



## CASE STUDY

### MANAGEMENT OF A LIVE DEVELOP & HOLD OF SHOPPING MALL PROJECT IN UAE

#### INTRODUCTION

This case study demonstrates how to model the development management of the DF 'Develop & Hold' scenario for a Retail Shopping Mall Development, utilising the following input and reporting tools within Estate Master DM:

1. Input Assumptions
2. Forecast Summary: Setting budgets, Reporting development variances, Forecast-to-complete analysis.
3. Cash Flow Sheet: Reporting your cash actuals on a monthly basis and integration with your existing accounting system.
4. Forecasting: Adjust the different forecasting views on a cost-by-cost basis
5. Stock Summary

The shopping mall will be developed over a 3 year period, held for 10 years to achieve a rental return, and then sold at the terminal capitalised value.

#### DESCRIPTION OF PROPERTY

The subject property is a 'neighbourhood shopping mall' located within the city limits of Dubai (United Arab Emirates), located in the prosperous Downtown district. The centre has two major department stores that serve jointly as anchor tenants (pre-let). The centre plans to also incorporate a series of smaller stores and shops (8). The annual gross income flows from the rent of the department stores and the smaller shop units. The subject property holds a challenging position in the overall scheme of retail merchandising in the city, forming part of the emerging community led retail development.

The property consists of a total area of 32,000 square metres (GLA). Data to be included in this appraisal consists of the following:

- Two (2) department store buildings containing a total of 14,360 sqm of gross leasable area. The smaller separate department store contains 5,160 sqm.
- An enclosed mall containing eight (8) additional shop units. This will also be a chic and prosperous retail environment, with a retail area of 17,640 sqm, including open terraces and piazzas for cafes and restaurants – each 2,205 sqm of useable area.
- Parking area improvements, including surfacing, wheel blocks, painted lines, landscaping, and lighting.
- Miscellaneous improvements.

## SITE MASTER PLAN

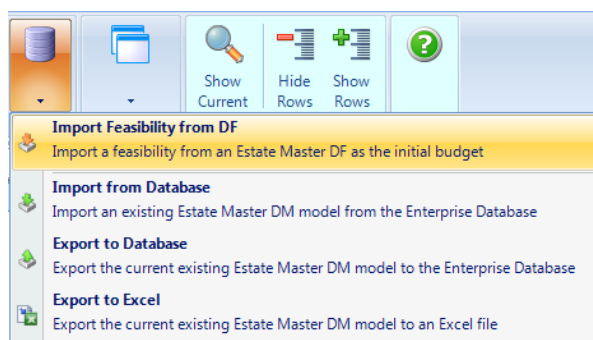
Your assessment of the planning controls and allowance for roads and open space produce the following

- 2 small-mid size department stores
- 8 additional retail units

Block #	Lot Size (Sqm)	No. of Lots	Type
1	9,200	1	Department Store
2	5,160	1	Department Store
3	2,205	8	Retail Units

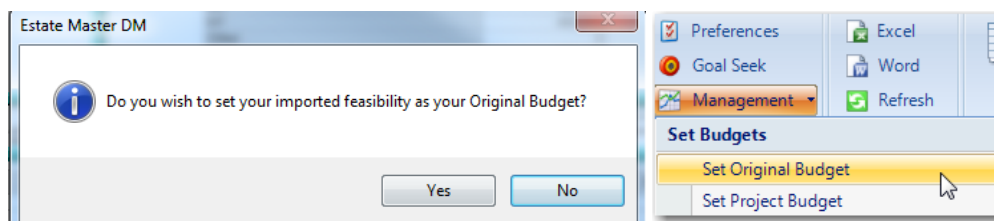
## IMPORTING YOUR DATA

As Estate Master DF and DM are integrated, the first thing you will need to do is to bring your completed feasibility into the Development Management software. When this is done an 'Original Budget' can then be set within DM for you to report against as you move through the project.



## THE ORIGINAL BUDGET

When an import from DF into DM is first completed you are prompted to set the original budget immediately by clicking on 'Yes'. You can also set your 'Original Budget' at a later stage using the 'Management' menu.

