12/2018 08:40:20	✓
SIN018276	55950 - To supply creative concept development consider	0	950	51010	27/12/2018	FWRIGHT	SIN - Sales Invoice	27/12/2018 09:21:35	✓
SIN018280	55759 - To supply mock-ups as requested.	0	2,808	51020	27/12/2018	FWRIGHT	SIN - Sales Invoice	27/12/2018 09:54:51	✓
SIN018281	56051 - To produce artwork for MSB stickers.	0	464	51020	27/12/2018	FWRIGHT	SIN - Sales Invoice	27/12/2018 06:09:10	✓

Show 10 lines

CANCEL CREATE TEST

This is just the first screen of many for December transactions for F Wright, but it enables the auditor to identify any transactions of concern.

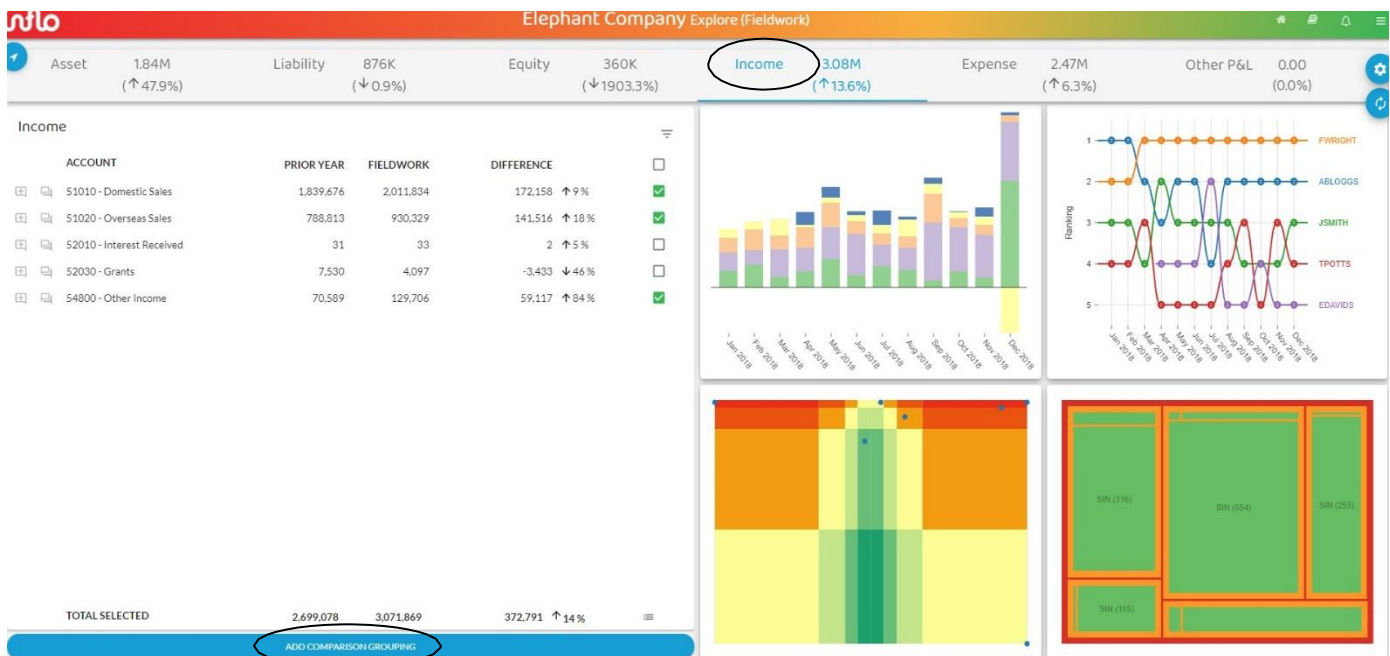
Note: to exit from the above screen use the CANCEL button in the bottom left-hand corner.

Comparing data

The data analytics software has the facility to compare two charts at the same time to enable comparisons to be made. These comparisons may include the identification of:

- common trends and patterns (eg income and receivables)
- unexpected differences in accounts that would normally be expected to have a close relationship (eg income and cost of sales)

Navigate to the *Explore* screen in 'Account View' which shows Assets, Liability, Equity, Income, Expense and Other P&L as in the screenshot below.



It can be seen from the top of the above screen that 'Income' (circled) has been selected.

It can also be seen from the green ticks that not all 'Income' accounts have been selected. This has been achieved by 'unticking' the boxes of the accounts you do **not** want to include to deselect them. This leaves accounts 51010, 51020 and 54,800 as ticked.

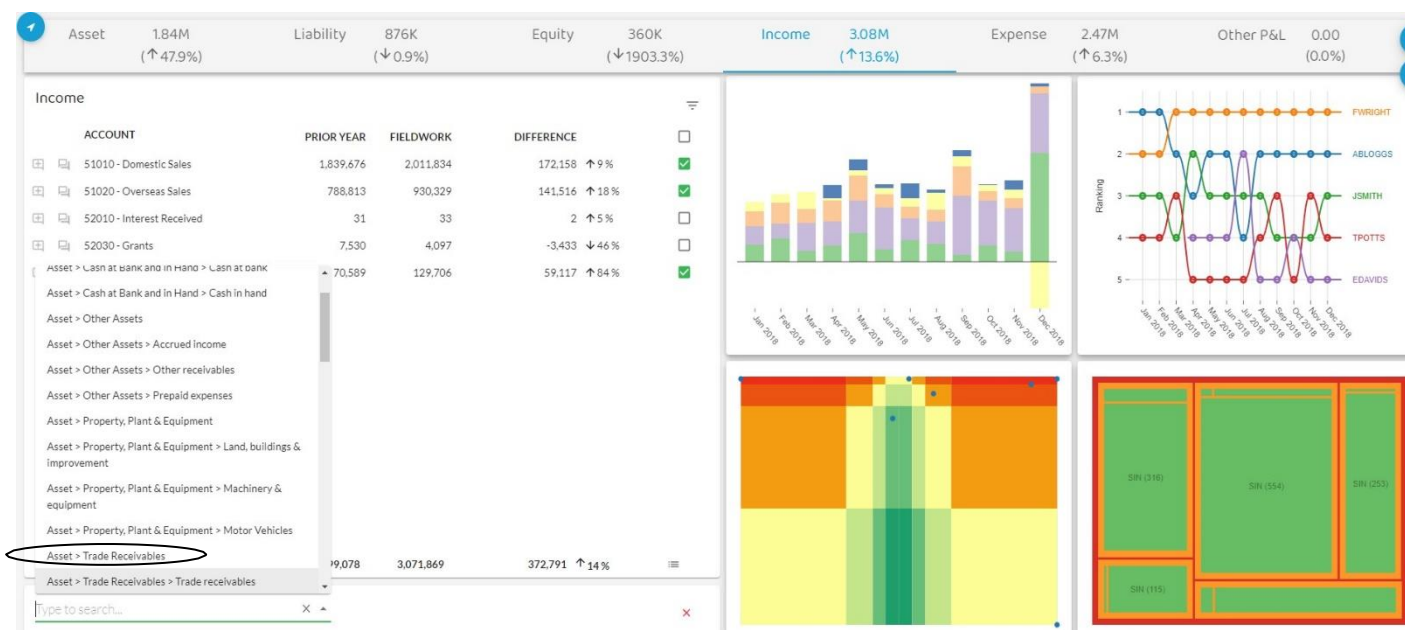
It is a question of judgement as to which accounts to select to make comparisons and

where there are meaningful relationships.

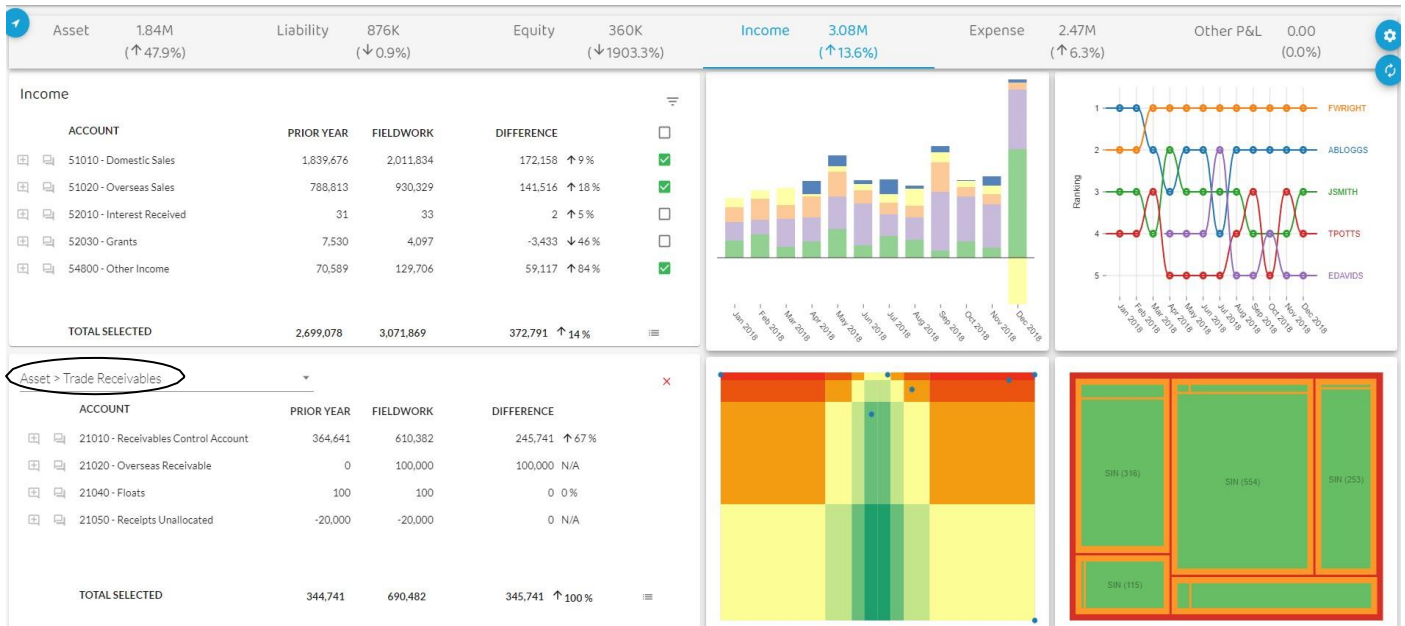
It might be that the auditor wishes to compare the pattern of Income with Trade Receivables during the year. This might be for example to:

- assess the relationship and recovery period throughout the year rather than just using the year end receivables balance
- identify any unusual movements
- identify a lack of segregation of duties by users posting sales and receivables entries.

To make the comparison, click on the 'Add Comparison Grouping' tab (circled) at the bottom of the screen above. Then click on the small drop-down arrow at the bottom of the page, next to where the 'Add Comparison Grouping' tab had been located. This brings up the pop-up menu showing the grouping of accounts available for comparison. Scroll down a little in the drop-down box and the following screen is then shown:




Click on **Asset > Trade Receivables** (circled) which will bring up the receivables accounts in the bottom left section of the diagram below (circled):



You need to review the receivables accounts to make sure that all sub accounts are relevant to the income accounts previously selected, so you are comparing like-with-like.

Important point: A comparison can now be made using **any** of the four visualisations in the four quadrants in the right half of the above screen. You can do this just by clicking on the visualisation in the desired quadrant.

Comparisons can also be generated in all visualisations using the comparison icon  (see later).

Comparison will be made here using the Stacked Bar Charts quadrant, as this is the visualisation that we are currently considering in this section.

Clicking on the Stacked Bar Charts quadrant shows the following screen:

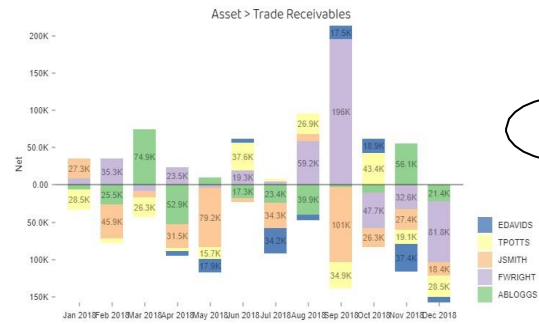
Stacked Bar Charts




ACCOUNT	PY BALANCE	CY BALANCE	DIFFERENCE	
51010 - Domestic Sales	1,839,676	2,011,834	172,158	↑ 9% <input checked="" type="checkbox"/>
51020 - Overseas Sales	788,813	930,329	141,516	↑ 18% <input checked="" type="checkbox"/>
52010 - Interest Received	31	33	2	↑ 5% <input type="checkbox"/>
52030 - Grants	7,530	4,097	-3,433	↓ 46% <input type="checkbox"/>
54800 - Other Income	70,589	129,706	59,117	↑ 84% <input checked="" type="checkbox"/>

CANCEL

Line Count Net Primary Variable: Effective Period Secondary Variable: Users



ACCOUNT	PY BALANCE	CY BALANCE	DIFFERENCE	
21010 - Receivables Control Acco...	364,641	610,382	245,741	↑ 67%
21020 - Overseas Receivable	0	100,000	100,000	↑ 100%
21040 - Floats	100	100	0	0%
21050 - Receipts Unallocated	-20,000	-20,000	0	0%

Variations in the Primary and Secondary variable can be made as previously. The comparison graph can also be altered by clicking on the wand icon  towards the top right-hand corner of the screen (circled).

To exit from the comparison routine and return to single screen viewing, click on CANCEL in the bottom left-hand corner. Then click the **x** next to the heading: Asset > Trade Receivables (you may need to hover the cursor if the **x** does not immediately appear).

How to Use

The table below gives indicative guidance of how the Stacked Bar Charts can be used in the Corporate Reporting exam. The two columns show a 'Big Picture' approach (eg, for overall review and risk identification) and 'Small Picture' approach (eg, for looking at details and selective investigation by drilling down to individual transactions). These are examples, rather than a comprehensive list.

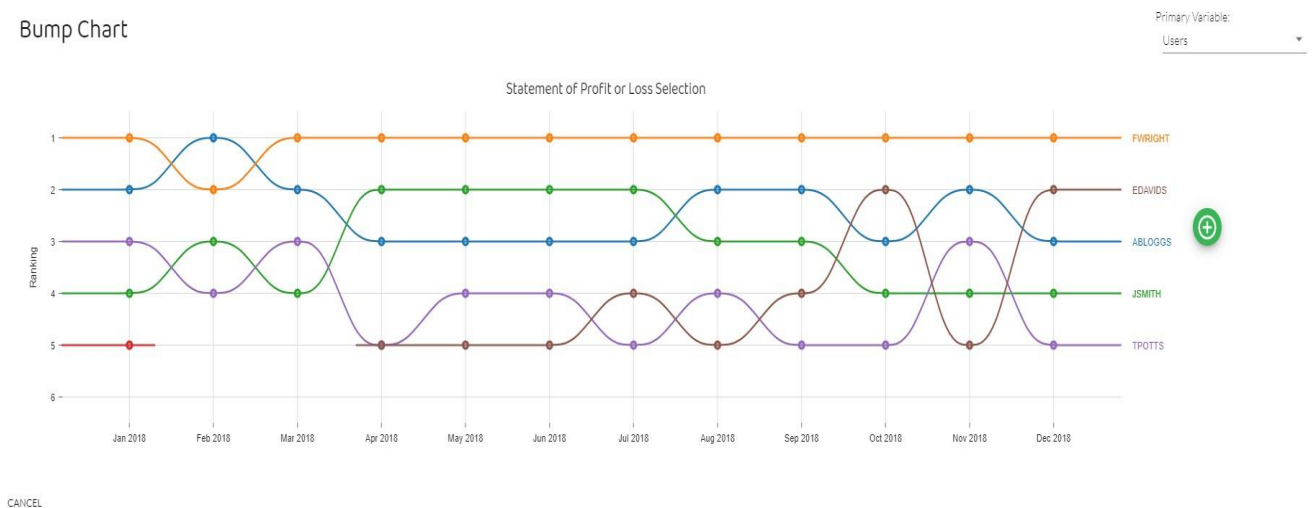
The 'Big Picture' approach	The 'Small Picture' approach
The Stacked Bar Charts have more variables than the other visualisation tools in the <i>Explore</i> Module. These variables are useful to identify a range of patterns in users, accounts and documents over the year.	If a particular user is identified as high risk, then a range of variables about that user can be identified: eg, timing (time of the day or day of the week); nature and amounts of transactions.
Comparisons can be made of frequency, value and types of postings in the same chart.	By clicking on the Stacked Bar Chart for a particular user in a given month, the user's transactions appear for that month: eg, if one user makes postings near the year end, but does not normally make postings in that account, then it may be regarded as high risk – particularly if the transactions are, for example, large journal entries.

3.4.2 The Bump Chart

The Bump Chart is found in the top right-hand quadrant of the main *Explore* Module dashboard.

The Bump Chart can be produced for one account or many accounts. In this case, the '*Financial Statement View*' has been adopted and **all Statement of Profit or Loss** accounts have been selected (with green ticks). This includes all income and expense accounts in the Statement of Profit or Loss.

Clicking on the Bump Chart quadrant presents the following screen:



There are two possible primary variables with the Bump Chart:

- Users
- Document Type

The above screen shot shows that 'Users' is the primary variable being applied (top right corner). It ranks the users in order of who made the most postings in each month.

There is no secondary variable for the Bump Chart visualisation.

Inspection of the above screen shows:

- F Wright posted more transactions than any other user in every month except February.
- E Davids did not make any postings before April. This user may have joined the company in April.
- S Thompson (shown on the broken line on row 5) only made one posting, which was in January. This user may have left the company in February. (**Note:** it is easy to miss this user as, due to the fact they left during the year, the S Thompson name does not appear in the named users on the right-hand side of the above Bump Chart).

If you hover the cursor over the orange line, it shows the number of transactions posted by F Wright for each month of the year.

