ClearFactr
Cloud-Based Financial Modeling Program

Who we are
ClearFactr is a SaaS spreadsheet platform purpose-built for financial modeling

- It enables users to create an integrated ecosystem out of dispersed, distributed and disconnected financial models
- It can be used via a spreadsheet-like user interface within a web browser, and/or programmatically via APIs
- It combines unique approaches to modeling clarity, powerful low/no-code analytics, and collaboration to solve a wide variety of risk, modeling and workflow challenges throughout the firm

Key Benefits

<table>
<thead>
<tr>
<th>Scenario Analytics</th>
<th>Model Auditing</th>
<th>Low-Code Workflows</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Overlay scenarios over a base case version of your model</td>
<td>▪ View “infinite” history of cell changes</td>
<td>▪ Separate business logic code from execution code</td>
</tr>
<tr>
<td>▪ See impact of different scenarios directly in the model</td>
<td>▪ Identify model inputs, intermediate calculation cells, and output cells</td>
<td>▪ Integrate models into larger workflows using ClearFactr APIs</td>
</tr>
<tr>
<td>▪ Permission scenarios for different audiences</td>
<td>▪ View calculations inside a cell using “natural” language</td>
<td>▪ Execute models in a “headless” state</td>
</tr>
<tr>
<td></td>
<td>▪ View impact of a cell on other cells</td>
<td></td>
</tr>
</tbody>
</table>

Two ways Goldman Sachs uses ClearFactr

Running models, at scale, in real time
- Pull data into models from disparate sources via APIs
- Push alerts to people when outputs of models become “interesting”

Providing a single source for important models
- Out of the box SDLC controls for model management
- Scenario Tool allows multiple views of any model

goldmansachs.com/engineering

These materials are for informational purposes only and do not constitute an offer to sell, or the solicitation of an offer to buy, any security. Some of the services and products described in these materials may not be available in certain jurisdictions or to certain types of client. Please contact your Goldman Sachs sales representative with any questions. These materials are given for purely indicative purposes and do not create any contractual relationship between you and Goldman Sachs. These materials are confidential and may not be disclosed to any third party (with the exception of external advisers on the condition that they themselves are bound by this confidentiality undertaking), or copied in whole or in part, without the prior written consent of Goldman Sachs. © Goldman Sachs 2019. All rights reserved.
ClearFactr

Scenario Analytics

- Overlay scenarios over a base case version of your model
- See impact of different scenarios directly in the model
- Permission scenarios for different audiences

Model Auditing

- View “infinite” history of cell changes
- Identify model inputs, intermediate calculation cells, and output cells
- View calculations inside a cell using “natural” language
- View impact of a cell on other cells

Low-Code Workflows

- Separate business logic code from execution code
- Integrate models into larger workflows using ClearFactr APIs
- Execute models in a “headless” state

goldmansachs.com/engineering