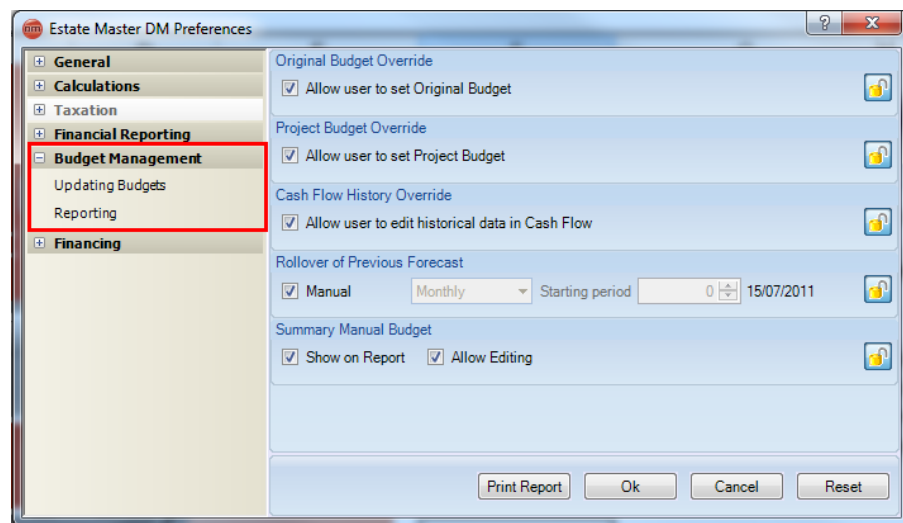


Once this budget is set you can see the 'Original Budget' column in the Forecast Summary section of the Cash Flow sheet, with budget amounts set for each line item.

	D	E	F	BA	BB	BC	BD
47				<b>Commercial Feasibility - FORECAST SUMMARY</b>			
48							
49	<b>ESTATEMASTER</b>						
50	PROPERTY SOFTWARE						
51	<b>Development Management</b>						
52	<b>Code</b>	<b>Stage</b>	<b>Description</b>	<b>Original Budget Jul-2011</b>	<b>Budget Transfers</b>	<b>Project Budget Jul-2011</b>	<b>Previous Forecast</b>
53	1000		<b>Land Purchase &amp; Acquisition Costs</b>				
54			Total Land Purchase Price				
55	1002	-	Deposit in Trust Account	900,000	-	900,000	
56	1003	-	Payment 1	-	-	-	
57	1004	-	Payment 2	-	-	-	
58	1005	-	Payment 3	-	-	-	
59	1006	-	Payment 4	-	-	-	
60	1007	-	Settlement (balance)	8,100,000	-	8,100,000	
61	1008	-	Stamp Duty (NIL)	-	-	-	
62			Interest on Deposit in Trust				
63			Profit Share to Land Owner				
64	1011	-	Legal and valuation fees	20,000	-	20,000	
65	1012	-	.	-	-	-	
66	1015	-	.	-	-	-	
67	<b>TOTAL</b>			9,020,000		9,020,000	

## PREFERENCES WITHIN THE MODEL

Estate Master DM has a number of different preferences that should be set in order for the calculations to be correct within the model. As DF and DM are directly integrated, any preferences set within DF are directly imported within DM; therefore you only need to set the Budget Management' preferences.



Estate Master DM has two major budgets: Original Budget and Project Budget. You can control how these are set using these preferences.

## UPDATING BUDGETS

- **Original Budget Override** : Untick "Allow users to set original budget"
- **Project Budget Override**: Tick "Allow users to set project budget"
- **Cash Flow History Override**: Untick "Allow user to edit historical data in cash flow"
- **Rollover of Previous Forecast**: Tick "Manual"
- **Summary Manual Budget**: Tick "Show on report and check allow editing"

## INPUT ASSUMPTIONS

All of the inputs in your Estate Master DF file should come directly across and populate both the 'Setup' worksheet as well as the 'Input Assumptions' (yellow section) of the 'Cash Flow' worksheet (see below)

You can at any time review the input assumptions and change them within DM. Once you have imported your file from Development Feasibility to Development Management, you are not required to go back to DF to make changes. This is the power of the Estate Master software and the integration.

When you make changes to the input assumptions, you can also (depending on your preference setup) update and change the Original and Project Budgets. Be careful however, as once you make the changes to the budgets, they cannot be undone (unless a backup was either saved or exported to the Estate Master Enterprise Database).

	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
47														
48														
49														
50														
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## HOLDING COSTS

As this project will be held once it's developed, you will need to add some holding costs to ensure the proper reporting of costs for the project.