If you click on the orange line a drop-down box shows the first screen of the individual transactions posted by F Wright as follows:

Profit and Loss Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates	
NOM058824	Zurich Assurance - Zurich Assurance/Keyman Ins re J Holme	141	0	72060	02/12/2018	FWRIGHT	NOM - Nominal Journal	08/12/2018 09:29:46	✓
NOM058828	Haymarket Publishing - Haymarket Publishing/Campaign (GM)	128	0	73070	05/12/2018	FWRIGHT	NOM - Nominal Journal	11/12/2018 17:11:07	✓
NOM058841	Scottish Equitable - Scottish Equitable/Staff Pension	6,836	0	71060	08/12/2018	FWRIGHT	NOM - Nominal Journal	14/12/2018 17:22:09	✓
NOM058843	Petty Cash - Reading Glasses	98	0	61055, 61065, 61090, 62026, 73060	06/12/2018	FWRIGHT	NOM - Nominal Journal	12/12/2018 15:29:43	✓
NOM058899	55126 . Auto CI - ú 55126.NOM057041:.. 55126 . Auto CI	837	837	61035, 61085	12/12/2018	FWRIGHT	NOM - Nominal Journal	18/12/2018 18:52:33	✓
NOM058901	55098 . Auto CI - ú 55098.NOM056147:.. 55098 . Auto CI	159	159	61085, 62026	12/12/2018	FWRIGHT	NOM - Nominal Journal	18/12/2018 15:36:46	✓
NOM058918	Femcare products - Femcare products	61	0	61010	08/12/2018	FWRIGHT	NOM - Nominal Journal	14/12/2018 18:41:31	✓
NOM058927	Femcare products - Femcare products	0	61	61010	08/12/2018	FWRIGHT	NOM - Nominal Journal	14/12/2018 18:58:39	✓
NOM058928	Femcare products - Femcare products	61	0	61010	08/12/2018	FWRIGHT	NOM - Nominal Journal	14/12/2018 15:05:01	✓
NOM058939	TFR	152	0	61085, 62026	15/12/2018	FWRIGHT	NOM - Nominal Journal	21/12/2018 07:32:47	✓

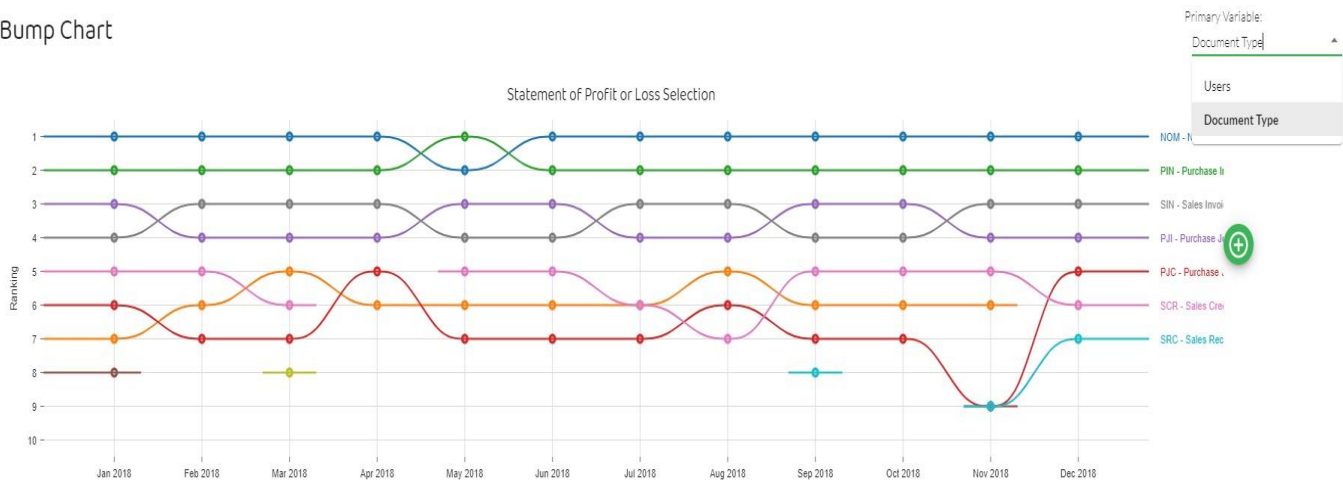
Show 10 lines

CANCEL CREATE TEST

There are 259 screens in all with F Wright's postings (see bottom right corner in the above chart).


Change the primary variable from 'Users' to 'Document Type' (use the small arrow in the top right corner of the Bump Chart screen). We are still in the 'Financial Statement View' with all Statement of Profit or Loss accounts selected – both income and expenses. This presents the following screen:

Bump Chart



CANCEL

This shows the relative frequency ranking of the various types of documents being posted in respect of Statement of Profit or Loss items.

The  icon on the right-hand side enables a comparison graph to be created.

How to Use

The table below gives indicative guidance of how the Bump Chart can be used in the Corporate Reporting exam. The two columns show a 'Big Picture' approach (eg, for overall review and risk identification) and 'Small Picture' approach (eg, for looking at details and selective investigation by drilling down to individual transactions). These are examples, rather than a comprehensive list, but they provide ideas of how you can use the Bump Chart to save time and to avoid missing some key issues or transactions.

The 'Big Picture' approach	The 'Small Picture' approach
Inspect the time series pattern for each user: <ul style="list-style-type: none"> • Are there gaps where no transactions are entered? • Does the series start or end during the period indicating an employee joining or leaving? 	The question may suggest a user is a particular risk (eg, lack of independence or competence). The Bump Chart is a tool to isolate transactions entered by that user to investigate.
Inspect cross sectionally considering the relative position of users: <ul style="list-style-type: none"> • Is one user dominant, indicating a primary responsibility? • Has one user entered a large number of postings in only one period, perhaps indicating unusual activity or changed responsibility? 	The question may suggest a transaction entered by a user is a particular risk. The Bump Chart is one tool to narrow the search and find the transactions entered by that user, rather than searching all transactions.
Identify and inspect transactions with higher risk document types, such as credit notes and identify which users are typically processing them.	

3.4.3 The Heat Map

The 'Heat Map' is found in the bottom left quadrant of the main Explore Module dashboard. It is a visualisation that identifies items that may be elevated (ie, high) risk according to their positioning on the Heat Map.

The Heat Map is a two-dimensional visualisation where the two variables are:

- (1) **Monetary impact** (measures the impact on profit or loss as a % of the materiality level – up to a maximum of 300% of materiality).
- (2) **Occurrence** (the number of transactions making up the monetary impact – up to a maximum of 100 transactions).

The premise of this visualisation is that infrequent transactions of high monetary impact on profit or loss are likely to be highest risk. These will be positioned in the red sections of the heat map.

The Heat Map for the *Statement of Profit or Loss* shows the following:

Heat Map



CANCEL

Each dot shows a single transaction or a grouping of transactions in an account, or a group of accounts.

The **y-axis** locates the vertical positioning of each dot according to the number of transactions included in the account which the dot represents. So, at the very top of the Heat Map diagram above, there may be only one transaction represented by the dot. Along the bottom of the Heat Map diagram there are 100 (or more) transactions represented by the dot.

The **x-axis** locates the horizontal positioning of each dot according to its scale (ie monetary impact on the statement of profit or loss) measured as a % of the materiality level. In the centre green section the amount is 0% indicating the transactions are of insignificant size.

All transactions on the left-hand side (ie to the left of 0%) are debit transactions, increasing in value to 300% of materiality (shown in this graph as -300% of materiality).

To the right of the 0%, the impact is a credit and again the scale goes to +300% of materiality (materiality is £30,000 for Elephant).


Note: The Heat Map identifies the net impact of a transaction (or group of transactions). It does not identify large transactions which do not impact on profit or loss (eg two entries that offset each other; or two entries in the statement of financial position). Instead, you could use, where appropriate, the *Detect* Module to identify such large transactions.

The Heat Map is divided into different *coloured zones* to represent areas of different risk levels. These are listed in the key in the bottom right of the screen (circled) which shows the range from, at the top, red (Elevated Risk) to, at the bottom, dark green (Low Risk).

On the Heat Map itself, the transactions of greatest risk are in the top right-hand and top left-hand areas. This indicates a risk by large one-off (or small number of) transactions which have a significant monetary impact and are likely to require further investigation. (ie the highest risk is where a high monetary impact is created by a small number of transactions).


The above Heat Map relates to all transactions in the Statement of Profit or Loss. Alternatively, the Statement of Financial Position could be selected which has different transactions and therefore a different Heat Map.

A more tightly focused use of the Heat Map would be to look below financial statement level at a group of accounts or single account by deselecting the green ticks as demonstrated earlier and leaving only the transactions with ticks to be examined using the Heat Map visualisation.

The  icon on the right-hand side enables a comparison graph to be created to enable different groupings of accounts selected to be compared.

Drilling down to individual transactions

By clicking on an individual dot, the colour of that dot changes from blue to green. A small call-out box shows the frequency and monetary impact for each dot when hovering over it.

We can then, for example, select the dot in the top left-hand corner of the above screen (click on the dot which will turn green) as Elevated Risk (this dot is only one of the Elevated Risk transactions in the *Heat Map*, but is used here as an example). We can then drill down to the transactions that comprise this dot by clicking on the detail icon  in the top left-hand corner of the above screen (circled).

This then shows the underlying transaction as follows:

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059282	Salary Jnl Jan 2017 - January 2017 salary journal	120,574	120,574	21200, 26500, 26520, 26530, 26561, 32010, 62100, 62105, 62120, 62125, 62130, 62135, 71000, 71060, 71500, 71510, 91060, 31800	31/12/2018	JSMITH	NOM - Nominal Journal	06/01/2019 18:53:56
NOM059642	2017 accruals revers - Accruals	328,125	328,125	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71070, 71090, 72000, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 08:04:01
SRC006974	Reversal of un-invoiced sales in December 2017 now invoiced in sept 2018	170,294	170,294	22200, 54800	17/12/2018	TPOTTS	SIN - Sales Invoice	23/09/2018 10:10:10

Show 10 lines


CANCEL CREATE TEST

Given the materiality level is £30,000, we would want to investigate all of these transactions as they are all greater than the materiality level. Transaction SRC006974 in particular is a notable transaction given the description and substantial gap between when the sales were accrued in December 2017 and actually invoiced in September 2018, which could indicate a cut-off issue.

These transactions should be investigated further by seeking information and explanations from management.

The blue icons in the top right-hand corner include 'Filtering'. Filtering may be useful (eg for a selected month) where there is a large number of transactions.

Alternatively, by clicking on the top red square in the key (Elevated Risk) in the bottom right of the main Heat Map screen (circled above) all three of the Elevated Risk dots change from blue to green. These can be seen at the top of the main Heat Map screen in the data analytics software.

Again, clicking the detail icon  in the top right of the screen (circled) it highlights all the transactions relating to the three elevated risk dots selected shown below:

Profit and Loss Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059282	Salary Jnl Jan 2017 - January 2017 salary journal	120,574	120,574	21200,26500,26520,26530,26561,32010,62100,62105,62120,62125,62130,62135,71000,71060,71500,71510,91060,31800	31/12/2018	JSMITH	NOM - Nominal Journal	31/12/2018 18:53:56
NOM059638	2017 Prepay reversal - Prepayments	51,066	51,066	23040,62010,62405,72000,72007,72020,72060,72065,72070,72510,73040,73060,73070,77010	01/12/2018	FWRIGHT	NOM - Nominal Journal	01/12/2018 06:49:58
NOM059639	2017 accruals revers - Accruals	216,075	216,075	34030,61010,62100,62105,62120,62125,71000,71005,71025,71070,71090,72050,73030,73035,77020,77030,77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	01/12/2018 17:16:03
NOM059642	2017 accruals revers - Accruals	328,125	328,125	34030,61010,62100,62105,62120,62125,71000,71005,71025,71070,71090,72000,72050,73030,73035,77020,77030,77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	01/12/2018 08:04:01
NOM059643	2017 accruals revers - Accruals	328,125	328,125	34030,61010,62100,62105,62120,62125,71000,71005,71025,71060,71090,72000,72050,73030,73035,77020,77030,77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	01/12/2018 11:08:29
SRC006973	Overseas receivable	100,000	100,000	21020,51020	01/12/2018	FWRIGHT	SRC - Sales Receipt	01/12/2018 15:18:32
SRC006974	Reversal of un-invoiced sales in December 2017 now invoiced in sept 2018	170,294	170,294	22200,54800	17/12/2018	TPOTTS	SIN - Sales Invoice	17/09/2018 10:10:10
SRC006975	Sales invoice	300,000	300,000	23040,54800	18/12/2018	ABLOGGS	SIN - Sales Invoice	18/12/2018 12:55:08

Show 10 lines

CANCEL

CREATE TEST

As an example, one transaction has been selected for investigation (circled above). This transaction can then be investigated by clicking into the blue 'Transaction Id' above, which produces the following screen showing the double entry:

Transaction 'SRC006973'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
SRC006973	21020	100,000	01/12/2018	SRC - Sales Receipt	Overseas receivable	FWRIGHT		07/12/2018 15:18:32
SRC006973	51020	-100,000	01/12/2018	SRC - Sales Receipt	Deposit on Brand maangement contract with Spooks	FWRIGHT		07/12/2018 15:18:32

Show 10 lines

Showing 1 to 2 of 2 lines

CANCEL

The transaction is selected as notable in the Heat Map due to it being three times (or over) the materiality level.

After it has been identified in the Heat Map, by drilling down to transaction details, the following additional factors can be set out to justify the transaction as a notable, and potentially high-risk, item:


- Size – it is a significant amount, which is quantified more precisely in the transaction details than in the Heat Map.
- It is a round sum amount.
- It is an overseas transaction where controls may differ and there may be foreign currency translation risks.
- There may be a revenue recognition issue. This is a 'deposit' received and so it is possible that it has been invoiced in advance of the service being delivered. In finding this one transaction it may be indicative that there are also other similar transactions. It is therefore possible audit evidence of a common practice and a wider revenue recognition issue than just this one transaction.

Critical appraisal

Like any other audit tool, it is important to know the limitations of the Heat Map. It is important to understand what it is trying to achieve and what it is not designed to achieve. It enables you to search for transactions and groups of transactions with elevated risk on the basis of two criteria: impact and frequency. It is good at identifying large individual transactions which impact on profit or loss as potential sources of audit risk. However, there are other dimensions to audit risk and it is important that these are also considered in using other tools from the data analytics software to gain a more general awareness of audit risk.

How to Use

The table below gives indicative guidance of how the Heat Map can be used in the Corporate Reporting exam. The two columns show a 'Big Picture' approach (eg, for overall review and risk identification) and 'Small Picture' approach (eg, for looking at details and selective investigation by drilling down to individual transactions).

The 'Big Picture' approach	The 'Small Picture' approach
<p>The Heat Map is applied to a grouping of transactions. The selection of this grouping is important. It may be:</p> <ul style="list-style-type: none"> • given to you in the question (eg, payables as one of the audit areas in a 'risks and procedures' style exam question). • you need to select the most appropriate account grouping to apply in the Heat Map. This could be broad (a whole financial statement) or narrow (one audit area such as payables or receivables). 	<p>The selection of individual transactions to investigate is important. Consider:</p> <ul style="list-style-type: none"> • The transactions in the red areas are highest risk. However, look wider than this in case there are notable groups of transactions with very high monetary impact, but based on a few transactions (eg in the orange area of elevated risk). • Once the detail icon  is clicked, use judgement to consider which transactions in the list are highest risk (see suggested criteria in the example above).
<p>Step back and look at the Heat Map as a whole. Consider:</p> <ul style="list-style-type: none"> • Are there a large number of dots in the elevated risk areas? • Are there very few dots in the elevated risk areas where there is a strong expectation by the examiner that you will be able to identify a given high-risk transaction? 	<p>It is important to understand the nature of the transactions highlighted by the Heat Map. The large one-off transactions identified by the Heat Map can often be journal entries made by management. Consider:</p> <ul style="list-style-type: none"> • Are these closing entries around the year end; the half year end; or the quarter (indicated by the transaction date)? • Is cut-off an issue for period-end entries? • Key words like 'reversal' may require an explanation and search for the original transaction being reversed. • Is there a risk of management override with few controls over the journal entry (who has made the entry may be significant)?
<p>Compare the left side to the right side:</p> <ul style="list-style-type: none"> • Is the Heat Map unbalanced with more to one side than the other? This may suggest that there may be a management bias to either increase or reduce reported income • Is the primary purpose of your test 	<p>A Corporate Reporting exam question may suggest a significant transaction may have occurred but may not set out in detail what it is.</p> <p>The Heat Map may help you find the transaction.</p> <p>With thousands of transactions in the data, a</p>

The 'Big Picture' approach	The 'Small Picture' approach
directional in looking either for overstatement or understatement of income? If so, you may wish primarily to focus on one side of the Heat Map	single significant transaction may be hard to discover by random searching. The Heat Map is one quick way to search for, and locate, large one-off transactions (there are also other ways – such as using the <i>Detect</i> Module).

3.4.4 The Tree Map

The Tree Map visualisation shows the document types posted by each user.

Select the *Explore* Module. Then select Statement of Profit or Loss at the top of the main *Explore* dashboard. Then click on the Tree Map diagram in the bottom right-hand quadrant of the four visualisations. The screen below is then shown:



Note: the presentation of the boxes may vary slightly from the above, depending on your screen size, but the same data is shown.

In the top right-hand corner, you need to select a primary variable and a secondary variable. There are only two possible variables for each of these with the Tree Map:

- Users
- Document Type

As you can see, the set up in the above diagram has *Users* as the primary variable and *Document Type* as the secondary variable.

The **red line** around the outside represents the total number of transactions posted (in this case) to the Statement of Profit or Loss.

The **orange lines** show the number of transactions posted by each user.

The **green areas** show the number (in brackets) of transactions of each document type posted by each user, and the size of the area represents the percentage of transactions of each document type for each user. The size of the green areas therefore gives a relative indication of which user made most postings.

To see the underlying data, let your cursor hover over each of the lines and green areas. A small call-out box will appear with the data relating to that line/area.

Practice Activity


Hover your cursor over the square in the section second from the left of the above screen (circled above) labelled 'NOM (937)'. It will show the total number of transactions posted by E Davids, which amounts to 1,428. It will also show that 937 of these have been posted via the nominal journal, which is 66% of the total transactions posted by E Davids.

Hovering the cursor over the orange lines around the area for E Davids also shows the total number of transactions posted by this user. Clicking on the green area for E Davids shows the relevant individual transactions posted by this user.

