



CadDo






An Introduction to CadDo ESG

June 2024

The light on ESG is shining brighter than ever, yet there is a gap between expectation and reality

Investors need to view companies not only by financials...but by **ESG Scores**

Sounds simple, but it's a big challenge:

-  Market providers only offer black-box calculations
-  Conflicting raw-data, which keeps changing
-  Bespoke solutions are costly, slow, and don't evolve
-  No market or government standards
-  Ever changing consumer expectations

Environmental

Social

Governance



Common Situation

- Investment firms are buying and ingesting a large range of ESG data from numerous providers (including in-house research)
 - The enrichment activities, to combine data and calculate scores, takes place through a mix of different technologies (incl. Python, SQL, Excel etc)
 - Separate reporting/visualisation teams utilise this data, and enrich further, to produce the end-user data/analytics
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- But this process is normally slow and cumbersome
 - The next step is to start combining and enriching data faster and better

Associated Issues

It's hard to manage the data enrichment

- Data manipulation is done in multiple tools, requiring a broad range of skills (not found in any single team)
- Large elements of the process require deep technical knowledge meaning some changes need to route through IT and not the analyst team

Making changes is slow & risky

- No easy method to quickly swap some logic and see the results
- Change control and audit capabilities are limited, because of the nature and range of tools in use

Logic is split across multiple platforms & technologies

- The cascade effect of what should be simple changes can ripple through the ecosystem and break it
- The analysts with the understanding of the data only own part of the picture

The common challenges and desired end-states

Rules are opaque to the business, as maintained by IT

Transparent

Logic can't keep up with pace of operational and data changes

Evolutionary

No single repository of 'final' data, with all required logic

Consolidated

Logic becomes duplicated across multiple reports & tools

Centralised

Teams wish to be able to develop bespoke tools to meet their unique needs

Requirements-led

Equations are embedded and hidden within code scripts

No-code

Audit trails and change management are not easy

Auditable

In-house development can be costly & lengthy in timescales

ROI

New data and new measurements are difficult to absorb on a timely basis

Agility

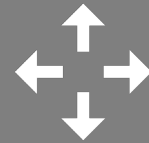
CadDo
centralises
everything

- Rules & logic become accessible & flexible to your analyst/strategy teams
- Reports become just a presentation layer for the wider user-base
- Simulation/Interactive tools developed with all logic maintained in one place
- All capabilities managed, maintained and audited centrally



Calculation engine that
streamlines the complexities
& holds all the rules

Data insights and simulation
capabilities more readily
available



Off-the-shelf solution that is
agile enough to meet
complex requirements

Quick, flexible, good ROI,
best practice



A tool that evolves and is
flexible enough to rapidly
meet new requirements

A single repository of 'final'
data, with all required logic &
capabilities

CadDo is a rules engine to pull all your logic and requirements into a single platform

A simple-to-deploy SaaS solution meaning minimal work for in-house IT teams

CadDo enables clear, aggregated ESG metrics and analysis across all investments

Data is weighted to each clients' assets giving a tailored, holistic view of holdings and portfolios

CadDo gives asset managers and investors a clear view of their holdings, with accurate ESG metrics, underlying data and trend information

...alongside existing financial performance analysis and simulation tools



All the logic is your logic: no black-box calculations



No-code rules engine bringing control into the hands of your analysts



SaaS "Preferred Solution" on Microsoft's class-leading Azure platform



An expert ESG delivery team fully setup to work remotely, ensuring resiliency & agility



World-class delivery partners, in ESRI and Microsoft

A platform to put all your logical design needs in one place

The platform keeps all required logic in one place. Easy to use, fully audited, validated and controlled

And it supports everything from no-code requirements up to full coding in T-SQL or Python

No Code

Welcome to CadDo
CADD0_ESG_SANDPIT

- Define Model**: Define the model and its characteristics and rules
- Process Model**: Publish changes and process the model
- View Data**: View model data or select to report

Process Scenario CADD0_ESG_SANDPIT

Scenario	Type	ETL	Import	Calculate	Post-Calc	Time	Scenario	Message
2023.05	Actual	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
2023.04	Actual	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
2023.05	Actual	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Low Code

Dimensions CADD0_ESG_SANDPIT

```

graph TD
    Corporate --> SCT[Sector]
    Corporate --> Client
    Client --> Chart
    Client --> Issue
    Issue --> Parthiva
    Issue --> Security
    Parthiva --> Holding
    Security --> Holding
  