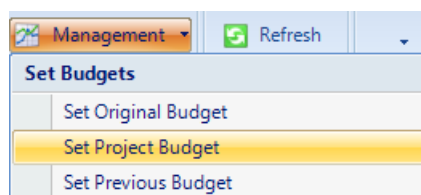
- Change a 'Miscellaneous Cost' input table heading to 'Holding Costs'

Enter in the following information:

- DEWA which is calculated at 5% of the rental
- Add the amount of \$45,58402.55

## PROJECT BUDGET

You can set the 'Project Budget' using the 'Tools > Management' menu button within DM.



The 'Project Budget' allows you to make changes between your original feasibility budget and a new revised budget. (Don't forget that there could be a time gap between approval of feasibility and actual construction commencement, which means you may need to change the budget again).

For the purpose of this case study, in between the original feasibility being approved by a company board and the project commencing there are three different costs that have now changed. To update the project budget you will need to change the costs on the input assumptions to create a Project Budget.

1000		Land Purchase & Acquisition Costs							
		Total Land Purchase Price							
1002	-	Deposit in Trust Account		A	10.00%	of Total Land Purchase Price.		8,900,000	←
1003	-	Payment 1		A	0.00%			-	
1004	-	Payment 2		A	0.00%			-	
1005	-	Payment 3		A	0.00%			-	
1006	-	Payment 4		A	0.00%			-	
1007	-	Settlement (balance)		A	90.00%			8,010,000	
1008	-	Stamp Duty (NIL)		A	0.00%			-	
		Interest on Deposit in Trust		A	0.00%	shared between seller and developer			
		Profit Share to Land Owner		A	0.00%	Paid progressively as project makes a profit			
1011	-	Legal and valuation fees		A	0.00%			30,000	←
1012	-			A	0.00%			-	
1015	-			A	0.00%			-	
TOTAL				% of Land Purchase Price					
2000	-	Project Contingency		A	3.00%	on Project Costs and/or		-	

- Updated 'Land Purchase Price' to \$8.9 Milliion
- Changed 'Legal and Valuation Fees' to \$30 000
- Input of a 3% 'Project Contingency 'on costs



## CHANGING RENTAL INCOME

As this is a 'develop and hold' project, you have been able to secure more detailed requirements regarding the rentals in the area. Update the tenancies to reflect the new rental agreements.

Tenant	Rent (\$USD)
Mayfair Department Store (Anchor)	350
Home Décor	450
Pret Coffee	700
Diamond Boutique	825
Il taglio Pizzeria	780
Posh Frocks	890
Sara Fashion	680
Geant Express	650
Geant Express	650
TLC Dry Cleaning	850

Once the input assumptions have been updated, you can now go through and set the 'Project Budget'. As you can see below, there is now a cost difference between both the Original Budget that was created in July 2011 and then the new Project Budget created a year later in July 2012.

Like your Original Budget, the Project Budget is stored in the Forecast Summary.

	D	E	F	BA	BB	BC	B
47							
48				<b>Commercial Feasibility - FORECAST SUMMARY</b>			
49	 			Original Budget Jul-2011	Budget Transfers	Project Budget Jul-2012	Prev Fore
50							
51	<b>Code</b>	<b>Stage</b>	<b>Description</b>				
52	1000		<b>Land Purchase &amp; Acquisition Costs</b>				
53			Total Land Purchase Price				
54	1002	-	Deposit in Trust Account	900,000		890,000	
55	1003	-	Payment 1	-	-	-	
56	1004	-	Payment 2	-	-	-	
57	1005	-	Payment 3	-	-	-	
58	1006	-	Payment 4	-	-	-	
59	1007	-	Settlement (balance)	8,100,000	-	8,010,000	
60	1008	-	Stamp Duty (NIL)	-	-	-	
61			Interest on Deposit in Trust				
62			Profit Share to Land Owner				
63							
64	1011	-	Legal and valuation fees	20,000		30,000	
65	1012	-		-	-	-	
66	1015	-		-	-	-	
67	<b>TOTAL</b>			9,020,000	-	8,930,000	
68							
69	2000		<b>Project Contingency</b>	-	-	2,203,997	

## CASHFLOW FORECASTING

Once both the Original Budget and Project Budget are set, you can then look at your forecasted cash flow for the life of the project (aqua section). With this cash flow you can change any of the forecasted amounts at any time throughout the life of the project.