Other data


The above Tree Map relates to all transactions in the Statement of Profit or Loss. Alternatively, the Statement of Financial Position could be selected, which has different transactions and therefore a different Tree Map visualisation.

A more tightly focused use of the Tree Map would be to look below the financial statement level at a group of accounts or single account in 'Account View' by deselecting the green ticks (as demonstrated earlier) and leaving only the transactions with ticks to be examined using the Tree Map visualisation.

The comparison icon  on the right-hand side enables a comparison Tree Map to be created to enable different groupings of selected accounts to be compared.

Practice Activity

To familiarise yourself with the Tree Map, carry out the following:

- Select *Income* in the main *Explore* screen to focus on sales data only (ie deselect other Statement of Profit or Loss accounts using the green ticks).
- Click on the Tree Map visualisation in the bottom right-hand quadrant of the *Explore* dashboard.
- Select: (i) *Document Type* as the primary variable; and (ii) *User* as the secondary variable
- Click on the  icon and select *Trade Receivables* for the comparison screen from the drop-down box.

Review the two screens for possible audit risks (eg, consistency of data; internal control risks from possible lack of segregation of duties).

How to Use

The table below gives indicative guidance of how the Tree Map can be used in the Corporate Reporting exam.

The 'Big Picture' approach	The 'Small Picture' approach
<p>The Tree Map is applied to groupings of transactions. The selection of this grouping is important. It may be:</p> <ul style="list-style-type: none"> • given to you in the question (eg, as one of the audit areas in a 'risks and procedures' style exam question). • you need to select the most appropriate grouping to apply the Tree Map. 	<p>Clicking on one of the green areas enables all the transactions posted by one user for one type of document to be identified.</p> <p>So, if a concern has arisen over the sales credit notes posted by one user, all these transactions can be identified and reviewed.</p>
<p>The Tree Map considers Users (<i>Who?</i>) and Document Types (<i>How?</i>)</p> <p>Step back and look at the Tree Map as a whole. Consider:</p> <ul style="list-style-type: none"> • What is the relative importance of each user in posting transactions? <p>Is there a link between Users and Document Types which may suggest risk (eg invoices, credit notes, cash received)?</p>	

The 'Big Picture' approach	The 'Small Picture' approach
Where a 'risks and procedures' style question highlights an audit area (eg payables) consider reviewing comparative Tree Maps with linked accounts (eg cost of sales and trade payables; income and receivables).	

3.5 Account Numbering

In 'Account View' each account has a number. So, for Elephant, account 11010 is the account number for Motor Vehicle 1, which is the top item on the listing we looked at earlier in section 3.3.

In navigating between accounts and recognising the nature of transactions, it is important that you can find specific accounts from their numbers. Thus, for Elephant:

- accounts beginning with 1 or 2 are assets
- accounts beginning with 3 are liabilities
- accounts beginning with 5 are income
- accounts beginning with 6 or 7 are expenses
- accounts beginning with 9 are equity (except 990 which is the suspense account, which is shown under 'other P&L' in this case)

NB. The Corporate Reporting exam will use a different company with a different account numbering system. Corporate Reporting exam questions may guide you, where relevant, by providing some key account numbers. However, you cannot rely on all relevant account numbers being provided in the question, so you need to be able to search for an account. To find any of the other account numbers, go into the 'Account View', select the type of account you are looking for (Asset, Liability, Income, Expense, Equity), and you will find the account numbers displayed in numerical order next to the individual account descriptions. If you are looking at an individual transaction showing the double entry, then hovering your cursor over each account code will show the account name.

Exam approach – investigating an account or transaction

Having looked at all four quadrants it should be clear that some tasks, some types of review, and some types of inquiry can be carried out in a number of different ways. A possible task at the lowest granular level, is to find a transaction in the data analytics software, from information provided, so further investigations can take place.

A Corporate Reporting exam question may highlight a particular account,

transaction, or type of transaction, that has been identified as notable or potentially high audit risk. You may be required to:

- Investigate that account to justify why it has high risk of misstatement (you would not necessarily be expected to interrogate all of the transactions in the account to find the relevant issues).
- Justify why a transaction(s) given in the scenario may generate a risk of misstatement.

For example, you may be asked to find the following transaction:

NOM059325 'BPA transfer' £48,364 Nominal Journal (Accounts 20010, 20014) posted by T Potts (effective date 3/1/2018).

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059325	BPA transfer - BPA transfer	48,364	48,364	20010, 20014	03/01/2018	TPOTTS	NOM - Nominal Journal	03/01/2018 19:47:49

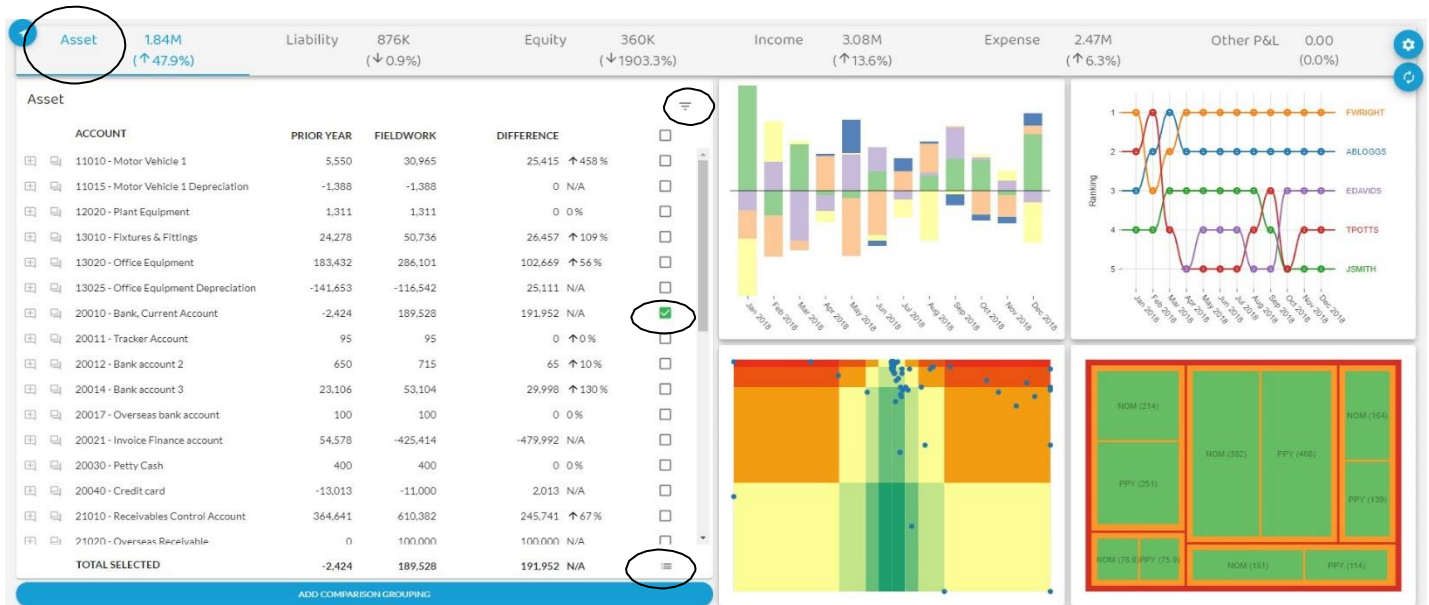
Finding one transaction amongst many thousands may seem daunting. However, using the tools in the modules, there are a number of different ways to do this.

In particular, we know several facts about this transaction:



- it was posted by T Potts
- it had an effective date in January 2018
- it was a nominal journal document type
- it was posted to accounts 20010 and 20014
- it has a Transaction Id of

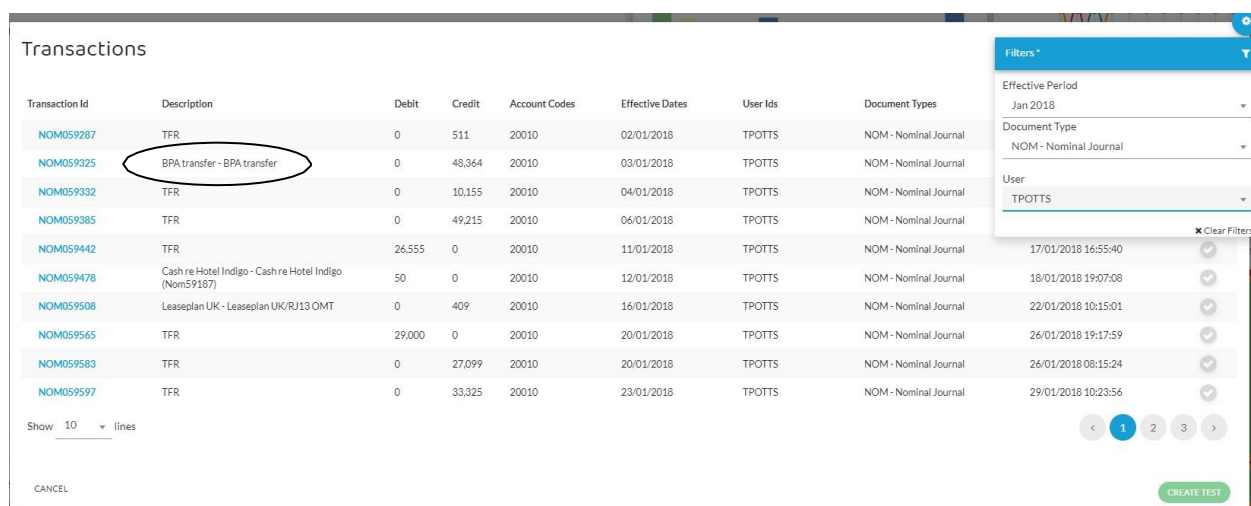
NOM059325

Start in the *Explore* screen below:



Steps:

- (1) We know that, for this company, accounts starting with the number 2 are asset accounts, so click on ASSET at the top of the page (circled).
- (2) Go to the *Explore* Module to isolate account 20010 for further searching by clicking the top box (circled above) to deselect all ticks.
- (3) Tick the account 20010 box (circled above) to select it.
- (4) Click on the  icon (circled above) to show all 20010 transactions.
- (5) Then to filter down these transactions, click on the filter icon  in the top right-hand corner and select: Effective Period 'Jan 2018'; Document Type 'NOM - Nominal Journal'; and User 'TPOTTS', to show the following:



Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types
NOM059287	TFR	0	511	20010	02/01/2018	TPOTTS	NOM - Nominal Journal
NOM059325	BPA transfer - BPA transfer	0	48,364	20010	03/01/2018	TPOTTS	NOM - Nominal Journal
NOM059332	TFR	0	10,155	20010	04/01/2018	TPOTTS	NOM - Nominal Journal
NOM059385	TFR	0	49,215	20010	06/01/2018	TPOTTS	NOM - Nominal Journal
NOM059442	TFR	26,555	0	20010	11/01/2018	TPOTTS	NOM - Nominal Journal
NOM059478	Cash re Hotel Indigo - Cash re Hotel Indigo (Nom59287)	50	0	20010	12/01/2018	TPOTTS	NOM - Nominal Journal
NOM059508	Leaseplan UK - Leaseplan UK/RJ13 OMT	0	409	20010	16/01/2018	TPOTTS	NOM - Nominal Journal
NOM059565	TFR	29,000	0	20010	20/01/2018	TPOTTS	NOM - Nominal Journal
NOM059583	TFR	0	27,099	20010	20/01/2018	TPOTTS	NOM - Nominal Journal
NOM059597	TFR	0	33,325	20010	23/01/2018	TPOTTS	NOM - Nominal Journal

- (6) We can now see there are still 3 pages of transactions for T Potts in January made in the nominal ledger. We can visually scan through these to locate the transaction which appears on the first page (circled).

However, there may be many more than 3 pages for some transaction types, despite filtering. In this case, we have further clues in the specific day of posting and the Transaction ID number. The Transaction ID numbers are in numerical order, so it is easy to skip through the pages (using the page numbers in the bottom right-hand corner) until the ID is found with the correct transaction.

Clicking on the blue ID number **NOM059325** for the circled transaction selected, produces the detailed entries as follows for you to investigate.

Transaction 'NOM059325'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
NOM059325	20014	48,364	03/01/2018	NOM - Nominal Journal	BPA transfer - BPA transfer	TPOTTS	012198_004	09/01/2018 19:47:49
NOM059325	20010	-48,364	03/01/2018	NOM - Nominal Journal	BPA transfer - BPA transfer	TPOTTS	012198_004	09/01/2018 19:47:49

Show 10 lines

Showing 1 to 2 of 2 lines

1

CANCEL

Exercise 2

Locate the following transaction and show the detailed entries:

SCR001232 '57307 - Retrieve existing 2 x Ads and update as briefed' £160 Sales credit (Account 51010), posted by F Wright (effective date 30/11/2018).

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
SCR001232	57307 - Retrieve existing 2 x Ads and update as briefed.	160	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	30/11/2018 17:00:41

The solution is in Appendix A.

Exam approach – search for related transactions

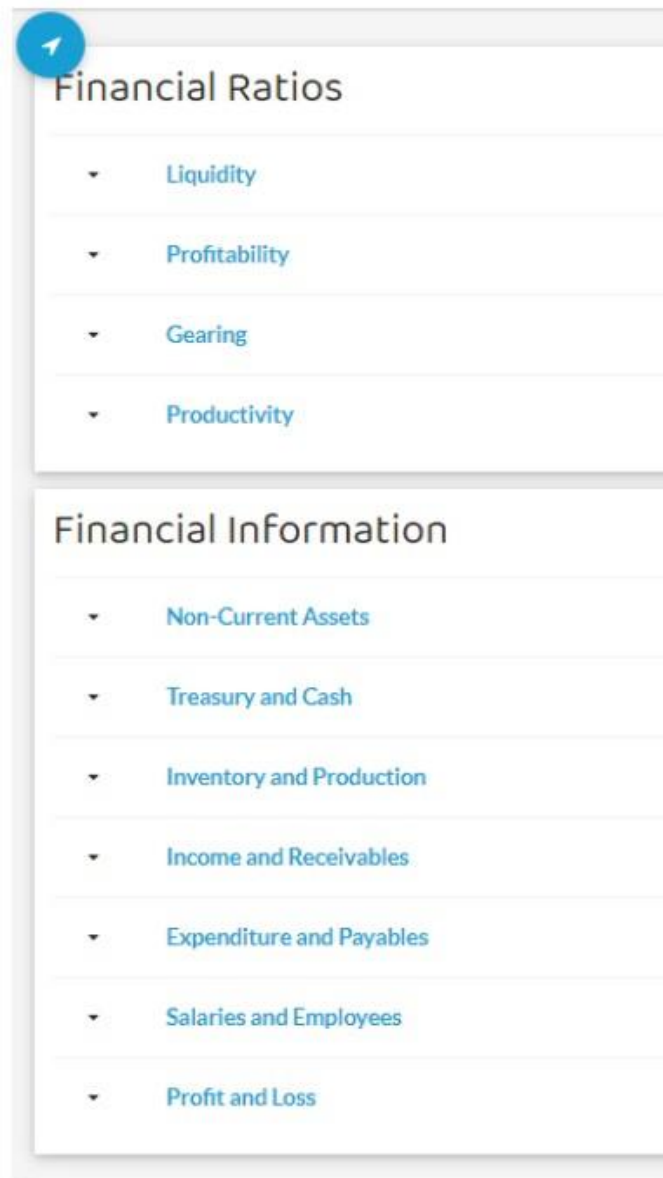
Having found a transaction in the data analytics software that has been identified in the exam, it is important to think laterally and not assume that the transaction can be considered in isolation. Ask yourself why the examiner has highlighted this transaction as a risk and whether related transactions may have similar risks. For example:

The Key Risk	How to respond
Is the user the key risk? (<i>Who</i>)	Search for similar transactions by the same user (using the Bump Chart)
Is the type of transaction the risk? (<i>What</i>)	Search the account where the original transaction is located for related transactions. eg, <ul style="list-style-type: none"> Repeated transactions of the same type Reversal of the original transaction by the same user Reversal of the original transaction by a different user
Is the time period the risk? (<i>When</i>)	Search for similar transactions in the same month (eg, perhaps cut-off is the issue)

4. THE *METRICS* MODULE (LEVEL 2)

When you use the Metrics Module for the first time you may be asked to enter some information about the company. If this is the case, you should enter n/a for all questions.

On entering the Module, the following screen is shown:



The above screen shows that the Metrics Module prepares two types of metrics:

- **Financial ratios** – showing the relationship between two or more accounts (expressed as a ratio).
- **Financial information** – showing amounts taken from the accounts (expressed as an absolute amount). The metrics can be benchmarked against other organisations and against industry specific standards. The validity of this benchmark comparison can be challenged, so it should not be heavily relied upon. The benchmark data can be changed in the data analytics software to be more focused (eg, for a particular geographical or industry group) but this is not required for the Corporate Reporting exam.

Exam Approach – which ratios and financial information to use

The *Metrics* Module can typically be used where a Corporate Reporting exam question asks for analytical procedures. These can be:

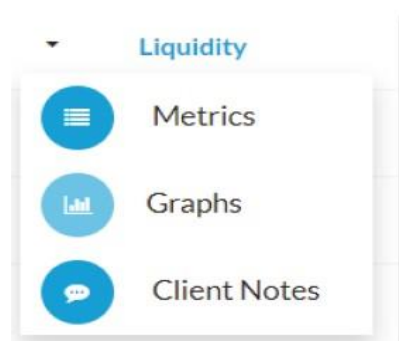
- Preliminary analytical procedures – at the beginning of the audit when planning
- Substantive analytical procedures – during the audit as evidence gathering
- Review analytical procedures – towards the end of the audit during audit completion.

To identify risks, it would be difficult to perform analytical procedures using all the available metrics in the data analytics software. You will be guided in the question and/or the requirements to select only a small number of relevant metrics.

NB All three types of analytical procedures should be accessed through the *Fieldwork* facility of the data analytics software. You do not need to change to Planning or Completion.

Financial Ratios

Clicking on the arrow to the left-hand side of one of the items under Financial Ratios or Financial Information produces the following drop-down box, giving the options shown:



The 'Client Notes' enable the audit team to leave notes within the data analytics software for the client.