```

Drivers CADD0_ESG_SANDPIT

Driver Name	Dimension	Equation	Data Type	Type	Index	Dimension	Measure	SQL Override	Nullable
Carbon Scope 1 Score	Holding	CASE WHEN ISSA_Carbon_Sco	INT	√	⊗	⊗	⊗	⊗	⊗
Carbon Scope 2 Score	Holding	CASE WHEN ISSA_Carbon_Sco	INT	√	⊗	⊗	⊗	⊗	⊗
Client	Client		VARCHAR(50)	⬇	⊗	⊗	⊗	⊗	⊗
Client	Client		SMALLINT	⬇	⊗	⊗	⊗	⊗	⊗
CO2_Score	Corporate		SMALLINT	⬇	⊗	⊗	⊗	⊗	⊗
CORA_Carbon_Scope_1	Corporate	AVGISSA_Carbon_Scope_1_In	DECIMAL(19,6)	√	⊗	⊗	⊗	⊗	⊗
CORA_Carbon_Scope_1	Corporate	STDEVUSSA_Carbon_Scope_1	DECIMAL(19,6)	√	⊗	⊗	⊗	⊗	⊗
CORA_Carbon_Scope_1	Corporate	CUSTOMJORNLOCKUR_Inprof	VARCHAR(100)	√	⊗	⊗	⊗	⊗	⊗
CORA_Carbon_Scope_2	Corporate	AVGISSA_Carbon_Scope_2_In	DECIMAL(19,6)	√	⊗	⊗	⊗	⊗	⊗
CORA_Carbon_Scope_2	Corporate	STDEVUSSA_Carbon_Scope_2	DECIMAL(19,6)	√	⊗	⊗	⊗	⊗	⊗
CORA_Percent_of_Women	Corporate	AVGISSA_Percent_of_Women_In	DECIMAL(19,7)	√	⊗	⊗	⊗	⊗	⊗

Full Code

View Name: view_Scenario

```

select c.ms_Scenario as Scenario, p.ms_Scenario as [Year_{1}]
from META_Scenario c
left join META_Scenario p on
c.ms_Scenario_Type = p.ms_Scenario_Type
and datepart(year, c.ms_Scenario_StartDate) = datepart(year, p.ms_Scenario_StartDate)
and datepart(month, c.ms_Scenario_StartDate) = datepart(month, p.ms_Scenario_StartDate)
and datepart(day, c.ms_Scenario_StartDate) = datepart(day, p.ms_Scenario_StartDate)
  
