Setting Up A Cash Flow Forecasting Process:

A Practical Guide

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Introduction

For a head office treasury or finance team, setting up new cash forecasting process or refreshing an existing process could bring in a number of benefits. Being able to accurately forecast a company's future cash position reduces the risks arising from liquidity issues and minimises the opportunity cost of holding uninvested cash.

To assist those looking to build a new cash forecasting process, we have created this guide which takes into account the complexities of large, multinational organisations.

This guide is built on our extensive experience in rolling out and implementing large scale cash forecasting processes across a range of industries.
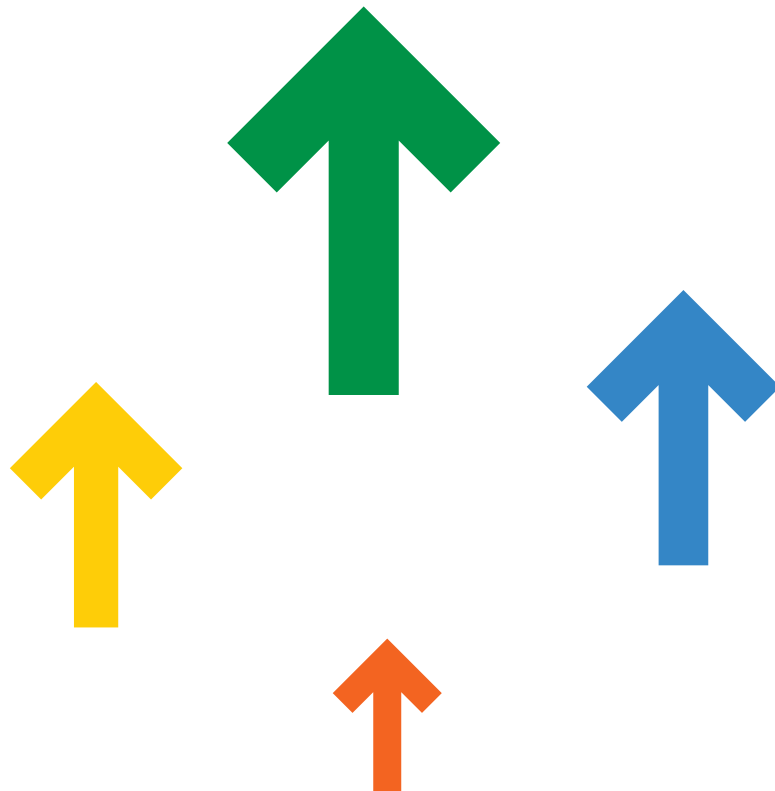
1. Setting Objectives

In advance of designing a new forecasting process and model, or refreshing an existing process, it is essential to clearly define the business objectives of the overall cash forecasting process. Ultimately, the output of the forecasting process and model should satisfy the business objective.

A clearly defined business objective serves two purposes. Firstly, it will help communicate the importance of the forecasting process to both head office and the broader business. Secondly, it will determine what kind of forecasting process is put in place. A poorly designed forecasting process and model risks not being able produce the required output and therefore not being able to able to achieve the business goal.

Example business objectives include:

Business Objective	Note
Short term liquidity planning	Companies with a focus on short term cash and liquidity planning have a critical need for accurate forecast visibility on a daily basis for a period of up to one month into the future. The short-term forecasting process typically informs working capital and short-term funding related activity.
Interest and debt reduction	Reducing debt levels and subsequent interest costs requires visibility over excess available cash on a short to medium term basis. The level of visibility will depend on the flexibility of the financing facilities and when they facilitate capital repayments.
Covenant and key date visibility	One of the primary uses of cash forecasts is to gain visibility over key reporting dates such as quarter and year end. This helps guide senior management, banks and investors on expected cash positions and covenant levels at these key dates.
Liquidity risk management	Often cash forecasts are simply used as an early warning signal for future liquidity issues. These forecasts need to provide a general understanding of future cash trends with a focus on expected shortfalls over the duration of the forecast.

The types of forecasting model required to meet these business objectives are outlined in the next section.

2. Designing a Forecasting Model

A forecasting model is the reporting structure and associated logic that produces the required forecast output. A forecast model typically has two dimensions and collects two types cash flow data.