NB 'Graphs' are not available for Financial Ratios, only Financial Information (see below).

The sole focus for Financial Ratios is therefore Metrics, which can be accessed using the drop down or by clicking on the required ratio, shown in blue. For **Liquidity** this shows the following set of metrics:



The *Metrics* visualisation above gives a number of Key Performance Indicators (expressed as ratios) relating to liquidity.


Each metric is shown on a dial. The green area of the dial shows the metric is low risk and the red area on the dial shows it is high risk. For some metrics, a high figure means high risk (eg, credit period or receivables days). For other metrics, a low figure means high risk (eg, current ratio).


Hovering over the green or red arrows underneath the dial shows the prior year figure for comparison. Arrows *pointing down* mean the amount has fallen since last year. Arrows *pointing up* mean the amount has risen since last year. Either could be a good or bad indication,

depending on the ratio.

Red arrows mean an adverse movement since last year. *Green arrows* mean a favourable movement since last year. Either could be an increase or a decrease.

If you hover your cursor over one of the arrows, the ratio for the prior year is shown.

Clicking on the  icon shows how the metric was calculated.

Thus, for the average payment period (ie, payables days) clicking on the  icon shows a drop-down calculation.

Average Payment Period

Current Year	62.9 days
Formula	(Trade Payables * Days in Period) / Cost of Sales
Values (Original)	$\frac{151,941.5 \times 365}{881,464} = 62.9$
Lower Quartile	5.5 days
Median	16.6 days
Upper Quartile	41.9 days
Benchmarked Against	All Data

CANCEL

The above calculation shows how the average payment period (ie, payables days) was calculated for the current period.

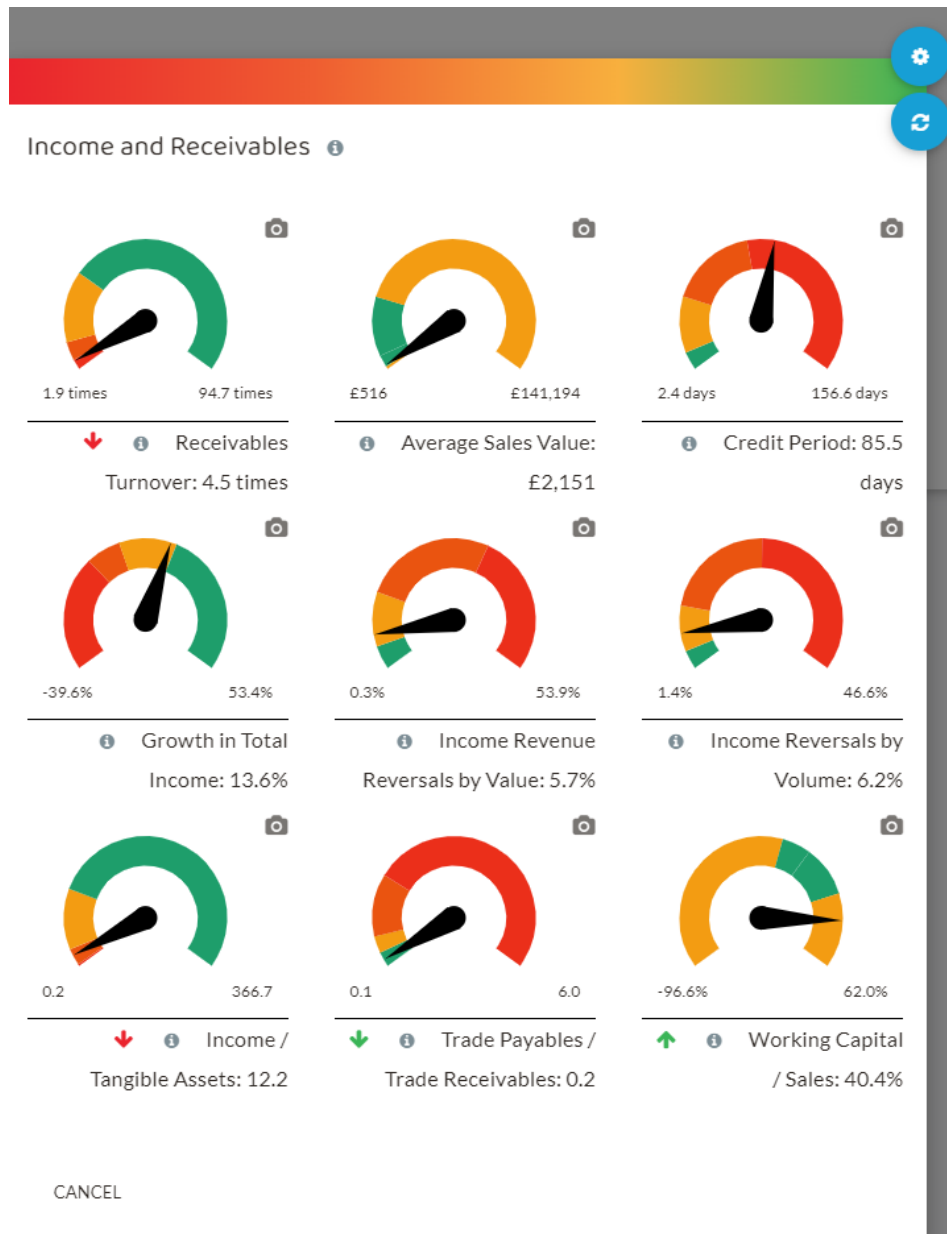
It also compares this figure with benchmark figures. At 62.9 days, it is higher than the upper quartile of the benchmark group at 41.9 days. Hence, it is high risk as indicated by the dial in the previous screen which is well into the red area.


Financial Information

The use of the dials is the same for the Financial Information items as it is for Financial Ratios. A key difference is however that Graphs are available for Financial Information.

Clicking on the Income and Receivables item under Financial Information the following screen in

shown with a set of metrics:



Clicking on the switching icon  in the top right-hand corner (circled) and then clicking on Graphs from the drop-down menu shows the following bar chart for receivables:

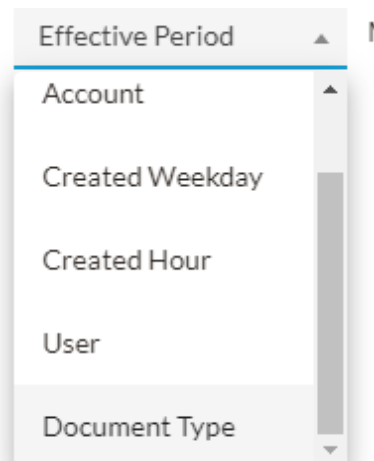


CANCEL

The primary variable in the top right-hand corner (circled) is the effective period so the bar chart shows the debit and credit entries for each month in the receivables account.

Hovering the cursor over the black dots shows the amounts of the debits and credits for each month and the number of transactions.

The variable can be changed by clicking on the small arrow next to the existing variable in the top right-hand corner of the screen above (circled). The following drop-down box appears showing the choices of alternative variables.



Practice Activity

Review each of the four types of Financial Ratios and each of the seven types of Financial Information.

- Familiarise yourself with the information available
- Identify key audit risks

Exam Approach – Which metrics to use

The Corporate Reporting exam would normally give some guidance on which Financial Ratios and which sections of Financial Information to use, but judgement is also needed. You will not need to use them all in any one Corporate Reporting exam.

It is important to link the sets of metrics identified to discern patterns or identify risks, rather than considering each metric, or set of metrics, in isolation.

5. THE *REVENUE CASCADE* MODULE (LEVEL 3)

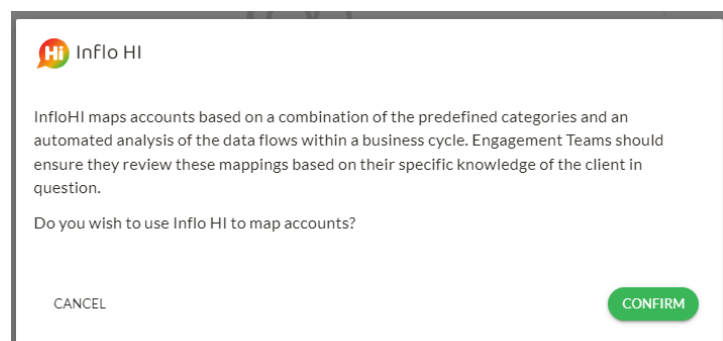
The *Revenue Cascade* Module is a tool to visualise and interrogate relationships in the revenue/receivable cycle to highlight transactions diverging from expectations.

It takes 100% of the revenue cycle transactions and maps them to the expected business cycle, visualising and stratifying the data population.

It identifies notable transactions to assess risk and evaluate the impact on quality of earnings. It can be used to reduce or replace alternative techniques, such as sampling.

Navigating into the Revenue Cascade Module

When you open the Revenue Cascade module for the first time, a pop-up box may appear directly inviting you to use InfloHI (Hybrid intelligence) to map the accounts:

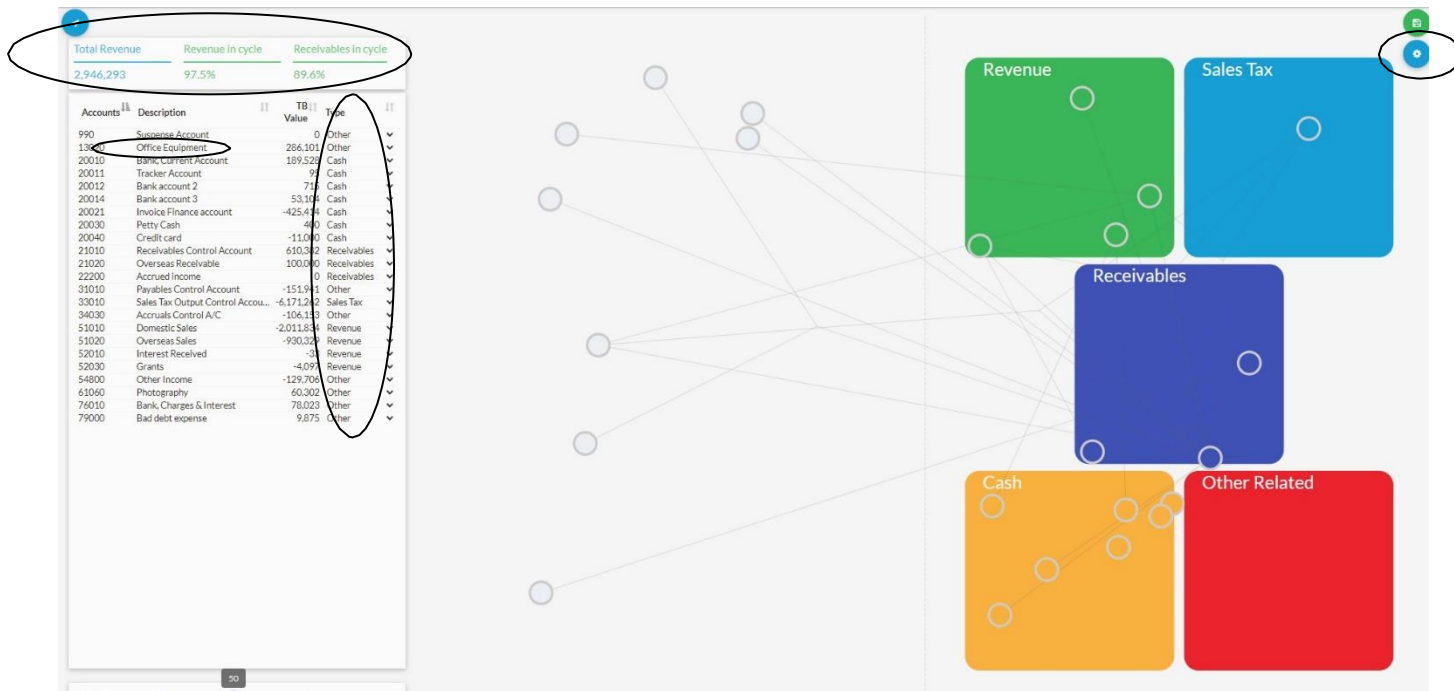


You should click CONFIRM.

If you do not do this (or enter the module again at a later stage without having saved the mapping), you will see the following screen. (Note: The positioning of the grey circles may vary).

Accounts	Description	TB Value	Type
990	Suspense Account	0	Other
11010	Motor Vehicle 1	30,965	Other
13010	Fixtures & Fittings	50,736	Other
13020	Office Equipment	286,101	Other
13025	Office Equipment Depreciat...	-116,542	Other
20010	Bank Current Account	189,528	Other
20011	Trailer Account	95	Other
20012	Bank account 2	715	Other
20014	Bank account 3	53,104	Other
20021	Invoice Finance account	-425,414	Other
20030	Petty Cash	400	Other
20040	Credit card	-11,000	Other
21010	Receivables Control Account	610,382	Other
21020	Overseas Receivable	100,000	Other
21200	Employee Loan	19,933	Other
22200	Accrued income	0	Other
23040	Pre-Payments Control A/C	300,000	Other
24000	Other Prepayments	0	Other
26500	Car Loan 1	98,822	Other
26505	Car Loan 2 RPB R13 OMT	46,293	Other
26506	Car Loan 3	11,231	Other
26510	Other loan receivable	16,723	Other
26520	Car Loan 5	116,061	Other
26524	Car Loan 6	25,004	Other
26530	Car Loan 7	111,385	Other
26537	Car Loan 8	37,113	Other
26561	Car Loan 10	-4,621	Other
29999	Other Temp	0	Other
31010	Payables Control Account	-151,941	Other
31025	HP Creditors	0	Other
31800	Other loans	0	Other
32010	Social Security Liability	-30,250	Other
32020	Tax liability	10,894	Other
33010	Sales Tax Output Control Acc...	-6,171,262	Other
33020	Sales Tax Input Control Acco...	3,026,917	Other
33030	Sales Tax Payments/Refunds	3,076,902	Other
34030	Accruals Control A/C	-106,153	Other
34500	Other Accruals	0	Other
35041	Pension Loan 2	0	Other
35042	Loan payable	-215,339	Other
35043	Pension Loan 3	-315,501	Other
51010	Domestic Sales	-2,011,834	Other
51020	Overseas Sales	-930,329	Other
52010	Interest Receivable	-33	Other

Using the cog icon in the top right-hand corner (circled) and then click ('Hybrid Intelligence') **Map Accounts**, in the drop-down menu. A pop-up box will appear inviting you to use Hybrid intelligence to map the accounts and then click CONFIRM to generate the following screen:



Note: The positioning of the grey circles, having clicked **Map Accounts**, may vary each time the screen is reconfigured. So, the grey circles in your screen may be in different positions to those above. You will need to map the accounts each time you enter the Revenue Cascade module unless you click the Save button to save your mapping. You can reset the mapping at any time using the Reset Mappings tool on drop-down menu on the cog.

The **Map Accounts** tool maps the accounts that relate to the revenue-receivables-cash cycle automatically applying labels ('Revenue', 'Sales Tax', 'Receivables', 'Cash', 'Other Related') under the 'Type' column (circled). Accounts that are not related to the revenue- receivables-cash cycle simply remain labelled as 'Other'. You may need to manually adjust this – for example, the 'Overseas receivable' account may need to be labelled as 'Receivables' manually using the drop-down arrow if the **Map Accounts** tool does not do it automatically.

NB Circles – the remaining circles (after clicking the button) now represent the accounts which contain transactions that do not fit in with the expectations of the normal revenue/receivables cycle.
Lines between the circles are links with the other side of the transaction.

The expected cycle is that revenue transactions will generate postings in the receivables account and sales tax account (other than any cash sales). On settlement, the receivables will then become cash receipts. Transactions falling into this normal cycle are lower risk, as this is what is expected to occur.

In contrast, revenue transactions that do not ultimately generate cash are higher risk, eg an irrecoverable receivable (ie, a bad debt write off).

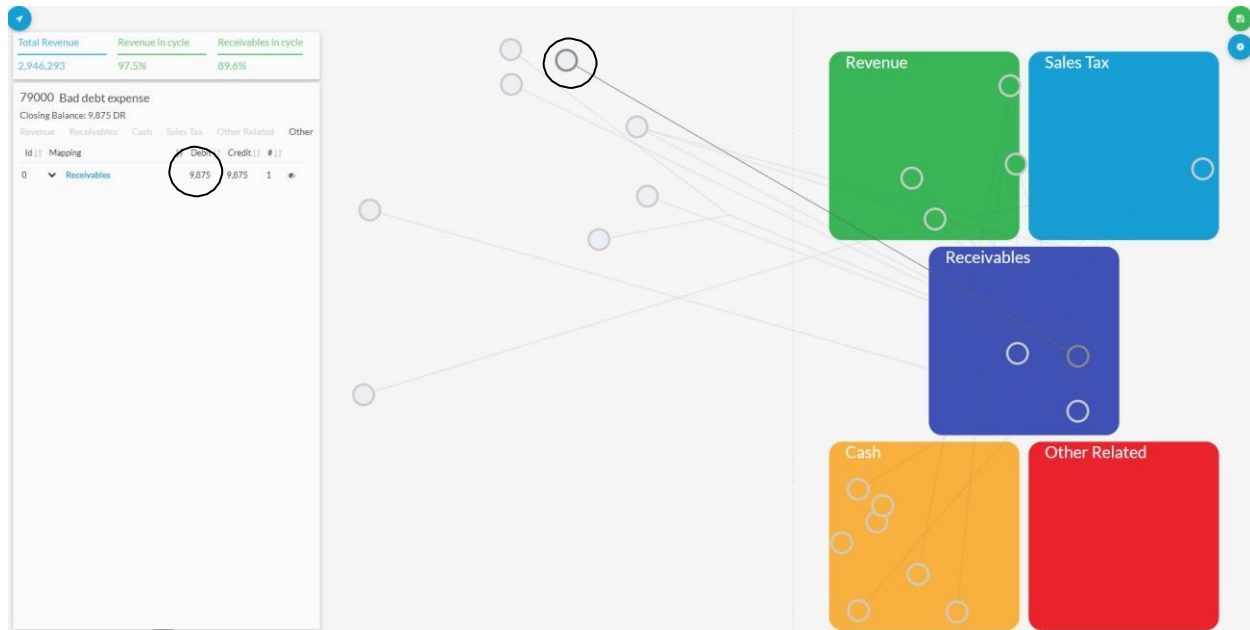
In the top left-hand corner of the above screen (circled) the Revenue in cycle % and Receivables in cycle % shows the percentage of revenue and receivable transactions that fall within the expected cycle. For example, it can be seen that 97.5% of Revenue and Sales Tax transactions flowed through to Receivables, while 89.6% of Receivables flowed through to Cash or Other Related.