ESTATEMASTER PROPERTY SOFTWARE			Development Management		Commercial Feasibility - CASH FLOW						
Code	Stage	Description	0	1	2	3	4	5	6	7	
			Jul-2012	Aug-2012	Sep-2012	Oct-2012	Nov-2012	Dec-2012	Jan-2013	Feb-2013	
1000		Land Purchase & Acquisition Costs									
		Total Land Purchase Price									
1002	-	Deposit in Trust Account	890,000	-	-	-	-	-	-	-	
1003	-	Payment 1	-	-	-	-	-	-	-	-	
1004	-	Payment 2	-	-	-	-	-	-	-	-	
1005	-	Payment 3	-	-	-	-	-	-	-	-	
1006	-	Payment 4	-	-	-	-	-	-	-	-	
1007	-	Settlement (balance)	4,005,000	4,005,000	-	-	-	-	-	-	
1008	-	Stamp Duty (NIL)	-	-	-	-	-	-	-	-	
		Interest on Deposit in Trust									
		Profit Share to Land Owner									
1011	-	Legal and valuation fees	-	30,000	-	-	-	-	-	-	
1012	-	-	-	-	-	-	-	-	-	-	
1015	-	-	-	-	-	-	-	-	-	-	
		TOTAL	4,895,000	4,035,000	-	-	-	-	-	-	
2000		Project Contingency	-	-	-	-	10,471	10,471	10,471	11,971	

The 'Reforecast Mode' column indicates for each cost and revenue how it will adapt in the 'Cash Flow' section if entries in the 'Cash Flow' section differ from data created automatically from the 'Input Assumptions' section and the related 'Setup' sheet. These changes in the 'Cash Flow' section could result from manual entry or by updating from accounts.

We have decided that we would like to keep a tight control on the Professional Fees throughout this project. Rather than relying on the 'automatic' reforecasting (as this will reapportion the balance of costs across the remaining span), we will utilise the 'S' reforecast code, which allows the balance to be reapportioned over the next time period only. This is important as you will be able to monitor the costs closely on a monthly basis when you complete the end-of-month process

<b>Professional Fees</b>									
Design for DA	S	2.00%	-	-	-	4	4	Nov-12 - Feb-13	-
Construction safety set	S	5.00%	-	-	-	C	-	Jun-13 - Apr-15	-
PM Design	S	0.00%	-	-	1	4	4	Nov-12 - Feb-13	-
PM Construction	S	0.00%	-	-	-	C	-	Jun-13 - Apr-15	-
	A	0.00%	-	-	-	0	-	-	-
	A	0.00%	-	-	-	0	-	-	-
		% of Net Construction Costs.						Pro-rata with Construction (C)	
Development Management	A	3.00%	% of Project Costs (exc Land, Finance & Tax)			C	-	Jun-13 - Apr-15	
<b>TOTAL</b>								Pro-rata with Construction (C), Settlements (S) and Project Co	

You can then see how this is functioning on the cash flow actuals through the example below.

For the 'PM Design' cost, the original budget was \$50 000 spread over 4 months (i.e. \$12,500 per month). You can see that because we have over spent the budget in the first month of November at an amount of \$37 500, there is now no cash left to use until the last month in February which is \$12 500. When managing different costs, this is critical to a project.

ESTATEMASTER Development Management			ASH FLOW					
Code	Stage	Description	2 Sep-2012	3 Oct-2012	4 Nov-2012	5 Dec-2012	6 Jan-2013	7 Feb-2013
3000		<b>Professional Fees</b>						
3001	-	Design for DA	-	-	336,544	336,544	336,544	336,544
3002	-	Construction safety set	-	-	-	-	-	-
3003	-	PM Design	-	-	37,500	-	-	12,500
3004	-	PM Construction	-	-	-	-	-	-
3005	-		-	-	-	-	-	-

The cash flow actuals also allow you to forward forecast different amounts, as this can change as the project adapts to different costs and variations throughout the project.