2.1. Model Dimensions

Reporting Periods

Reporting Categories

	Period	Nov W3	Nov W4	Dec W1	Dec W2	Dec W3	Dec W4	Jan W1	Jan W2	Jan W3	Jan W4	Jan W5
▸ OPENING BALANCE		1,459,854	1,940,753	1,771,631	2,313,162	4,139,665	6,035,416	7,574,814	10,478,481	14,859,503	13,360,032	13,548,596
RECEIPTS												
▸ Customer Receipts		1,370,457	659,558	1,850,511	3,945,269	2,320,826	2,247,502	4,454,676	2,624,687	408,006	615,989	544,361
▸ Other Cash Flow		36,743	41,490	156,175	1,115,978	443,840	58,655	45,678	229,034	31,857	34,899	12,627
▸ Debt Movement		0	0	321	0	3,206	25,353	28,855	25,318	250	2,886	0
▸ Debtor Factoring		0	0	31,846	144	39,730	177	0	28,598	28,534	0	0
▸ Intercompany Payments	IC	6,927	23,151	53,116	44,454	512,422	476,696	60,258	5,518	3,272	7,441	0
▸ Foreign Exchange	IC	0	0	0	673,934	804,604	1,169,995	0	3,153,151	535	6,225	0
▸ TOTAL RECEIPTS		1,414,128	724,199	2,091,970	5,779,780	4,124,628	3,978,379	4,589,467	6,066,306	472,454	667,440	556,988
PAYMENTS												
▸ Supplier Payments		652,267	471,472	887,451	764,879	477,743	973,699	280,227	87,830	1,482,785	54,615	11,534
▸ Sales & Marketing		1,987	424	8,175	11,313	3,160	3,608	2,798	25,636	219	6,803	249
▸ Payroll		268,012	263,544	405,574	412,914	381,495	441,210	382,343	389,051	481,951	400,416	416,925
▸ Taxes		465	3,181	167,455	171,748	485,469	163,109	974,376	8,572	1,005	2,847	5
▸ Capital Expenditure		257	489	19,197	2,944	23,372	2,292	525	217	1,439	936	102
▸ Intercompany Payments	IC	7,576	21,157	50,490	69,795	563,684	420,561	43,861	3,968	3,286	9,360	0
▸ Interest		1,284	305	681	299	116	620	584	289	465	465	0
▸ Debt Movement		96	131,465	353	799	273	96	465	212	289	465	96
▸ Foreign Exchange	IC	0	0	0	251,938	293,267	433,671	0	1,168,925	197	2,251	0
▸ TOTAL PAYMENTS		931,944	892,037	1,539,376	1,686,628	2,228,579	2,438,865	1,685,180	1,684,700	1,971,636	478,160	428,911
▸ NET MOVEMENT		482,183	(167,838)	520,748	4,093,008	1,856,319	1,539,337	2,904,286	4,353,008	(1,527,716)	189,280	128,077
▸ CLOSING BALANCE		1,940,753	1,771,631	2,313,162	4,139,665	6,035,416	7,574,814	10,478,481	14,859,503	13,360,032	13,548,596	13,676,208

The two dimensions of a forecasting model are:

1. Reporting dates split on a daily, weekly or monthly basis to certain points in the future.
2. Reporting categories which group cash flows typically on a "management reporting" level of detail.

The level of granularity chosen for both the reporting dates and categories will be determined by the overall objectives of the forecasting process.

2.2. Types of Cash Flow

A forecast model typically collects two types of cash flow data; actual and forecast.

In the graphic above, actual cash data is displayed to the left of the red line and forecast data is displayed to the right of the red line.

Capturing actual cash flow and balance data as part of the overall forecast reporting process is an important initial consideration. Actual cash data allows the forecast model to produce both trend and variance analysis which are very useful pieces of supplementary analysis to the base forecast.

Project Management Tip:

Make the initial structure as simple as possible. Complexity can be added later.

2.3. Model Structure Examples

The table below outlines some forecasting structures designed to meet specific business objectives.

Business Objective	Forecast Horizon	Reporting Date Granularity	Reporting Categories	Frequency of Creation
Short term liquidity planning	10 business days	Daily	High level flows and balances	Twice a week
Interest and debt reduction	13 weeks	Weekly	Management reporting categories and flows	Weekly
Covenant and key date visibility	To next significant reporting date (at least)	Weekly	Management reporting categories and flows	Weekly, more frequent approaching key date
Liquidity risk management	Six months	Weekly for 13 weeks + monthly for three months	High level flows and balances	Monthly

Ultimately, the structure of the model chosen should be able produce the range of reporting outputs needed to meet the business objectives.