The accounts that fall outside the expected cycle may be of higher risk and may need to be investigated. These have been identified by the *Revenue Cascade* Module. They are represented by the grey circles in the middle section of the above diagram.

Where transactions fall outside the expected cycle, the accounts which contain these transactions are listed on the left-hand side of the above screen. The totals for each for these accounts is also shown. For example, in the list on the left (circled above), the office equipment account total is shown as £286,101.

Hover your cursor over the grey circle showing the transaction (or transactions) relating to the *Office Equipment* account (you will need to find the correct grey circle). The line from this grey circle shows that it is linked to receivables and to the photography account. Clicking on the grey circle, it shows a transaction amount of £95,000 in the left-hand box. Clicking on **Receivables** in this box, reveals the double entry transaction. The audit risk is that this transaction is not part of the normal receivables cycle and it therefore requires further investigation.

Clicking on another grey circle in the centre section to indicate it is a bad debt. (circled below – but remember your screen may differ slightly in terms of the positioning of the grey circles, so you will need to find the correct circle by making the cursor hover over a few grey circles until you find the correct one).



This shows on the left-hand side as having a value of £9,875 (circled). We can drill down further by clicking on Receivables on the left-hand side, which will show the double entry and transaction details as follows:

Detail for grouping #0

Journal Id	Amount	Effective Date	Document Type	Journal Description	Account Code	User Id	Line Description	Line Description
NOM003045	-9,875	28/10/2018	NOM - Nominal Journal	Write off Geoworld receivable	21010	TPOTTS		28/10/2018
NOM003045	9,875	28/10/2018	NOM - Nominal Journal	Write off Geoworld receivable	79000	TPOTTS		28/10/2018

Show 10 lines

Showing 1 to 2 of 2 lines

CANCEL

Follow up audit procedures can then seek evidence on the detail of the transaction, establish why it occurred, who authorised the bad debt write off; and identify any internal control deficiencies.

Practice activity

- 5.1** Follow the above routines to identify and establish the nature of all the other transactions in the central grey area on the *Revenue Cascade* diagram.
- 5.2** For each transaction in (a), make sure you understand why it has fallen outside the expected revenue-receivables-cash cycle.

- 5.3 Set out the audit procedures you would carry out for the transactions that you regard as high risk.

6. THE *DETECT* MODULE – (LEVEL 2)

When you open the Detect module for the first time, you may be asked to confirm the data. If this happens, click on the green 'CONFIRM' button at the bottom right of the screen below.

Configure

Fieldwork Detect Materiality 30000 Working Time From: 07:00:00 To: 19:00:00

Keywords: Fraud, Hidden, Hide, Cover, Delete, Remove, Ceo, Cfo, Adjust, Correct, Gifts, Facilitation, Bribe, Personal, Private

To add a keyword, press the 'Enter' key after typing.

Related Individuals +

Related Businesses +

First Name Last Name Name

CANCEL CONFIRM

When returning to the Detect module in the future, you will not see this initial confirmation screen again (unless you need to add new keywords, which is covered later).

For the Corporate Reporting exam, you will need a good working knowledge of the key functions of the Detect module. This section of the Explanatory Guidance Notes will address the examinable functions only.

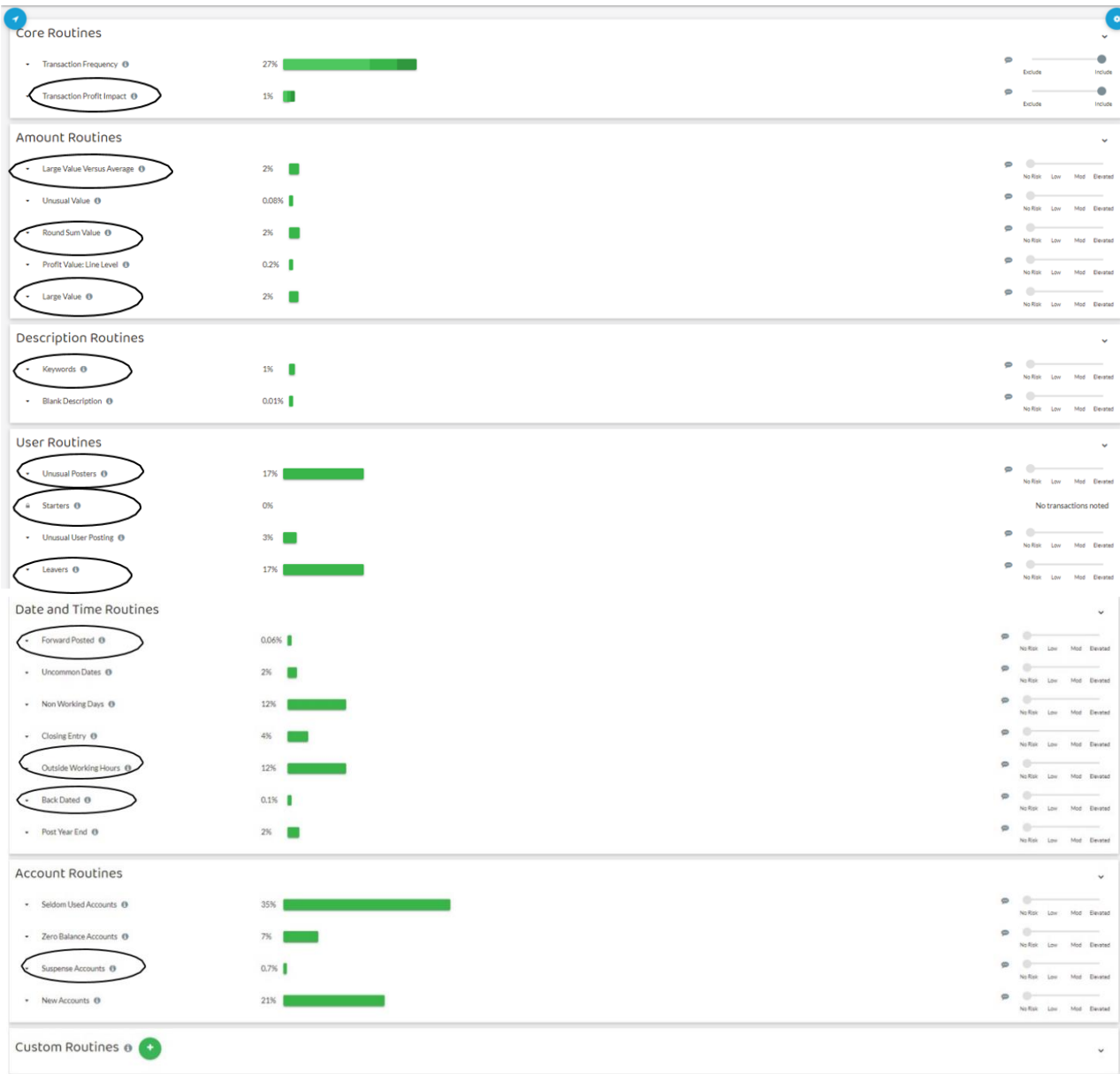
The Detect module enables the running of audit tests (routines).

There are 24 routines which test against pre-defined criteria to detect exceptions. Each routine relates to ISA 240 guidance for fraud and risk testing.

Functions include:

- Setting risk ratings
- Identifying unusual characteristics
- Identifying indicators of fraud, management override and unusual behaviour
- Visualisations to identify trends.



On navigating into the *Detect* Module, you will be taken to the following dashboard (you may need to scroll down to see the full screen):



This screen shows the 24 tests (routines) plus Custom Routines. For the purposes of the Corporate Reporting exam some of the most useful (circled) are:

- Large Value (most important)
- Leavers
- Starters
- Post Year End
- Round Sum Value
- Large Value Versus Average
- Keywords

- Forward Posted
- Back Dated
- Transaction Profit Impact
- Suspense Accounts
- Unusual Posters
- Outside Working Hours

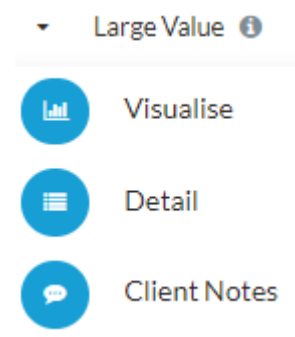
The information icon  to the right of the test description gives information on the nature of the test parameters. So, for example, hovering over the  next to **Large Value** will indicate that this routine identifies large transactions where the gross value exceeds the materiality level (£30,000 for Elephant).

The percentage number of transactions that fall into the category are shown on the right-hand side of the test description and are represented by the green bar. Hovering on the green bar with your cursor gives the total number of transactions overall and the number of transactions that fall within the criteria of the test. So, for example, for the Large Value routine, there are 167 transactions that exceed the materiality level – which is approximately 2% of transactions as indicated by the green bar.



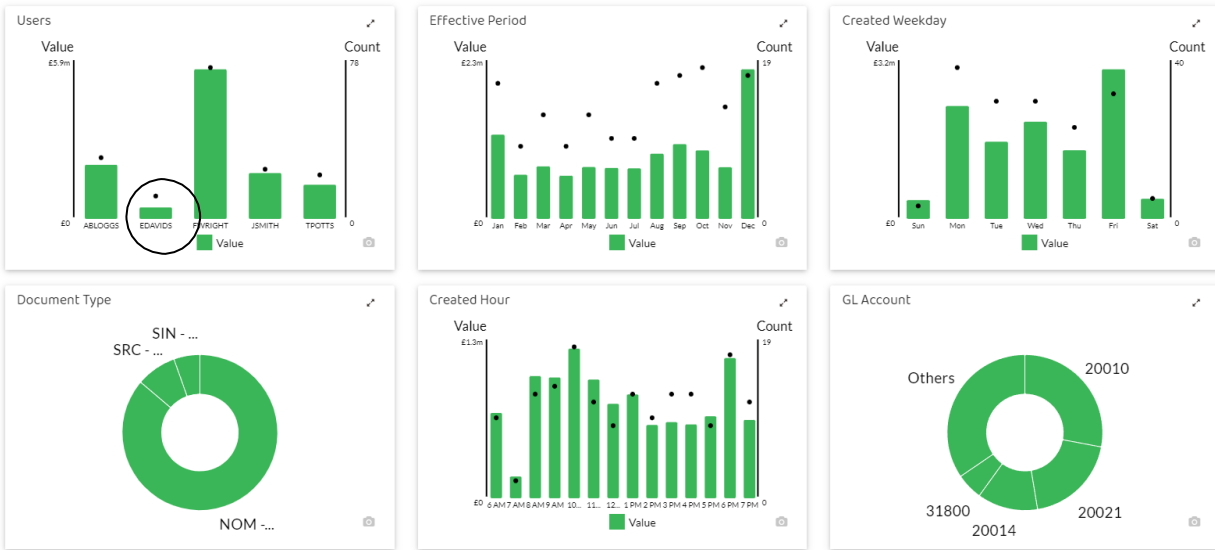
Using the graphs function to identify and investigate transactions

Each of the routines operates in the same way: clicking on the small grey arrow to the left of a test description, such as Large Value, gives the following drop-down box:



Clicking on 'Visualise' produces a range of graphs relating to the routine concerned. eg, for 'Large Value' as follows:

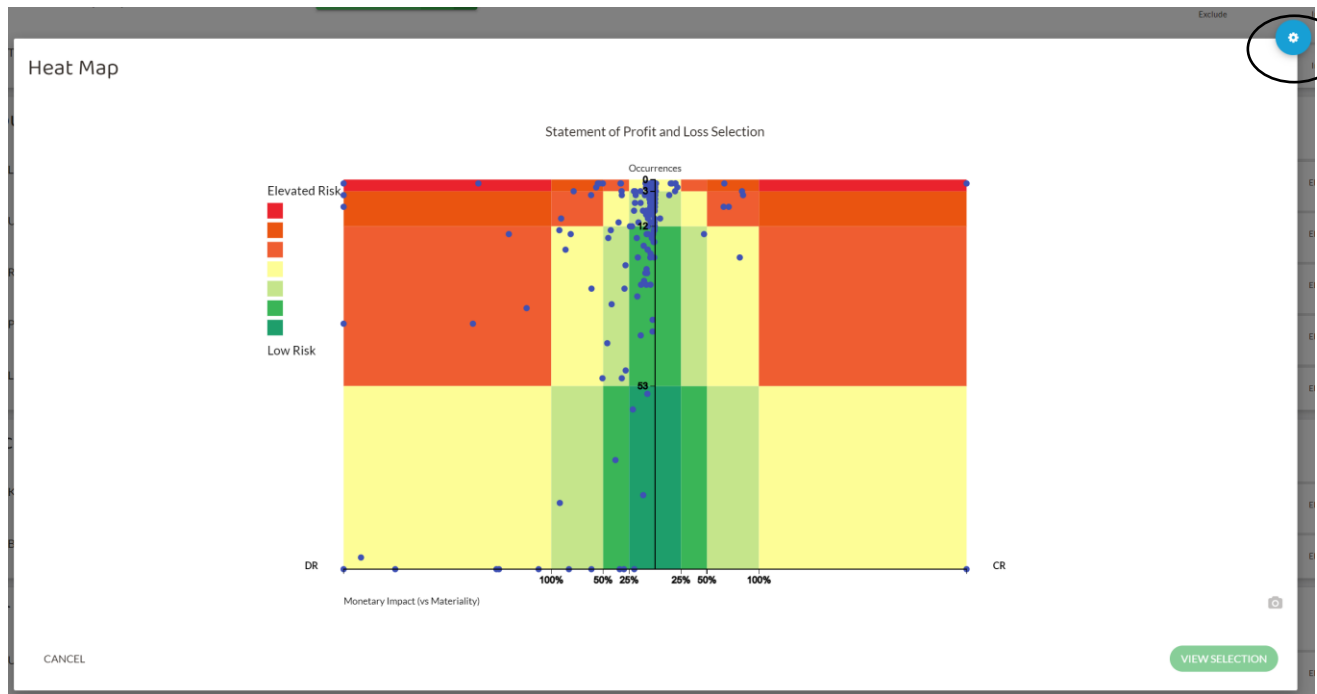
Graphs



CANCEL

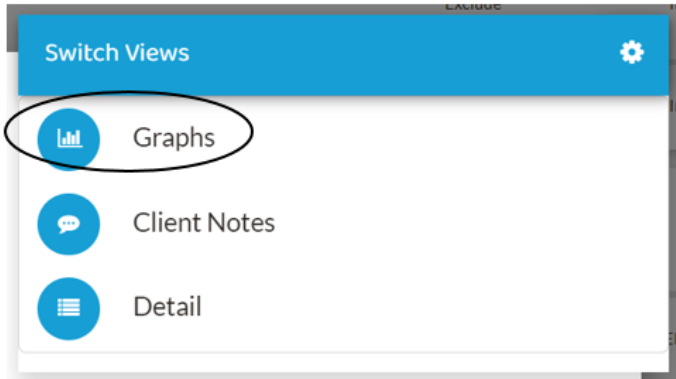
Each of the six graphs analyses the transactions identified by the routine in the different ways that we have met previously. The way we investigate depends on the nature of our concerns.

In the case of the 'Transaction Profit Impact' routine (only), clicking on Visualise shows a Heat Map rather than the 6 graphs (similar to the one seen in the Explore module):



CANCEL

However, the 6 graphs can still be accessed by clicking the cog icon (circled above), and selecting 'Graphs' from the dropdown menu:



This reveals the following graphs for the 'Transaction Profit Impact' routine:

Graphs



CANCEL

The six graphs

The way we use the six graphs to investigate depends on the nature of the audit risks. Let us consider each graph in turn.

Users - this enables allows transactions identified by a particular routine to viewed by the user that posted them.

For example, returning to the 'Large Value' routine, click CANCEL (circled above) on the 'Transaction Profit Impact' graph and select the 'Large Value' routine graph using the method explained above), if E Davids is a junior employee, we may be concerned that this user should not be posting large transactions. We can click on the green block for E Davids (circled below) in the

Users graph for the 'Large Value' routine.

Graphs



CANCEL

This shows the large transactions (ie, in excess of materiality of £30,000) posted by this user, as follows:

Transactions filtered by user EDAVIDS ⓘ

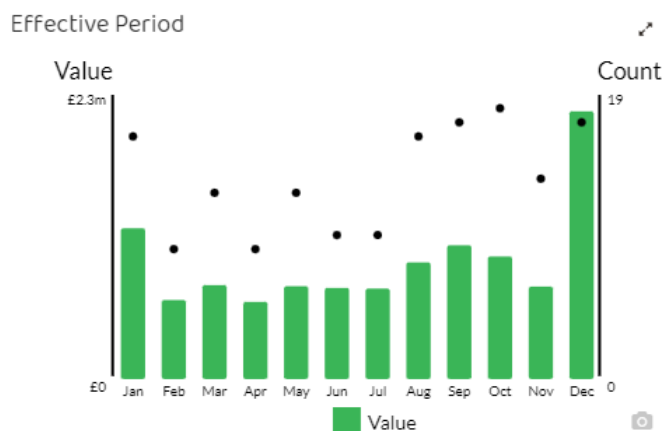
Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM060874	TFR	30,000	30,000	20010,20021	03/05/2018	EDAVIDS	NOM - Nominal Journal	09/05/2018 15:17:17
NOM061116	TFR	30,451	30,451	20010,32010	19/05/2018	EDAVIDS	NOM - Nominal Journal	25/05/2018 19:40:17
NOM061233	BPA transfer - BPA transfer	87,945	87,945	20010,20014	30/05/2018	EDAVIDS	NOM - Nominal Journal	05/06/2018 12:56:17
NOM061650	TFR	30,000	30,000	20010,20021	04/07/2018	EDAVIDS	NOM - Nominal Journal	10/07/2018 11:20:15
NOM062780	TFR	39,811	39,811	20010,20014	25/09/2018	EDAVIDS	NOM - Nominal Journal	01/10/2018 18:04:25
NOM062930	TFR	50,000	50,000	20010,20021	03/10/2018	EDAVIDS	NOM - Nominal Journal	09/10/2018 15:45:07
NOM063167	TFR	30,409	30,409	20010,32010	19/10/2018	EDAVIDS	NOM - Nominal Journal	25/10/2018 15:50:56
NOM063174	TFR	30,409	30,409	20010,20014	19/10/2018	EDAVIDS	NOM - Nominal Journal	25/10/2018 06:54:39
NOM063189	TFR	44,099	44,099	20010,20014	20/10/2018	EDAVIDS	NOM - Nominal Journal	26/10/2018 13:15:22
NOM063349	TFR	31,892	31,892	20010,20014	30/10/2018	EDAVIDS	NOM - Nominal Journal	05/11/2018 19:15:32

Show 10 lines

CANCEL CREATE TEST

As previously, these transactions can be investigated further by clicking on the blue Transaction Id numbers on the left-hand side.