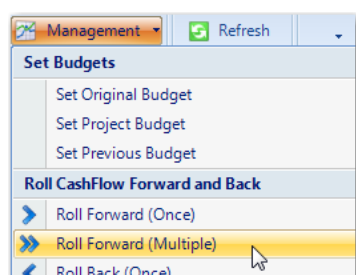
## CASHFLOW ACTUALS

ESTATEMASTER PROPERTY SOFTWARE   Development Management			Commercial Feasibility - CASH FLOW							
Code	Stage	Description	0 Jul-2012	1 Aug-2012	2 Sep-2012	3 Oct-2012	4 Nov-2012	5 Dec-2012	6 Jan-2013	7 Feb-2013
1000		<b>Land Purchase &amp; Acquisition Costs</b>								
		Total Land Purchase Price								
1002	-	Deposit in Trust Account	890,000	-	-	-	-	-	-	-
1003	-	Payment 1	-	-	-	-	-	-	-	-
1004	-	Payment 2	-	-	-	-	-	-	-	-
1005	-	Payment 3	-	-	-	-	-	-	-	-
1006	-	Payment 4	-	-	-	-	-	-	-	-
1007	-	Settlement (balance)	4,005,000	4,005,000	-	-	-	-	-	-
1008	-	Stamp Duty (NIL)	-	-	-	-	-	-	-	-
		Interest on Deposit in Trust								
		Profit Share to Land Owner								
1011	-	Legal and valuation fees	-	30,000	-	-	-	-	-	-
1012	-	.	-	-	-	-	-	-	-	-
1015	-	.	-	-	-	-	-	-	-	-
		<b>TOTAL</b>	<b>4,895,000</b>	<b>4,035,000</b>	-	-	-	-	-	-
2000		<b>Project Contingency</b>	-	-	-	-	11,221	10,096	10,096	11,971

The 'Cash Flow' sheet allows you to update your forecasted cash flow with actuals that are either imported from your accounting system or directly inputted manually by the user.

It is recommended that the inbuilt 'Update Cash Flow with Accounts Data' features are used, as you can integrate the DM software with your existing accounting system and close the loop on the reporting that you require for a project.

For the purposes of this case study, we are going to roll forward 11 time periods using the 'Roll Forward (Multiple)' function in the Management menu to June 2013, so we can update the construction costs with actuals from our accounting system.



## UPDATING YOUR CASH FLOW WITH ACTUALS

We are now at the end of the month for July 2013, and the cash flow is required to be updated for the business before moving forward. The first requirement will be to reconcile all invoices and ensure that the accounts are up-to-date for the cash flow.

For this case study, we are only updating a single project, and as we progress through it, we will be doing an import for a month at a time. Estate Master DM does have the ability to update 12 months of actuals at once. However, it is recommended to do this a **quarter at a time** so that you are able to easily reconcile and review the total amounts with your account system in smaller batches.

In order to make sure the import process works correctly, we need to do the following:

1. Export the transactions for the current month from the accounting system into an Excel file.
2. Format it as per one of the required layouts.

Project		Dates			
Account Code		Jan-12	Feb-12	Mar-12	Apr-12
PJ1000					
1-1000	10,000	65,000	13,000	22,000	
2-1100	37,500	92,550	50,540	10,450	
2-1350	79,000	42,000	2,900	14,000	
		Amounts			

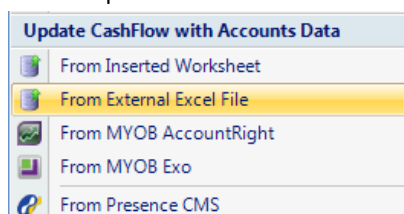
Figure 1 - Pivot Table

Project		Dates		
Account Code	Cost Codes			Amounts
PJ1000	1-1000	Jan-12		10,000
PJ1000	2-1100	Feb-12		92,550
PJ1000	2-1350	Mar-12		2,900
PJ1001	3-4200	Apr-12		2,901

Figure 2 - Standard Table

To update the DM cash flow for the month of June 2013, we will simply:

1. Click on the 'Management' menu in DM
2. Under 'Update Cash Flow with Accounts Data', select **From External Excel File**



3. Browse to the file *AccountsUpdate.xlsx* (part of this Case Study documentation)
4. When prompted, selected 'Pivot Table Format', and press OK

You can see the changes that have occurred in the 'Professional Fees' and 'Construction Costs' sections – the default budgeted amounts have turned from black to blue font within the current month, indicating they have been overwritten with the actual cost.