2.4. Visible Executive Sponsorship

As with any new initiative, it is important to gain visible executive sponsorship to allow for the smooth set-up and roll-out of the new forecasting process. Sponsorship allows the required budget to be obtained while driving buy-in of other stakeholders across the company.

Clear business objectives and an understanding of the overall impact on the organisation are central to achieving the required sponsorship.

Project Management Tip:

Including the project sponsor (typically the CFO) from the beginning dramatically increases buy-in and chances of a successful outcome.

3. Scoping & Planning

When the business objectives have been set, the forecast model has been designed and the project has been signed off at a senior management level, it is time to determine the full scope of the project and put a plan in place.

3.1. Scoping

Scoping Consideration	Note
Timelines	When does the new forecasting process need to be in place? This will determine the timetable for the project.
Project Team	Who will be the lead project manager and what support will they have? The project team will also have an operational sponsor (e.g. treasurer or financial controller).
Stakeholders	Most forecasting processes in large companies will require input from stakeholders around the organisation, typically people in business units. A full picture of all stakeholders will need to be developed ahead of starting the project.
Dependent Systems	A forecasting process may rely on other systems and data sources for information needed to populate the central forecasting model. See section 4.2 for discussion on key data sources.

3.2. Key Tasks

Following the scoping exercise, a list of key tasks necessary to complete the set-up of the new process can be compiled. The exact tasks will be determined by the unique scope of the project but broadly speaking most projects will include the following steps:

1. Develop a project plan
2. Send initial communication to all stakeholders
3. Configure required data collection and reporting tool
4. Configure interfaces with other data sources (if required)
5. Test reporting tool
6. Arrange and deliver training
7. Go-live – First reporting cycle

Project Management Tip:

Breakdown the tasks in as much detail as possible with assigned internal and external resources.

3.3. Project Plan

The key tasks will then be used to create a project plan similar to the one outlined below.

Example Project Timetable								
Task	**ID**	**Description**	**Week 1**	**Week 2**	**Week 3**	**Week 4**	**Week 5**	**Week 6**
1. Planning	1.1	Agree full project scope	● ● ●					
	1.2	Design process and reporting structures	●	● ● ● ● ● ●	●			
	1.3	Finalise project plan		● ● ●				
2. Tool Activation and Set-up	2.1	Initiate new portal	● ●	● ● ●				
	2.2	Capture master data		● ● ● ●	● ● ● ● ● ●			
	2.3	Set-up master data			● ● ● ● ●	● ●		
3. Model Set-up	3.1	Create forecasting model			● ● ● ●	● ● ● ● ●		
	3.2	Review and iteration				● ● ● ● ●	● ● ● ● ● ●	
	3.3	Transfer process to CashAnalytics					● ● ● ● ●	
4. Roll-out Planning	4.1	Identify in-scope entities and personnel			● ●			
	4.2	Develop training plan			● ● ● ●			
5. Training & Go-live	5.1	Deliver training				● ● ● ●	● ● ● ● ● ●	
	5.2	Go-live (first reporting cycle)					● ● ● ● ● (red)	
	5.3	Go-live Support					● ● ● ● ●	● ● ● ● ●

Free project plan

For a sample project plan please email: info@cashanalytics.com

4. Process Set-up

4.1. Tool Configuration

To manage a cash forecasting process, there are a number of tools that can be used.

A dedicated cash forecasting software solution carries a number of benefits, however the process can also be built and managed in spreadsheets and other aggregation type tools. Each of these other options has their own advantages and disadvantages. Regardless of which tool is selected, it will need to be configured for the task at hand.

The initial elements that need to be set up are the static or "master data" elements. Typically this data would include:

- Reporting calendar
- Legal entities
- Reporting categories
- Bank accounts
- Intercompany rules
- User profiles
- User permissions

These master data elements allow for the required model design to be implemented in whatever tool is being used.

4.2. Other Data Sources & Interface Configuration

There are two key sources of data that may be required by a forecasting process and model. The level of integration required with each data source will depend on how frequently the forecast needs to be refreshed and how much detail the model needs.

Banking Portals and Electronic Bank Statements

Bank portals and electronic bank statements contain cash and bank balance data that can be used to populate the "actuals" component of a forecast model.

Most bank portals allow for a download of balance and transaction data in numerous formats. Banks can also send electronic bank statements to their customers, on a daily basis. The two most common electronic bank statement format are:

- Swift MT940
- BAI2

This format, or simple CSV format, can be directly imported into most tools.