```

Procedure Name: Calculate_Post_Calculate

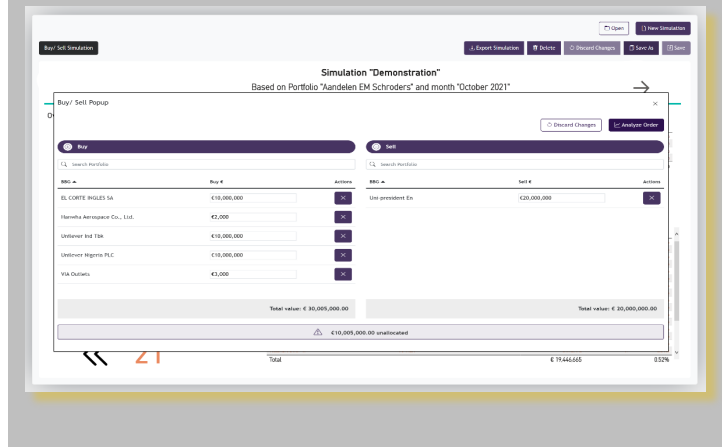
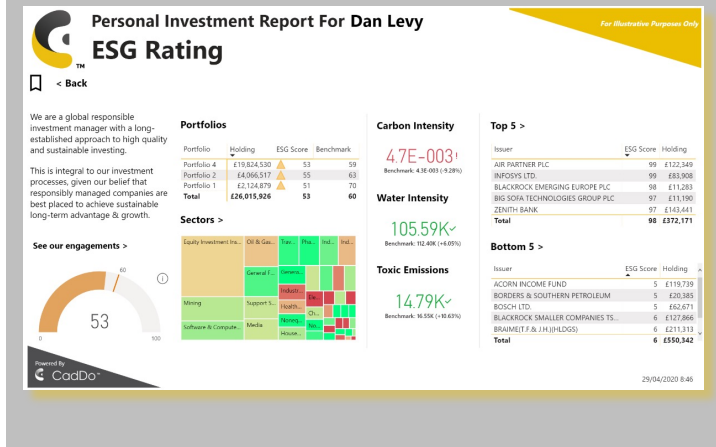
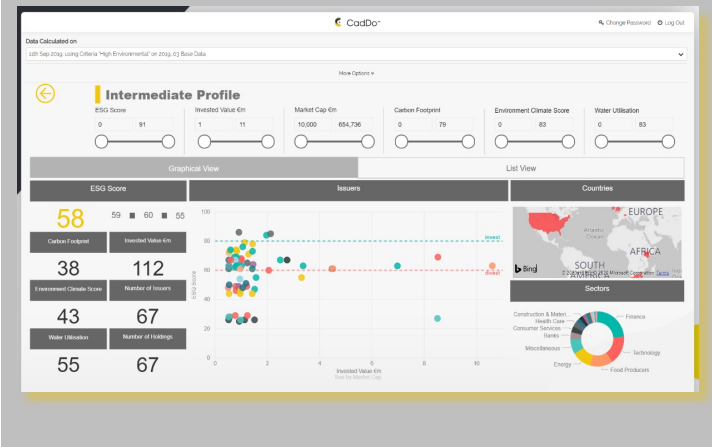
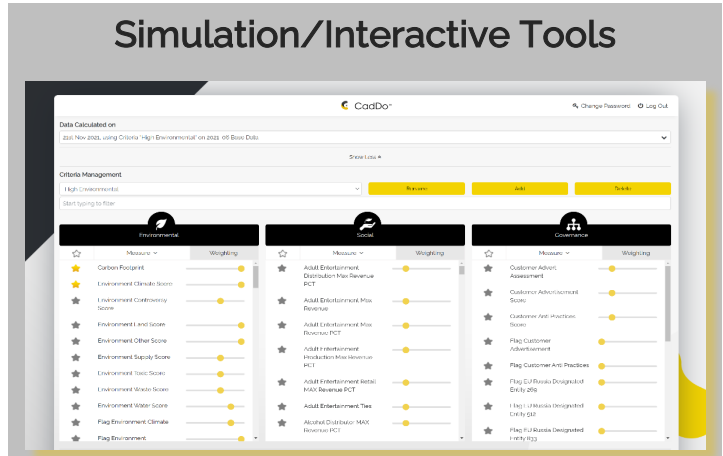
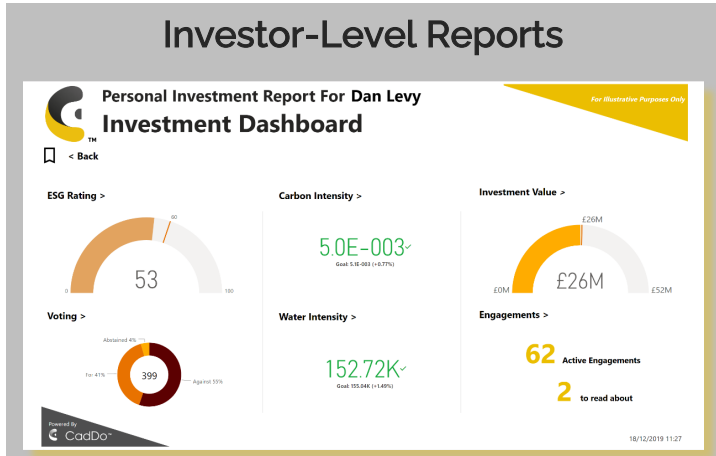
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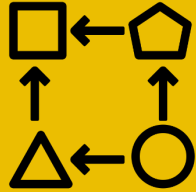
Header
24 INSERT LOG_Process_Custom_Procedure
25 ([LPCP_Task_Time], [LPCP_Scenario], [LPCP_Custom_Procedure], [LPCP_End_Time],
[LPCP_Status], [LPCP_Message], [LPCP_User_Name],
[LPCP_Scenario_Name])
26 VALUES(@Task_Time, @Scenario, @Custom_Procedure, @GETDATE(), @Status, @Message,
@Message, @User_Name, @Scenario_Name)

Footer
[LPCP_Status], [LPCP_Message], [LPCP_User_Name],
[LPCP_Scenario_Name]
  
```

Able to meet multiple reporting needs with the same underlying capability

The platform can meet any ESG reporting requirements, off the same underlying technology
e.g. Interactive Portfolio-manager toolsets alongside Investor-level reporting and simulation tools





CadDo Transformation

Technical expertise in data integration and business modelling with unique cross-functional skills



CadDo Calculate

Class-leading calculation Software as a Service (SaaS) running on Microsoft's global Azure platform



CadDo Analytics

Track record of helping clients improve business performance using Data Science methodologies

Underpinned by expertise in profitability & sustainability data, and analytics we help our clients in a broad range of areas, such as:

- Customer & Product Profitability
- Connecting Disparate Data Sources into a Single Version of the Truth
- Holistic Customer Investment

All delivered by a team of cross-functional experts across all these areas, allowing our 3-step model to be delivered efficiently without separate resources

Our Solution

- Fully hosted. CadDo provide all the technology, management & support
- Fully customisable based on your changing needs & changing requirements
- Client-specific reports, inline with your Marketing team's requirements, with CadDo doing all development work
- Adaptive, enabling new features to be added quickly (days/weeks, not months)
- Fully scalable – the solution will grow and develop with you

Your Involvement

- Provide your raw data as-is: no need to develop custom data extracts
- Your IT team can play as big or small a part as desired, from day-1 and into operational running
- Provide new requirements in a flexible way (mock-ups, drawings etc.): no functional specs!
- You focus on your business requirements, we do the rest