ESTATEMASTER		Development Management		11	12
PROPERTY SOFTWARE				Jun-2013	Jul-2013
Code	Stage Description				
<b>3000 Professional Fees</b>					
3001	- Design for DA			-	1,482
3002	- Construction safety set		50,000		44,276
3003	- PM Design		5,000		-
3004	- PM Construction		10,000		-
3005	-		-		-
3015	-		-		-
3099	- Development Management		56,580		45,348
	<b>TOTAL</b>		121,580		91,106
<b>4000 Construction Costs</b>					
4001	- Car Parking		150,000		15,496
4002	- Construction		160,000		936,132
4003	- Mechanical & Electrical Costs		85,000		347,184
4004	- Local municipality fees		40,000		232
4005	- Dewa Utilities servicing and connection fee		85,989		-
4006	-		-		-
4025	-		-		-
4099	- Construction Contingency		-		65,484
	<b>TOTAL</b>		520,989		1,364,529

As this is a 'develop and hold' project, the tenancy rentals should also be updated in the same way during the 'hold' phase.

Reconcile the import and ensure that everything has been updated correctly. There are instances where a cost may be expensed to the wrong code.

Once the accounts data has been imported and reconciled, the Cash Flow can now be **rolled forward to the next month**. When this occurs the cash flow will move forward to the next month and all of the variances within the 'Forecast Summary' report will be updated to reflect the new updated actuals



## FORECAST SUMMARY

Commercial Feasibility - FORECAST SUMMARY							
Original Budget Jul-2011	Budget Transfers	Project Budget Jul-2012	Previous Forecast	Current Forecast Jun-2013	Variation to Previous	Variation to Project	Variation to Original
1,346,176	-	1,346,176		1,347,658		1,482	1,482
3,365,439	-	3,365,439		3,369,144		3,705	3,705
50,000	-	50,000		55,000		5,000	5,000
-	-	-		10,000		10,000	10,000
-	-	-		-		-	-
-	-	-		-		-	-
2,209,549	-	2,275,669		2,278,628		2,959	69,079
6,971,164	-	7,037,284		7,060,430		23,147	89,267
909,307	-	909,307		909,307		(0)	(0)
46,030,476	-	46,030,476		46,030,476		(0)	(0)
17,097,034	-	17,097,034		17,097,034		(0)	(0)
51,373	-	51,373		51,373		0	0
15,412	-	15,412		85,989		70,577	70,577
-	-	-		-		-	-
-	-	-		-		-	-
3,205,180	-	3,205,180		3,208,709		3,529	3,529
67,308,783	-	67,308,783		67,382,889		74,106	74,106

We can use the 'Forecast Summary' report as a way of being able to actively review the project on a monthly basis including the performance off the project on a cash basis.

For any current project, the most notable parts of the 'Forecast Summary' report that you need to constantly review at a minimum are:

- Original and Project Budgets
- Previous and Current Forecasts
- Variation to Previous, Project and Original Budgets
- Total Costs to Date and Forecast to Complete

Looking at the 'Forecast Summary' report, you can see the following as a snapshot

- The Original Budget was set and approved in **Jul 2011**
- The Project Budget was set and approved one year later in **July 2012**
- What the current forecasted cash flow is for the month (yellow column)
- What was forecasted last month in the Previous Forecast column
- Variations to Professional Fees and Construction Costs against the original and project budget

## STOCK SUMMARY

As this is a 'develop and hold' project, you will see that there is only one sale, which is in April 2020. This signifies the terminal capitalised sale based on the rental income stream.

