## **Cash Flow Intelligence App**

# Functional specifications

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J.P.Morgan CFI: Functional Specifications

### **CASHFLOW INTELLIGENCE: OVERVIEW**

The Cash Flow Intelligence (CFI) application provides stakeholders insights into cash flows and with machine learning generated cash flow forecasts.

### MMP (Minimum Marketable Product) features:

- 1. Research Historical data
- 2. Get auto-generated machine learning forecasts



### EXPLORE HISTORICAL DATA FLOW

### **CFI: OVERALL APPLICATION FLOW**





### **Cash Flow Intellegence**

RUN A FORECAST FLOW

### **CFI: Functional Specifications**



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### **CFI: LANDING PAGE, HEADER & FOOTER**

As a user I want to see Cash Flow Intelligence application, including header, footer, control bar and option to run a forecast.

### Application default state

- All the drilldowns are collapsed -
- The default account (10) is the account with the highest transaction value and \_ volume for inflows and outflows
- For returning users the default account (10) is the last account the user interacted with. If they had run the forecast for that account, they would see the remaining forecast, and actuals to date for that account
- The default granularity is daily (6) -
- The default flow direction (11) is one with highest value and volume -

### Header

As a user, I want to see a header including logo (1), application name ""Cash Flow Intelligence" (2) and a log-out button (3).

- clicking on log-out button brings up confirmation dialog box
- JPMC UITK: Icons LogOff (3)

### Footer

As a user I want to see a footer in the bottom of the application.

- Text in the bottom left corner matches the mock-up (49)
- Sitemap (50), Security (51), Privacy Links (53), Contact Us, Terms and conditions (56) links
- JPMC UITK: Icons Tear-out (52, 54, 57)

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### **CFI: CONTROL BAR**

As a user I want to be able to select an account, cashflow type and granularity.

### **Account Selector**

As a user I want to be able to select an Account to analyze (10). When user clicks on the account selector, they see a list of all the available accounts 

- with last 4 digits of the account number
- Accounts are listed in alphabetical order
- User should be able to search accounts by last four digits or by account name
- The account selector dropdown box should expand wide enough when open to show \_ the full name and the last 4 digits of the account number
- JPMC UITK: Combobox (5)

### **Cash Flow Direction Selector**

As a user I want to switch between cashflow types "Inflow" and "Outflows" (11). If "inflow" or "outflow" option is not available for a selected account radio button is -

- grayed out
- JPMC UITK: RadioButton (5) -

### **Granularity Selector**

As a user I want to switch between cashflow types "daily" and "weekly" views (12).

- Tooltip (7) should read "Dictates the granularity for the historical transactions graph and the forecast. Use daily for a 30 day forecast. Use weekly for a 24 week forecast."
- JPMC UITK: Tooltip Default

### **CFI: Functional Specifications**



Transaction details: Monday, 07/01/2019

					Monday, 07/0 <sup>-</sup>	1/2019						
						delta 07/01/2018	39					
\$0M	\$0.2M	\$0.4M	\$	0.6M	US \$XX,XXX,X	XX.XX ▲ +0%	\$1.2M		61.4M	\$1.6M	\$1.8M	- I
	Value Date	Counterparty			I	Account Number		Meth	od		Amount	$\downarrow$
	10 2019	Lorem lpsum				123452440859		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem lpsum				1234627035		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem lpsum				123412892		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem Ipsum				123452440859		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem Ipsum				1234586		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem Ipsum				1234470309		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem lpsum				123452440859		ACH			USD 2 Original	CCY A
•	07/01/2019	Lorem lpsum				123488		ACH			USD ; EU	R XX
►	07/01/2019	Lorem lpsum				123452440859		ACH			USD X,XXX,XX	X.XX
•	07/01/2019	Lorem lpsum				1234140716		ACH			USD X,XXX,XXX	X.XX
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### **CFI: CONTINUOUS TIMELINE W/ TRANSACTION DETAILS**

As a user I want to be able to rollover a data point in the continuous timeline view a tooltip (32) with actual and top counterparty.

### **Continuous Timeline Table**

As a user I want to be able to click on a data point in the continuous timeline and see the transaction details. By default there is no table below the continuous timeline. Once user clicks on a historical data point on the continuous timeline table always stays expanded.

### **Distribution/volume toggle**

### **Counterparty Table**

48

### **Continuous timeline/comparison toggle**

As a user I want to be able to switch between continuous timeline and comparison views. JPMUITK: ToggleButton (16) 

### Export Data

As a user I want to be able to download chart data (19,20)

- If there is no forecast the export includes only historical data
- If forecast has been generated the export includes historical data and forecast
- JPMUITK: Icon document-csv (19)

### **Continuous Timeline Tooltip**

As user I want to be able to switch between transaction distribution (38) and volume (40).

- UITK: ToggleButton (38) -
- Distribution tooltip (39) -
- Volume tooltip (41) -

As user I want to view counterparty details and stats.

- By default table is sorted from the highest amount to the lowest (47)
- Row expanded (48)
- Counterparty stats tooltip (49)
- Only the top 100 transactions load and 15 transactions are displayed in a table
- Currency tooltip, JPMC UITK: Tooltip Default (50)

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### **CFI: FORECAST**

### **Forecast basis Selector**

As a user I want to be able to create a forecast based on prior 1, 2, 3 years or a custom time period (13).

- Default: Prior 2 years
- Tooltip (9) copy: "The machine learns from historical cash flows. It will look for patterns and trends over time. Select a historical time frame that you believe best reflects your current business." JPMUITK: Icons Error (9)

### **Run Forecast Button**

As a user I want to be able to run a forecast by clicking on "Run Forecast" button (14).

JPUITK: Buttons CTA Small Default (14) -

### Import Forecast

As a user I want to be able to import forecast (18)

JPMUITK: Icon Export (17) -

### **Continuous timeline with Forecast**

As a user I want to be able to see weekly forecast data appended to the continuous timeline.

- Forecast timestamp (95) \_
- Forecast details panel (96)
- Forecast data points hover (105) \_

OCT	14, 2019 - MAR 23	, 2020
Highe	st Outflow	US \$XX,XXX,XXX Week of 12/30/19
Lowes	t Outflow	US \$X,XXX,XXX Week of 02/03/2020
Week	of 12/30/19 Higher bound	US \$30,000,000
•-	Best Prediction Po	int US \$XX,XXX,XX.XX
	Lower bound	US \$XX,XXX,XXX

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### **CFI: COMPARISON VIEW**

As a user a want to rollover a data point on a historical comparison and see weekly summary (95) and transaction detail table below the timeline.

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