Effective Period - this enables transactions identified by a routine with an effective date in a particular month to be identified, as illustrated by the following diagram for the 'Large Value' routine:



It might be that an audit risk is cut-off. For example, using the 'Large Value' routine, this visualisation could be used to identify material transactions in December. The auditor might also be particularly interested in December as it has the greatest number of large transactions.

Clicking on the green column for December shows the following screen on page 2.

Transactions filtered by effective period Dec ⓘ

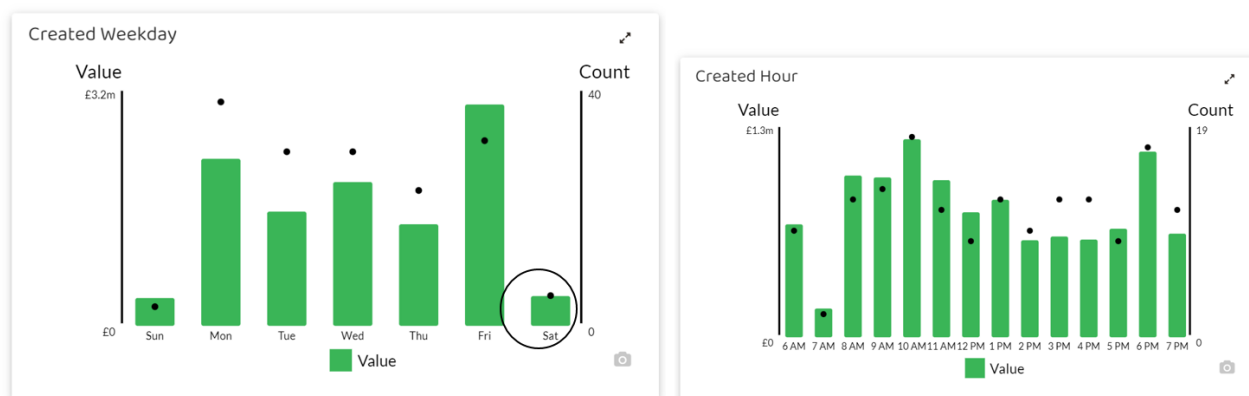
Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059639	2017 accruals revers - Accruals	216,075	216,075	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71070, 71090, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 17:16:03
NOM059642	2017 accruals revers - Accruals	328,125	328,125	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71070, 71090, 72000, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 08:04:01
NOM059643	2017 accruals revers - Accruals	328,125	328,125	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71060, 71090, 72000, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 11:08:29
SRC006592	18000 - 18000	32,564	32,564	20021, 21010	19/12/2018	FWRIGHT	SRC - Sales Receipt	25/12/2018 16:26:27
SRC006971	Cash from invoice finance company	75,000	75,000	20010, 20021	29/12/2018	ABLOGGS	SRC - Sales Receipt	04/01/2019 14:12:08
SRC006973	Overseas receivable	100,000	100,000	21020, 51020	01/12/2018	FWRIGHT	SRC - Sales Receipt	07/12/2018 15:18:32
SRC006974	Reversal of un-invoiced sales in December 2017 now Invoiced in sept 2018	170,294	170,294	22200, 54800	17/12/2018	TPOTTS	SIN - Sales Invoice	23/09/2018 10:10:10
SRC006975	Sales Invoice	300,000	300,000	23040, 54800	18/12/2018	ABLOGGS	SIN - Sales Invoice	24/12/2018 12:55:08

Show 10 lines

BACK CREATE TEST

This shows the detail of all large transactions (above materiality of £30,000 for this engagement) occurring in December. There are only two pages so we could review all of these. For example, if reviewing for cut-off, the effective dates versus the created dates could be inspected.

Created Weekday and **Created Hour** – this function shows transactions identified by a routine classified by day of the week (Created Weekday routine) or allocated to the hour in which the transaction was created (Created Hour routine). Similar to the Heat Map function (which shows created weekday), this can be used to investigate transactions, identified by a routine, which are posted at unusual days and times. The Created Hour routine only shows the hourly blocks for which there are transactions identified by the routine.



For example, using the 'Large Value' routine to identify material transactions, clicking on the green 'Sat' (Saturday) bar (circled) of the 'Created Weekday' visualisation reveals 5 transactions above materiality posted on a Saturday:

Transactions filtered by created weekday Saturday ⓘ

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059201	TFR	100,000	100,000	20010, 20021	30/12/2018	ABLOGGS	NOM - Nominal Journal	05/01/2019 09:50:31
NOM059202	TFR	78,347	78,347	20010, 31800	30/12/2018	TPOTTS	NOM - Nominal Journal	05/01/2019 10:16:04
NOM059719	Salary Jnl Feb 2017 - Salary Journal - February 2017	119,292	119,292	21200, 26500, 26520, 26530, 26561, 32010, 62100, 62105, 62120, 62125, 62130, 62135, 71000, 71005, 71060, 71500, 71510, 31800	28/01/2018	JSMITH	NOM - Nominal Journal	03/02/2018 06:13:47
SIN018405	SIN018405 - Posting Run Control	37,200	37,200	21010, 33010, 51010	28/01/2018	JSMITH	SIN - Sales Invoice	03/02/2018 09:39:53
SRC006972	Website dev	95,000	95,000	13020, 21010, 61060	29/09/2018	FWRIGHT	SRC - Sales Receipt	06/10/2018 09:44:22

Show 10 lines

CANCEL CREATE TEST

Clicking on transaction SRC006972 'Website dev' shows the following detail:

Transaction 'SRC006972'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
SRC006972	13020	95,000	29/09/2018	SRC - Sales Receipt	Website dev	FWRIGHT		06/10/2018 09:44:22
SRC006972	61060	-20,000	29/09/2018	SRC - Sales Receipt	Photography	FWRIGHT		06/10/2018 09:44:22
SRC006972	21010	-75,000	29/09/2018	SRC - Sales Receipt	Digital Dreams Ltd	FWRIGHT		06/10/2018 09:44:22

Show 10 lines

Showing 1 to 3 of 3 lines

Hovering over the number in the 'Account Code' column for each line reveals the name of each account code, eg, account code 13020 is 'Office equipment', account code 61060 is 'Photography' and account code 21010 is 'Receivables Control Account':

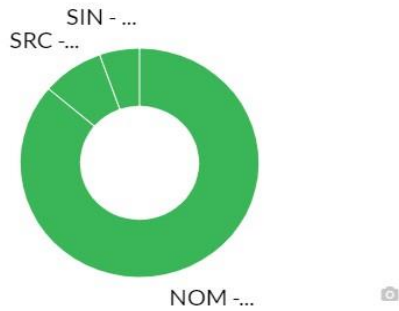
Transaction 'SRC006972'

Transaction Id	Account Code	Account Name
SRC006972	13020	Office Equipment
SRC006972	61060	Photography
SRC006972	21010	Receivables Control Account

This transaction merits further investigation as it is material, a round sum figure which suggests an estimate, was posted on Saturday (outside the normal working week) and appears to reclassify photography expense and a trade receivable as office equipment, which is then labelled as 'Website development' (which ordinarily would be an intangible asset rather than office equipment).

Document Type - this enables transactions identified by the selected routine of a particular document type to be investigated, as illustrated in the following diagram for the 'Large Value' routine:

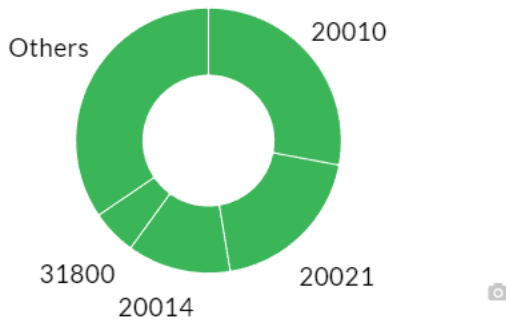
Document Type



In this case, most of the large transactions are posted in the nominal ledger. Clicking the different segments allows those transactions to be viewed. An area of audit risk could be large manual journals put through by management. These might be part of management override and sit outside normal control systems for many companies. In many companies this could be an area where professional scepticism and management challenge is appropriate. In the case of Elephant there are no large manual journals identified which provides some comfort.

GL Account – this function shows transactions identified by a routine, classified by general ledger account. For example, looking at the GL Account visualisation for 'Large Value' routine shows the following:

GL Account



The account numbers indicate which of accounts contain transactions that meet the routine criteria (ie, in this case those in excess of materiality of £30,000). The size of the green segment indicates how many such transactions there are in each account. Not all general ledger accounts will contain a 'large value' item.

If, for example, we click on the green segment for account 31800 (Other Loans), the following list of transactions is shown:

Transactions filtered by account 31800 T

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates	
NOM059202	TFR	78,347	0	31800	30/12/2018	TPOTTS	NOM - Nominal Journal	05/01/2019 10:16:04	✓
NOM059282	Salary Jnl Jan 2017 - January 2017 salary journal	0	78,347	31800	31/12/2018	JSMITH	NOM - Nominal Journal	06/01/2019 18:53:56	✓
NOM059665	TFR	77,372	0	31800	27/01/2018	TPOTTS	NOM - Nominal Journal	02/02/2018 18:45:41	✓
NOM059719	Salary Jnl Feb 2017 - Salary journal - February 2017	0	77,372	31800	28/01/2018	JSMITH	NOM - Nominal Journal	03/02/2018 06:13:47	✓
NOM060096	Sal Jnl March 2017 - Salary journal March 2017	0	74,734	31800	24/02/2018	ABLOGGS	NOM - Nominal Journal	02/03/2018 10:34:23	✓
NOM060113	TFR	74,734	0	31800	28/02/2018	ABLOGGS	NOM - Nominal Journal	06/03/2018 16:58:27	✓
NOM060437	TFR	70,993	0	31800	30/03/2018	JSMITH	NOM - Nominal Journal	05/04/2018 19:10:10	✓
NOM060459	Salary Jnl Apr 2017 - Salary journal April 2017	0	70,993	31800	30/03/2018	TPOTTS	NOM - Nominal Journal	05/04/2018 19:21:44	✓
NOM060790	TFR	71,220	0	31800	28/04/2018	FWRIGHT	NOM - Nominal Journal	04/05/2018 17:02:01	✓
NOM060893	Salary Jnl May 2017 - Salary journal May 2017	0	71,220	31800	30/04/2018	FWRIGHT	NOM - Nominal Journal	06/05/2018 14:45:20	✓

Show 10 lines

< 1 2 3 >

BACK CREATE TEST

In this case, there are three pages transactions which meet the routine's criteria which can be scanned for items indicating an audit risk. Alternatively, the filter function can be used (circled top right) to further refine the search by 'Effective Period', 'Document Type' or 'User'.

For example, we could filter transactions by 'Document Type': Nominal Journal to identify transactions entered outside of the standard processes (although that would be all of them in this case!) or posted by a particular 'User', eg, A BLOGGS, which identifies two transactions as follows:

Transactions filtered by account 31800 T

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types
NOM060096	Sal Jnl March 2017 - Salary journal March 2017	0	74,734	31800	24/02/2018	ABLOGGS	NOM - Nominal Journal
NOM060113	TFR	74,734	0	31800	28/02/2018	ABLOGGS	NOM - Nominal Journal

Show 10 lines

CANCEL

Filters T

Effective Period
Please Select

Document Type
Please Select

User
ABLOGGS

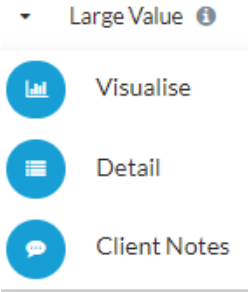
x Clear Filters

CREATE TEST

Filters can be cleared by click 'x Clear Filters' menu (circled above) on the Filters drop-down menu.

Transaction detail

If you simply want to view all transactions identified by a routine, clicking on the small grey arrow to the left of the routine name, gives a 'Detail' option in the drop-down box:




For example, for the 'Large Value' routine, clicking on the 'Detail' option reveals the following list of transactions:

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM058832	TFR	50,000	50,000	20010, 20021	07/12/2018	FWRIGHT	NOM - Nominal Journal	13/12/2018 16:28:20
NOM058840	TFR	67,695	67,695	20010, 20014	07/12/2018	FWRIGHT	NOM - Nominal Journal	13/12/2018 15:06:44
NOM059020	TFR	37,292	37,292	20010, 32010	19/12/2018	TPOTTS	NOM - Nominal Journal	25/12/2018 14:05:43
NOM059033	TFR	38,732	38,732	20010, 20014	19/12/2018	FWRIGHT	NOM - Nominal Journal	25/12/2018 11:37:27
NOM059051	TFR	60,412	60,412	20010, 20021	21/12/2018	FWRIGHT	NOM - Nominal Journal	27/12/2018 18:34:20
NOM059069	TFR	53,983	53,983	20010, 20014	21/12/2018	FWRIGHT	NOM - Nominal Journal	27/12/2018 15:48:18
NOM059201	TFR	100,000	100,000	20010, 20021	30/12/2018	ABLOGGS	NOM - Nominal Journal	05/01/2019 09:50:31
NOM059202	TFR	78,347	78,347	20010, 31800	30/12/2018	TPOTTS	NOM - Nominal Journal	05/01/2019 10:16:04
NOM059282	Salary Jnl Jan 2017 - January 2017 salary journal	120,574	120,574	21200, 26500, 26520, 26530, 26561, 32010, 62100, 62105, 62120, 62125, 62130, 62135, 71000, 71060, 71500, 71510, 91060, 31800	31/12/2018	JSMITH	NOM - Nominal Journal	06/01/2019 18:53:56
NOM059289	TFR	57,000	57,000	20010, 20021	03/01/2018	ABLOGGS	NOM - Nominal Journal	09/01/2018 13:51:54

Use of the example routines


The routines to be used by candidates in the Corporate Reporting exam is a question of judgement. There are often different routines that can be used to obtain the same information. The following list covers examples of some routines with a description of the types of transaction they identify.

As mentioned above, each of the routines produces the same 6 graphs so the approach (with the exception of Keywords, covered in more detail below) is the same for all the routines.

Examinable routine	Description in Info (hovering over )
Transaction Profit Impact	<p>Transactions are assigned a score based on the number of occurrences of that identical transaction during the year as follows:</p> <ul style="list-style-type: none"> • Transaction occurs less than once per quarter = 3 • Transaction occurs between once per quarter and once per month = 2 • Transaction occurs between once per month and once per week = 1.
Large Value Versus Average	Transactions which have an impact on any general ledger account of 10 times the average value of transactions impacting the same general ledger account during the year.
Round Sum Value	Transactions which contain individual lines within the transaction which are for a round sum value, or 0.01 less than a round sum value.
Large Value	Transactions where the gross value exceeds materiality.
Keywords	Transactions where the description fields or general ledger accounts contain keywords.
Starters	Transactions entered by users who posted no transactions in the first 3 months of the year.
Leavers	Transactions entered by a user who posted no transactions in the final 3 months of the year.
Forward Posted	Transactions entered more than 30 days before their effective date.
Back Dated	Transactions entered more than 30 days after their effective date.
Post Year End	Transactions entered after the year end date.

Keywords routine

The 'Keywords' routine identifies transactions with particular words in the transaction description field.

This routine operates in a different way to the other routines as the transactions that the routine has identified by keyword are accessed by clicking  icon (circled) on the Graphs page for the 'Keywords' routine:



(Please note that 'EDIT KEYWORDS' is used to view transactions by keyword and add filters. The method used to add **new** keywords to be searched for is covered below).