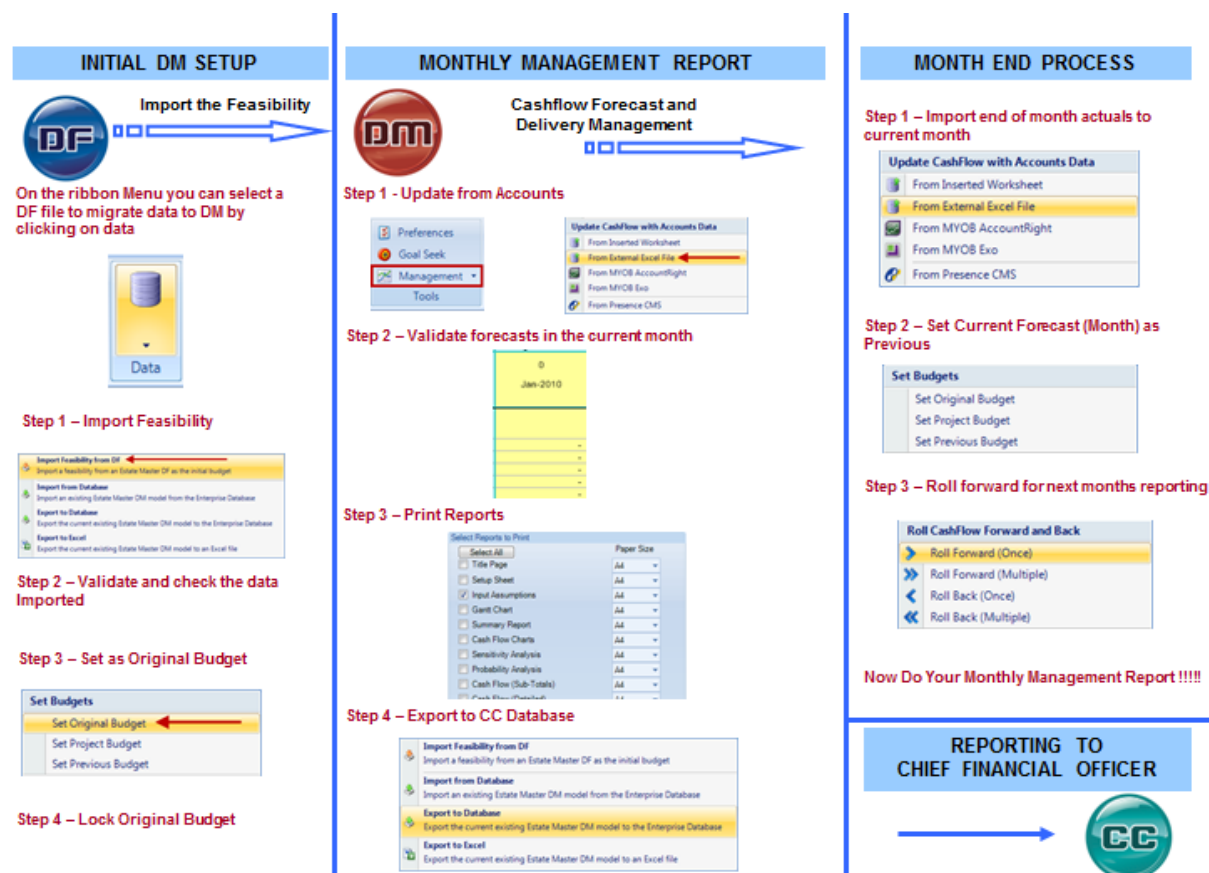
		91 Feb-2020	92 Mar-2020	93 Apr-2020	94 May-2020
Code	Stage Description				
<b>STOCK SUMMARY</b>					
<b>SALES SUMMARY</b>					
Units Sold		-	-	10.00	-
	Cumulative Units Sold	-	-	10.00	-
	% Units Sold	-	-	100.0%	-
SqM Sold		-	-	32,000.00	-
	Cumulative SqM Sold	-	-	32,000.00	-
	% SqM Sold	-	-	100.0%	-
USD Sold		-	-	172,389,192	-
	Cumulative USD Sold	-	-	172,389,192	-
	% USD Sold	-	-	100.0%	-
<b>HANDOVER SUMMARY</b>					
Units Handed Over		-	-	10.00	-
	Capitalised Terminal Rent	-	-	10.00	-
	Cumulative Units Handed Over	-	-	10.00	-
	% Units Handed Over	-	-	100.0%	-
SqM Handed Over		-	-	32,000.00	-
	Capitalised Terminal Rent	-	-	32,000.00	-
	Cumulative SqM Handed Over	-	-	32,000.00	-
	% SqM Handed Over	-	-	100.0%	-
USD Handed Over		-	-	172,389,192	-
	Cumulative USD Handed Over	-	-	172,389,192	-
	% USD Handed Over	-	-	100.0%	-

## THE DM WORKFLOW PROCESS

The input assumptions have now been updated and the budgets have been set. It's also important to remember that as you will be using the DM cash flow to manage and hold the development, that you have a workflow process set to ensure that the cash flow actuals are updated every month.

Paying particular attention to the monthly management report and the month-end process that is required, it is recommended to have a documented workflow in place to ensure that the cash flow is updated accurately.

Below is an example workflow:



## HURDLE RATES

The hurdle rate has been reduced to 15% to compensate for the 10 year holding period for the shopping centre development.

### Project Hurdle Rates

Project Discount Rate (target IRR)	15.00%
Nominate an estimate of IRR	15.00%
Developer's Cost of Equity (for WACC)	20.00%

## CONCLUSION

Looking at the above case study, you can see the benefit of using Estate Master DM to easily manage a development's cash flow from commencement, through the 'hold' period, before finally disposing of the asset at a future point in time.