ERP and Accounting Systems

ERP systems are a key source of short term transactional forecast data. The debtor and creditor ledgers within the ERP system will provide a good view of what is expected to paid and received in the short term, based on booked invoices.

ERP ledgers typically provide good quality forecast data up to 30 days into the future and therefore can be used to populate the short end of a cash flow forecast.

Project Management Tip:

Full-scale integration with other systems is rarely needed as a starting point. Start with the key systems first and basic uploads.

4.3. Testing

A testing phase is critical when setting up a forecasting process. The goal of a testing phase is to ensure that the forecasting model designed, and the assumptions underpinning it, make practical sense.

The testing phase should aim to provide coverage around all components and workflows of the process on a small scale. For example, if a process is being rolled out to 50+ entities, a testing process modelling scenarios with 5 entities should give sufficient testing coverage.

Key elements to consider when designing a testing phase include:

• User rights and permissions
• Manual data population
• Automated data population
• Intercompany data flows
• Reporting categories
• Process workflows
• Reporting outputs
• System generated communication

If an existing process is being replaced, the data from the old process can be very useful in the testing process. Also, if replacing an existing process, consideration should be given to a period of "parallel running" as part of the testing phase.

If you are using a dedicated cash forecasting software solution, much of this testing phase can be automated when building the process, and various comparisons can be performed at the touch of a button. However, if you are using any of the other tools, it is still important to ensure that the process is tested thoroughly.

Project Management Tip:

For more meaningful testing, use real life data as much as possible in the testing phase. You can compare system reporting output to existing cash flow reporting.

5. Communication, Training & Roll-out

5.1. Stakeholder Communication

When rolling out a forecasting process across a large organisation it is imperative to provide clear and concise communication to all stakeholders. People contributing information to the process are often based in different countries and work in different time zones, any training and communication must be sensitive to their circumstances.

A tiered communication strategy is a good way to introduce the new process, and positions the upcoming project with stakeholders in a way that it can be perceived as more manageable.

Introduction Communication
Head office communicates with the user base letting them know a new process is coming, informing users of the goals and objectives of the process, naming their point of contact on the project team, and naming the project sponsor.

Detailed Communication
After the initial communication it is important to inform users of the details of what is coming and what will be required of them. Users appreciate being kept in the loop and having a timetable of events that will impact them. Items to consider as part of this communication include:

- Users required per entity
- Delivery of training documentation
- Scheduling of training sessions
- Go-live date

5.2. Training Material

Training Documentation
Training documentation should be provided for all system users. This documentation must clearly detail how the system will work for them. Well-designed training documentation serves as a useful manual and guide, not only at the roll out stage, but also in the weeks and months post go-live.

Webinar Training Sessions
For multinational organisations, users are based across the globe. Therefore it often makes sense to utilise simple web training software to provide hands on training for users. Grouping users into to geographic regions, containing a maximum of 10-12 users per group, works well to ensure full participation.

Project Management Tip:
Send entity controllers a communication schedule with key dates so they can integrate with their existing day to day tasks.

5.3. Go-Live

Go-live is the culmination of the preparation work that has been carried out over the course of the project. At this stage in the process it is important to ensure that everything that has been planned and scheduled is complete, and that the support resources are in place to assist users as needed. Users of any new process will often have questions relating to either the workflow steps or what is required of them.

In terms of preparing for this phase, it is useful to have a Go-live Checklist to ensure all bases have been covered, this would typically cover items such as:

- Review tool configuration
- Review Masterfile set-up
- Verify all testing processes have been completed
- Ensure all interface components are now live
- Confirm all users have been trained and training documentation issued
- Confirm all users have access to the system.

5.4. Feedback and Continual Improvement

As with any process, once it is up and running there is always capacity for continual improvement. After the first reporting cycle, request user feedback on the process and ask for improvement suggestions. In addition, it is important that evolving business requirements, as well as changing user needs, are taken into consideration and the process is altered accordingly.

About CashAnalytics

A dedicated cash forecasting software solution

CashAnalytics are dedicated to helping our customers better understand their current and future cash and liquidity positions. We are differentiated from other software providers through the depth of functionality and intuitive interface of our solutions, the speed at which they can be rolled out and the ease with which they can be integrated with existing systems, as well as the high level of ongoing support we provide to clients.

We have developed a thorough yet efficient set-up process that enables quick and easy integration of our software. During this process, comprehensive project management with senior members of the CashAnalytics team ensures smooth collaboration across a company's business units with minimal impact on day-to-day operations.

To see our software in action, and to see the value it can help you to deliver, contact us to book a demo now.

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