Here, we can see the keywords already included in the routine, and the words they have matched against in transaction descriptions:

Keywords

Keyword	Matched Word	Count		
adjust	adjust	3		+
adjust	adjustable	1		+
adjust	adjustment	3		+
ceo	voiceover	5		+
correct	correct	7		+
correct	correction	4		+
correct	incorrect	3		+
correct	incorrectly	1		+
cover	cover	51		+
cover	covering	1		+

Show 10 entries

Showing 1 to 10 of 20 entries

CANCEL

Clicking the folder icon reveals the transactions with descriptions that include the keyword in one or more parts of the double entry. For example, clicking the folder icon for the Keyword 'adjust' and Matched Word 'adjust' (circled above) reveals the following transactions:

adjust adjustable 1

Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM062456	Adjust Q3 sales	33,333	33,333	990, 51010	30/09/2018	FWRIGHT	NOM - Nominal Journal	16/11/2018 16:00:04
SCR001167	- SCR001167 - Posting Run Control	4	4	21010, 33010, 51010	16/03/2018	ABLOGGS	SCR - Sales Credit	22/03/2018 11:59:20
SCR001204	- SCR001204 - Posting Run Control	339	339	21010, 33010, 51010	19/10/2018	JSMITH	SCR - Sales Credit	25/10/2018 19:48:31

Show 10 lines

CANCEL

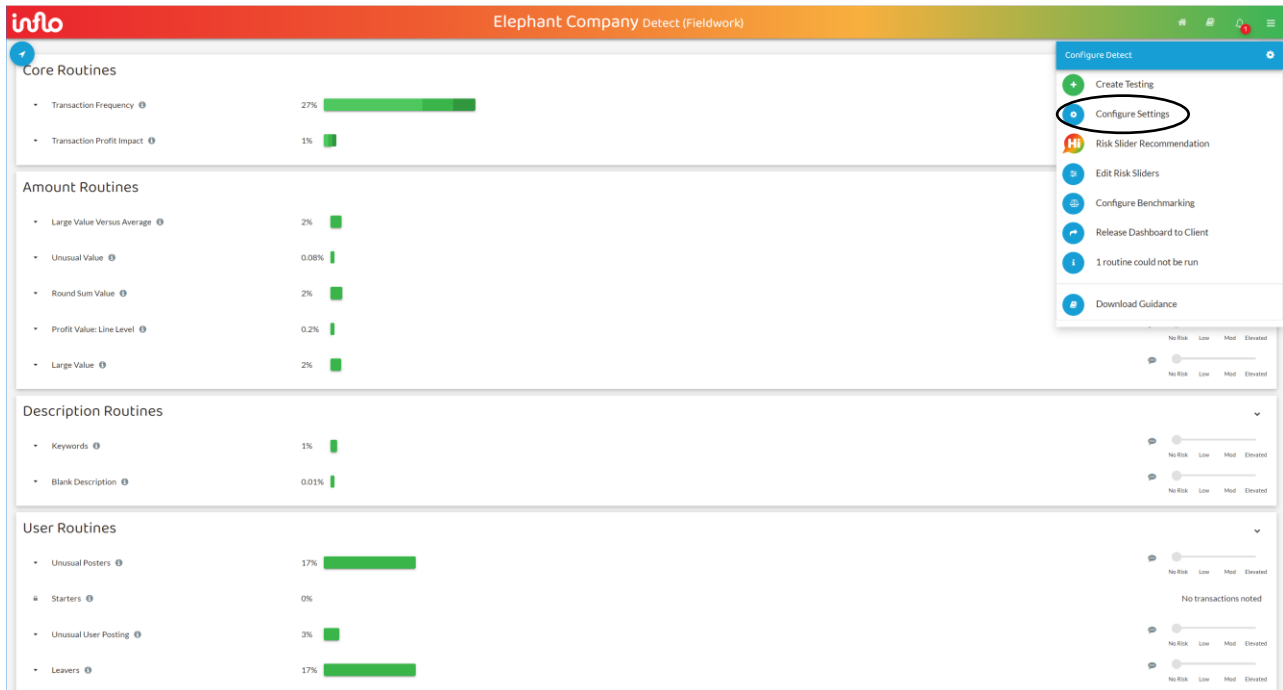
CREATE TEST

The first transaction in particular warrants further investigation as it:

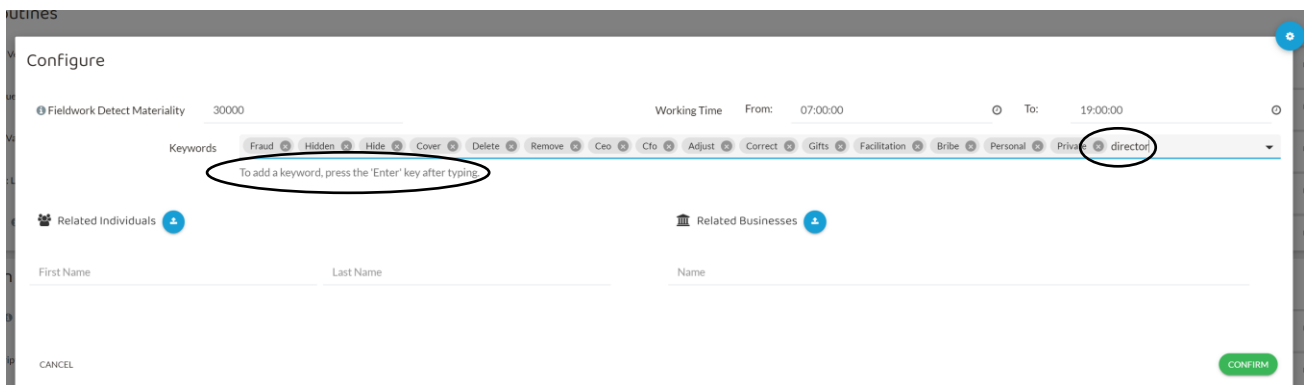
- exceeds materiality of £30,000
- is a manual journal adjustment (Document Type: 'NOM - Nominal Journal')
- has a suspicious description ('Adjust Q3 sales')
- is posted on 16/11/2018 which is 6 weeks after its effective date of 30/9/2018
- is transferred from account 990 (which is the suspense account).

Adding keywords

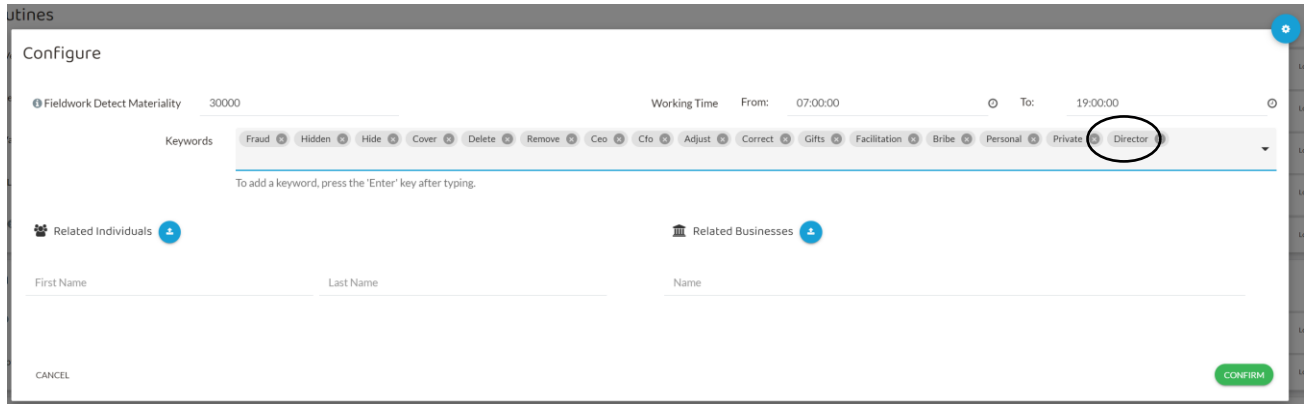
New keywords can be added by selecting the cog item at the top right of the *Detect* module main screen and selecting 'Configure Settings':




To add a new keyword, click to the right of existing pre-populated keywords and type the new keyword, eg, for 'director' as a new keyword (circled):



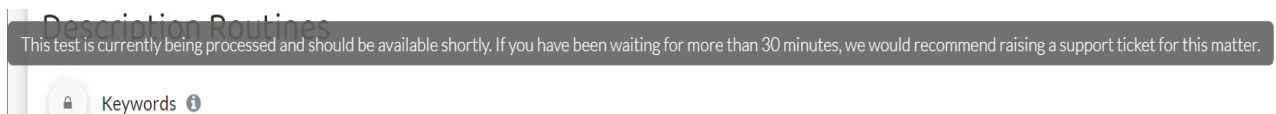
NB: As explained in the text below the keywords above (circled), you must then then press 'enter/return' on your keyboard to add the keyword which will then appear as follows:



Keywords can be removed by clicking the  icon to the right of the keyword.


In both cases you must also click  to save the changes.

After you amend the 'Keywords' routine, on the *Detect* module main screen, you may see a padlock on the routine (instead of the usual grey drop-down arrow) and the following message if you hover over the padlock:



This is a little misleading and can normally be resolved immediately by navigating to another module (eg, *Explore*) and then returning to the *Detect* module, or by refreshing your browser.

After having added a new keyword, the  screen is updated for the new keyword. This is accessed as before using the Visualise menu from the grey dropdown arrow  Keywords  and selecting .

The updated screen shows transactions where 'director', or words including it such as 'directors', are the matched words (circled below), in this case on page  (circled below):


Keywords

Keyword	Matched Word	Count		
cover	covers	1		+
cover	discover	2		+
director	director	6		+
director	directors	15		+
gifts	gifts	1		+
hide	malahide	1		+
personal	dec/lynda.com(ross-personal)	1		+
personal	personal	2		+
personal	personalisation	1		+
private	private	5		+

Show 10 entries

Showing 11 to 20 of 22 entries

CANCEL

The transactions can be accessed as before by clicking the folder  icons on the 'director' and 'directors' lines. For example, clicking the folder icon for the Matched Word 'director' line reveals 6 transactions:

cover covers 1

Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM05960	R Parker-Blair - Loan from Director	20,000	20,000	20010, 26561	23/01/2018	FWRIGHT	NOM - Nominal Journal	29/01/2018 19:22:43
NOM059602	A Quincey - Loan from Director	20,000	20,000	20010, 26500	23/01/2018	ABLOGGS	NOM - Nominal Journal	29/01/2018 13:31:59
NOM059603	J Holme - Loan from Director	20,000	20,000	20010, 26530	24/01/2018	JSMITH	NOM - Nominal Journal	30/01/2018 18:57:38
NOM059639	2017 accruals revers - Accruals	216,075	216,075	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71070, 71090, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 17:16:03
NOM059642	2017 accruals revers - Accruals	328,125	328,125	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71070, 71090, 72000, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	08:04:01
NOM059643	2017 accruals revers - Accruals	328,125	328,125	34030, 61010, 62100, 62105, 62120, 62125, 71000, 71005, 71025, 71060, 71090, 72000, 72050, 73030, 73035, 77020, 77030, 77035	01/12/2018	FWRIGHT	NOM - Nominal Journal	07/12/2018 11:08:29

Show 10 lines

CANCEL

CREATE TEST

Clicking on the Transaction Id for the first transaction (circled) and hovering the cursor over account 26561 reveals that this is a car loan:

Transaction 'NOM059600'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
NOM059600	Car Loan 10	20,000	23/01/2018	NOM - Nominal Journal	R Parker-Blair - Loan from Director	FWRIGHT	008360_099	29/01/2018 19:22:43
NOM059600	26561	-20,000	23/01/2018	NOM - Nominal Journal	R Parker-Blair - Loan from Director	FWRIGHT	008360_099	29/01/2018 19:22:43

Show 10 lines Showing 1 to 2 of 2 lines

CANCEL

This would need to be disclosed as related party transaction as it is a transaction with key management personnel.

A word of warning using keywords...

If you click the **+** icon on the **EDIT KEYWORDS** screen, the word is added to a 'whitelist' which means that transactions including that word are **excluded** from search results. This can be useful to narrow down a search, but, if not used properly, risks excluding transactions. For example, if you were to click **+** on the Matched Word 'director' line (circled below) and then click **SAVE AND RUN** on the 'Keywords Whitelist' menu that appears, the exact word 'director' would then be **excluded** from results

director	director	6	⌵	+
director	directors	15	⌵	+

Keywords Whitelist

Keywords

To add a keyword, press the 'Enter' key after typing.

CANCEL **SAVE AND RUN** **SAVE**

This would leave only the word 'directors' as shown below:

Keyword	Matched Word	Count
cover	covers	1
cover	discover	2
director	directors	15
gifts	gifts	1
hide	malahide	1
personal	dec/lynda.com/ross-personal	1
personal	personal	2
personal	personalisation	1
private	private	5
remove	remove	11

Showing 11 to 20 of 21 entries

CANCEL



To undo this, 'whitelist' words can be removed by clicking 'View Whitelist' (circled above) on the cog drop-down menu, clicking the  by the word (circled below) and then clicking

 :

Keywords Whitelist

Keywords

To add a keyword, press the 'Enter' key after typing.

CANCEL  

Therefore, the recommendation is to **not** add 'whitelist' words as this will not be necessary in the Corporate Reporting exam. To add words to be **included** in keyword searches the approach outlined above in the 'Adding keywords' section (using 'Configure Settings' on the cog menu on the main *Detect* module main screen) must be followed.

Exercise 3

Use the *Detect* module to identify all transactions that were back dated and posted on a weekend day (Saturday or Sunday). Comment on whether these transactions should be investigated further.

The solution is in Appendix A.

7. THE *COLLABORATE* MODULE (LEVEL 3)

NB You do **not** need to use this module in the Corporate Reporting exam.

For background information, the *Collaborate* Module is an audit management tool. It enables secure communication between the auditor and the client. It also enables confidential communications between members of the audit team, with or without client access.

Examples of applications of the *Collaborate* Module include:

- File collaboration and effective workflow management with clients
- Requesting and receiving documents and other evidence from clients
- Tracking and monitoring outstanding requests in real time.

8. THE *INGEST* MODULE (LEVEL 3)

NB You do **not** need to use this module in the Corporate Reporting exam and it will not be available to you.

For background information, the *Ingest* Module enables the client to upload and import its trial balance and nominal ledger into the data analytics software.

Automated validation checks are then carried out by the audit team to verify and cleanse the data.

The *Ingest* Module is also normally used in practice initially to set the materiality level and can also be used to set performance materiality. However, these tasks are **not** required in the Corporate Reporting exam.

9. THE *FLUX* MODULE (LEVEL 3)

NB Only a general awareness of this module is needed as background context.

The *Flux* module allows analytical procedures to be applied to trial balance data ingested at the planning, fieldwork or completion stages of the audit.

Unusual movements based on parameters set by the auditor are flagged for further audit investigation.

Whilst these tests are within the scope of the Corporate Reporting exam, you will **not** be expected to use the Flux module to perform these tests in the exam; this is because the examiner will not access the data analytics software to examine any comments you make in the software.

10. THE *SELECT* MODULE (LEVEL 3)

NB Only a general awareness of this module is needed as background context.

The *Select* Module automates sample selection from a population of transactions. It is designed to complement other audit practices, procedures and processes and enable a collaborative approach to testing with the client's management.

It enables the auditor to import tests into the *Select* Module from a series of predefined tests.

Whilst these tests are useful in practice, you will **not** be expected to use these in the Corporate Reporting exam.

11. THE *REPORTS* MODULE (LEVEL 3)

NB Only a general awareness of this module is needed as background context.

The *Reports* Module combines testing results and visuals to present them in a final report, with supporting content.

The report relates to the audited entity and is designed to add value for the client.

This type of report facility is useful in practice, but you will **not** be expected to use this in the Corporate Reporting exam.

APPENDIX A – ANSWERS TO EXERCISES

Exercise 1 – solution

Select **Expense** in the 'Account View' then select the  icon.

This shows the following screen, where you should select only Administrative Expenses by deleting all other green ticks. This shows the following screen.

Select Categories (Expense)

Payroll Expenses <input type="checkbox"/>	Cost of Sales <input type="checkbox"/>	Distribution Costs <input type="checkbox"/>	Administrative Expenses <input checked="" type="checkbox"/>
Wages and salaries <input type="checkbox"/>	Cost of goods sold <input type="checkbox"/>	Distribution costs <input type="checkbox"/>	Administration expenses <input checked="" type="checkbox"/>
Social security costs <input type="checkbox"/>	Other cost of sales <input type="checkbox"/>		Operating lease costs <input type="checkbox"/>
Other pension costs <input type="checkbox"/>			Legal and professional fees <input type="checkbox"/>
Other Expenses <input type="checkbox"/>	Depreciation Costs <input type="checkbox"/>		
Other expenses <input type="checkbox"/>	Depreciation cost <input type="checkbox"/>		
	Amortisation cost <input type="checkbox"/>		

CONFIRM

Click on the  button in the bottom right corner.

This list of accounts making up Administrative Expenses is then shown and can be reviewed:

Requirement (a)

Reviewing these accounts, a number of areas of potential audit risk arise:

- (i) *72000 Rent charge* – is material and has increased by £7,622 which is a 10% increase. Also, it needs to be ascertained that the rent relates to administrative expenses to ensure it has been attributed the correct account.
- (ii) *72030 Rep & Maint - Machinery* – although not material in absolute terms, there has been a 123% increase which needs explanation by management. Also, it needs to be ascertained that the repairs and maintenance relates to administrative expenses to ensure it has been attributed the correct account. Moreover, the nature of the repairs and maintenance transactions needs to be ascertained to ensure that they are not improvements, in which case they should be capitalised.

- (iii) *73040 Computer Software* – is material and has increased by £8,889 which is a 39% increase. As previously, it needs to be ascertained that the computer software relates to administrative functions to ensure it has been attributed the correct account. Moreover, the nature of the computer software needs to be ascertained to ensure that they are not capital items.
- (iv) *76010 Bank Charges and Interest* – this item is material at £78,023 but more importantly back interest is not an item that should be presented in Administrative Expenses in the financial statements. Rather it should be presented as part of Finance Charges.

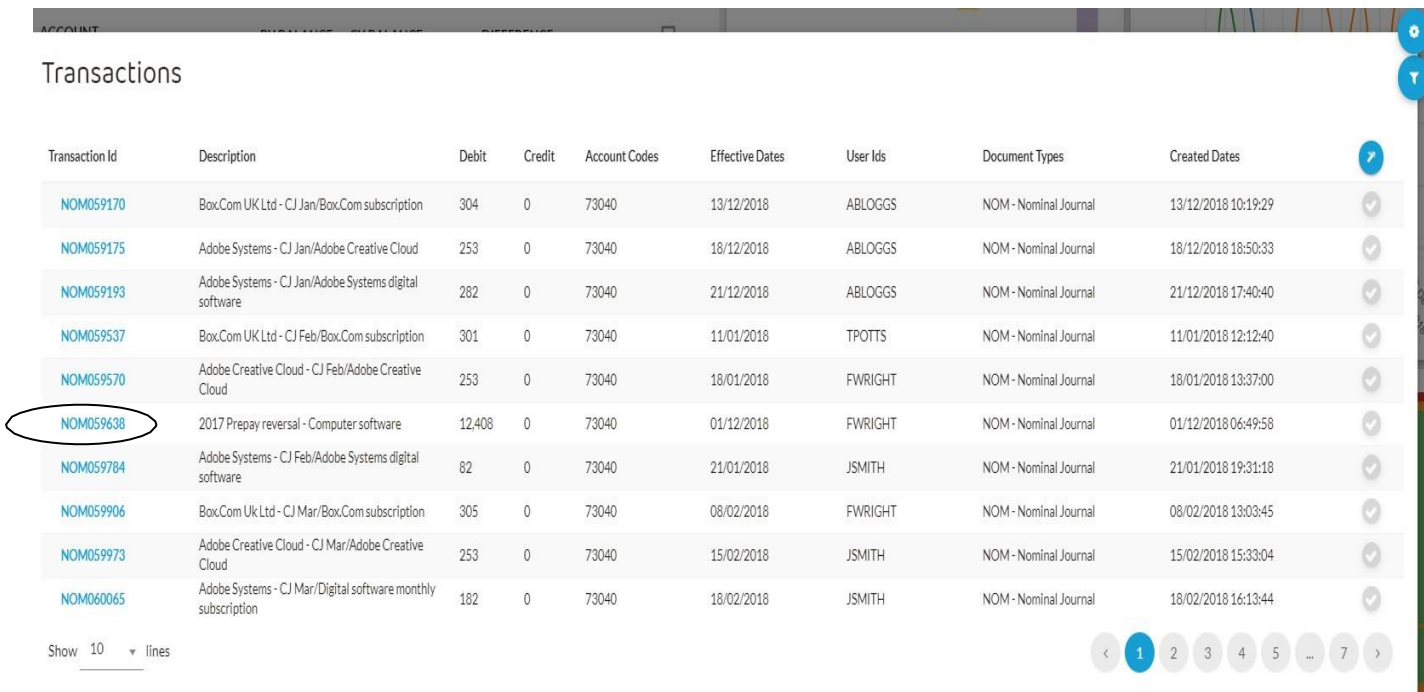
Requirement (b)

Select account *73040 Computer Software* using the green ticks (you may need to scroll down):

Asset		1.84M	Liability		876K	Equity		360K
		(↑ 47.9%)			(↓ 0.9%)			(↓ 1903.3%)
Expense								
ACCOUNT		PRIOR YEAR	FIELDWORK		DIFFERENCE			
<input type="checkbox"/>	<input type="checkbox"/>	72060 - Insurance - Misc	16,533	14,060	-2,473 ↓ 15 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	72065 - Insurance - Property	11,232	12,285	1,053 ↑ 9 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	72070 - Insurance - Equipment	495	895	400 ↑ 81 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	72080 - Indemnity Insurance	2,687	2,374	-313 ↓ 12 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	72510 - Property	3,037	3,197	160 ↑ 5 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73010 - Stationery & Printing	4,986	5,344	357 ↑ 7 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73020 - Postage	581	554	-27 ↓ 5 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73030 - Telephone, Office	4,269	4,824	556 ↑ 13 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73035 - Telephone - Mobile	9,868	8,492	-1,376 ↓ 14 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73040 - Computer Software	22,659	31,548	8,889 ↑ 39 %		<input checked="" type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73060 - Staff Welfare	5,896	5,760	-137 ↓ 2 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73070 - Subscriptions	9,757	10,364	607 ↑ 6 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	73090 - Sundry Admin Charges	1,022	1,152	130 ↑ 13 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	74020 - Motor Repairs	599	188	-410 ↓ 69 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	75005 - Charities	250	300	50 ↑ 20 %		<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	75010 - Advertising	302	280	-22 ↓ 7 %		<input type="checkbox"/>	
TOTAL SELECTED			22,659	31,548	8,889 ↑ 39 %		<input checked="" type="checkbox"/>	

Click on the transactions icon  in the bottom right corner of the above screen (circled).

This reveals the following list of transactions which comprise the first of 7 pages of the Computer Software account:



Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM059170	BoxCom UK Ltd - CJ Jan/Box.Com subscription	304	0	73040	13/12/2018	ABLOGGS	NOM - Nominal Journal	13/12/2018 10:19:29
NOM059175	Adobe Systems - CJ Jan/Adobe Creative Cloud	253	0	73040	18/12/2018	ABLOGGS	NOM - Nominal Journal	18/12/2018 18:50:33
NOM059193	Adobe Systems - CJ Jan/Adobe Systems digital software	282	0	73040	21/12/2018	ABLOGGS	NOM - Nominal Journal	21/12/2018 17:40:40
NOM059537	BoxCom UK Ltd - CJ Feb/Box.Com subscription	301	0	73040	11/01/2018	TPOTTS	NOM - Nominal Journal	11/01/2018 12:12:40
NOM059570	Adobe Creative Cloud - CJ Feb/Adobe Creative Cloud	253	0	73040	18/01/2018	FWRIGHT	NOM - Nominal Journal	18/01/2018 13:37:00
NOM059638	2017 Prepay reversal - Computer software	12,408	0	73040	01/12/2018	FWRIGHT	NOM - Nominal Journal	01/12/2018 06:49:58
NOM059784	Adobe Systems - CJ Feb/Adobe Systems digital software	82	0	73040	21/01/2018	JSMITH	NOM - Nominal Journal	21/01/2018 19:31:18
NOM059906	BoxCom UK Ltd - CJ Mar/Box.Com subscription	305	0	73040	08/02/2018	FWRIGHT	NOM - Nominal Journal	08/02/2018 13:03:45
NOM059973	Adobe Creative Cloud - CJ Mar/Adobe Creative Cloud	253	0	73040	15/02/2018	JSMITH	NOM - Nominal Journal	15/02/2018 15:33:04
NOM060065	Adobe Systems - CJ Mar/Digital software monthly subscription	182	0	73040	18/02/2018	JSMITH	NOM - Nominal Journal	18/02/2018 16:13:44

The largest transactions now need to be identified and reviewed as, potentially, they have the highest risk.

On page 1 the most significant transaction (circled) is:

NOM059638 2017 Prepay reversal - Computer software 12,408 0 73040 01/12/2018 FWRIGHT NOM - Nominal Journal 01/12/2018 06:49:58

You will not be able to produce the above visualisations and you must describe the transaction:

The largest transaction is a nominal journal debit for £12,408 and has the Transaction ID NOM 059638 and effective date 01/12/2018 posted by F Wright.

Although large by comparison to the other transactions, it seems low risk as it is described as a 2017 prepayment reversal.

Drilling down by clicking on the blue Transaction ID **NOM059638** shows the detailed double entries for each of the prepayments.

A key audit procedure for this transaction is to agree it to the audited closing entries brought forward from the prior period.

Moving on to page 4 of the transactions screen above, the most significant transaction is:

PIN028967	SIN035898 - 1 year exchequer annual license fee 31/3/15 -	2,673	0	73040	26/12/2018	FWRIGHT	PIN - Purchase Invoice	26/12/2018 16:02:45
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The transaction is a purchase invoice for £2,673 and has the Transaction ID PIN028967 and effective date 26/12/2018 posted by F Wright.

Drilling down again by clicking on the blue Transaction ID **PIN028967** shows the detailed double entries as follows:

Transaction 'PIN028967'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
PIN028967	73040	2,673	26/12/2018	PIN - Purchase Invoice	SIN035898 - 1 year exchequer annual license fee 31/3/15 -	FWRIGHT		01/01/2019 16:02:45
PIN028967	33020	535	26/12/2018	PIN - Purchase Invoice	- PIN028967 - Posting Run Control	FWRIGHT		01/01/2019 16:02:45
PIN028967	31010	-3,208	26/12/2018	PIN - Purchase Invoice	- PIN028967 - Posting Run Control	FWRIGHT		01/01/2019 16:02:45

Show 10 lines

Showing 1 to 3 of 3 lines

CANCEL

The description of this transaction indicates that it relates to a one-year licence fee covering a period to 31.3.2015, the period that the licence covers is outside of the accounting period and requires investigation to ensure that it all relates to the current accounting period.

The other accounts in the double entry above are 31010 Payables control and 33020 Sales input control account and are as expected for this type of transaction. These can be found in the *Accounts View*, clicking on Liabilities and searching down for the account codes.

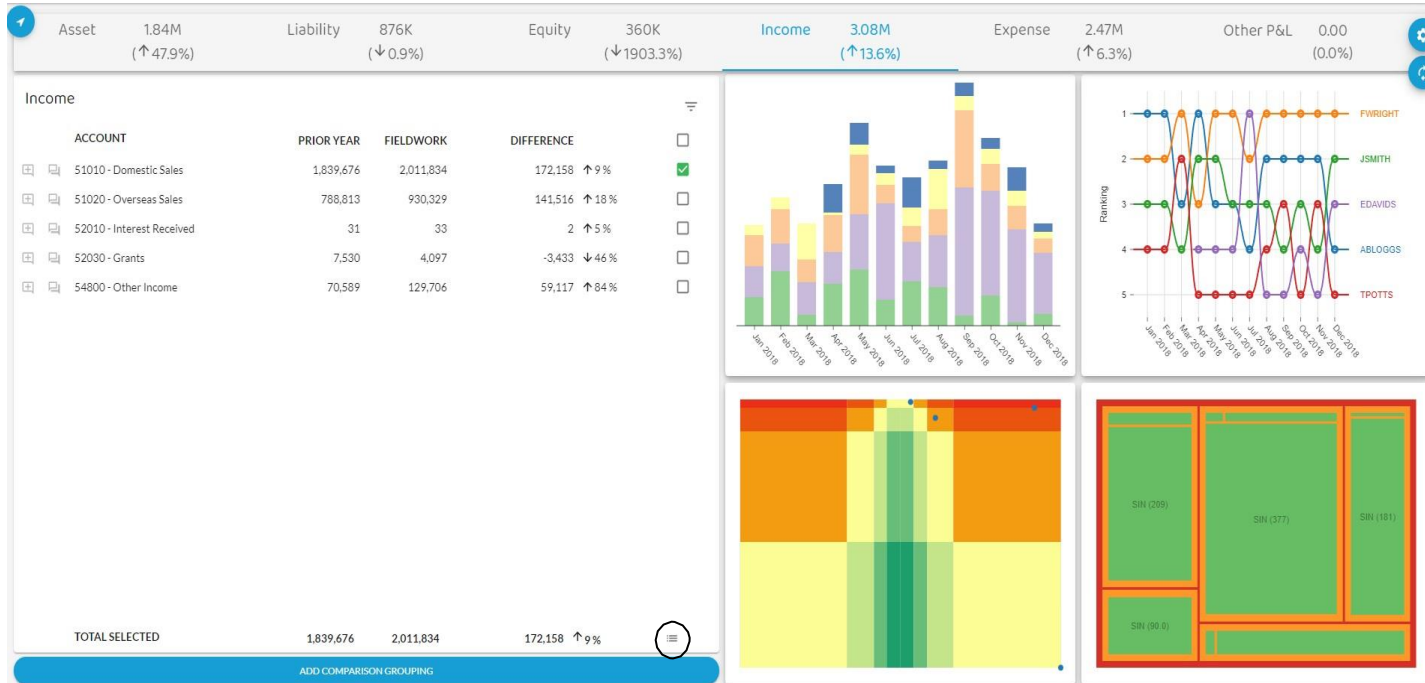
Other audit procedures should be to inspect and verify the nature and validity of the licence agreement. It should also be verified that the use of the licence relates to administrative activities.

Exercise 2 – solution

We know several facts about this transaction:

- it was posted by F Wright
- it had an effective date in November 2018
- it was posted to account 51010 (which is the Domestic Income account)
- It is a sales credit note

1. Start in the *Explore* screen by selecting (in the 'Account View', using 'Income') the 'Domestic Sales' account with the green ticks as follows:



Then click on the transactions icon in the bottom right-hand corner (circled above).

2. Click on the filter icon in the top right-hand corner of the screen below and select in the menu: Effective Period 'Nov 2018'; Document Type 'SCR - Sales Credit'; User 'FWRIGHT'; to show the following:

3.

Transactions

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	
SCR001216	56845 - Preparation of store internal signage hanging	2,412	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	
SCR001220	57243 - Produce 2 x window posters and deliver to store	136	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	
SCR001224	57314 - Produce 2 x roller banners artwork and deliver to	216	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	
SCR001225	57315 - To produce and fit glazing treatments	790	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	
SCR001229	57400 - Manufacture replacement header panels for 4 mod	886	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	30/11/2018 11:12:20
SCR001231	57423 - To supply 2 x roller banners artwork and deliver	216	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	30/11/2018 17:03:47
SCR001232	57307 - Retrieve existing 2 x Ads and update as briefed.	160	0	51010	30/11/2018	FWRIGHT	SCR - Sales Credit	30/11/2018 17:00:41

Filters

- Effective Period: Nov 2018
- Document Type: SCR - Sales Credit
- User: FWRIGHT

Show 10 lines

CANCEL

CREATE TEST

4. Searching down the blue Transaction ID number (which are in numerical order) the required transaction is found on the first page (circled above).

5. Clicking on the blue Transaction ID number shows the following double entry:

Transaction 'SCR001232'

Transaction Id	Account Code	Amount	Effective Date	Document Type	Journal Description	User Id	Line Description	Created Date
SCR001232	51010	160	30/11/2018	SCR - Sales Credit	57307 - Retrieve existing 2 x Ads and update as briefed.	FWRIGHT		06/12/2018 17:00:41
SCR001232	33010	32	30/11/2018	SCR - Sales Credit	- SCR001232 - Posting Run Control	FWRIGHT		06/12/2018 17:00:41
SCR001232	21010	-192	30/11/2018	SCR - Sales Credit	- SCR001232 - Posting Run Control	FWRIGHT		06/12/2018 17:00:41

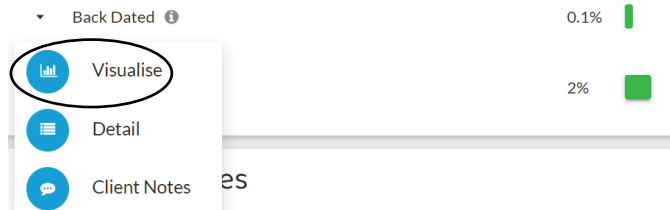
Show 10 lines

Showing 1 to 3 of 3 lines

CANCEL

Exercise 3 – solution

Click on the 'Visualise' option from the drop-down menu from the grey arrow to the left of the 'Back Dated' routine in the *Detect* module (circled):



This shows the following graphs:



The 'Created Weekday' graph shows that backdated transactions were posted on Fridays and Saturdays.

Clicking on the 'Sat' green bar (circled) reveals all backdated transactions posted on a weekend (as the graph shows that none were posted on Sundays):

Transactions Filtered by created weekday Saturday ⓘ

Transaction Id	Description	Debit	Credit	Account Codes	Effective Dates	User Ids	Document Types	Created Dates
NOM061350	Adj Q1 Suspense	5,000	5,000	990, 13010	31/03/2018	FWRIGHT	NOM - Nominal Journal	12/05/2018 11:32:48
NOM062036	Adj Q2 Suspense	9,000	9,000	990, 13010	30/06/2018	FWRIGHT	NOM - Nominal Journal	11/08/2018 14:38:12
NOM062458	Adj Q3 Suspense	11,111	11,111	990, 13010	30/09/2018	FWRIGHT	NOM - Nominal Journal	17/11/2018 16:00:04

Show 10 lines

CANCEL CREATE TEST

These were all transactions backdated to the quarter ends (31 March 2018, 30 June 2018, 30 September 2018). Clicking on each of the transaction Ids (in blue) and then hovering over the codes in the Account Codes column to reveal the account names (or simply hovering over the codes in the Account Codes column on the screen above) shows that in each case, the transactions involved the suspense account (account 990) and an asset account (13010 Fixtures and Fittings).

They are also manual journals ('NOM = Nominal Journal') rather than part of the normal accounting processes. These transactions warrant further investigation to determine what the adjustments relate to and why they are necessary. Clicking the other green bar ('Fri' for Friday) shows that there are similar transactions that arose on Fridays. Cumulatively these adjustments exceed materiality of £30,000.

It also worth noting that there is no such adjustment for quarter 4 as clicking on the other green bar (Friday) does not show a quarter 4 adjustment either (which can also be confirmed by looking at the transactions in account 13010 Fixtures and Fittings via the *Explore* module). This is something that could be queried with management, given that these adjustments appear to normally be made at each quarter end.

APPENDIX B – SKILLS GRID

The Corporate Reporting exam requires the use of professional skills. These include combining skills relating to the data analytics software with more traditional auditing skills.

The following is a summary of how key skills can be tested and used in the Corporate Reporting exam in a question using the data analytics software.

Assimilating and using information

These skills may include, for example, identifying transactions and investigating unusual patterns and trends from visualisations produced by the data analytics software. Assimilating data could, for example, involve selecting two charts to analyse and draw meaningful comparisons of the data trends.

The use of the *Metrics* Module may also involve assimilating and using a range of ratios to build up an overall picture in assessing trends, patterns and risks.

Data assimilation could be at the level of an account (such as making comparisons with prior years or other account balances in the current year), or it could be at the level of identifying and comparing individual transactions.

In assimilating data, you will need to be selective in identifying the relevant information. It follows from this that it is also important to identify and exclude non-relevant data from a data set, as you will not have time to evaluate every available transaction.

Structuring problems and solutions

Using the data analytics software to structure the data is important. A range of variables is available for a transaction. For example: amount, account, user, timing, document. Using the data analytics software to structure the data in the most appropriate way is important. For example, finding high risk transactions using the *Heat Map* or large transactions using the *Detect* module. Solutions in terms of appropriate audit procedures then need to be devised.

Structuring the problem may require drawing together information provided in the scenario with data and visualisations provided in the data analytics software to ensure they present a consistent story in developing a solution.

Applying judgement

A Corporate Reporting exam question may require you to apply judgement to data that you have previously assimilated or structured. This may, for example, be in identifying and justifying which elements of the data represent highest audit risk.

Identifying notable, or high risk, transactions can also be a matter of judgement. For example, evaluating a combination of attributes that would cause a transaction to be selected as high risk may involve judging the relative significance of: amount, user, timing, frequency and currency.

The exercise of an appropriate degree of professional scepticism can also be a question of judgement.

Tasks can often be completed in the data analytics software in a number of different ways. Judgement is needed to determine the most appropriate way, based on: ease of use, speed and the form and content of the data ultimately obtained.

Concluding, recommending and communicating

It is important that you demonstrate communication skills which demonstrate your understanding and analysis of the transactions, visualisations and other data. This should be in a manner that conveys meaning appropriately and can be understood by the target recipient(s).

Recommendations should be supported by evidence, which may include data and information from visualisations in the data analytics software, but also information provided in the scenario.