

Interweave model

Computation

```
```{python}
model = ols(formula='y ~ x',
data=df).fit(cov_type='HC3')
table1_results = model.summary()
```
```

Composition

```
Vivamus lacinia odio vitae vestibulum.
Donec in efficitur leo. Suspendisse
potenti. Nullam fringilla orci lacinia
`table1_results`
```

Computation

```
```sh
echo "Hello, World!"
 for i in {1..5}; do
done
```
```

Composition

```
Integer elementum, libero sed semper
auctor, augue justo pulvinar mauris,
nec sollicitudin lorem felis at purus.
Etiam in arcu nec orci dictum lacinia.
```

local environment

Tracked model with structured interfacing

Computation

```
#!/R/t_test.R
res = t.test(
  x = iris$Sepal.Length,
  y = iris$Sepal.Width
)
test_p_value = round(res$p.value,3)
```

```
publish_data(test_p_value)
```

```
#!/python/regression.py
model = ols(formula='y ~ x',
data=df).fit(cov_type='HC3')
table1_results = model.summary()
table1_results
```

```
publish_data(table1_results)
```

nested containers

self-documenting
static ledger

./pubdata.toml

```
[test_p_value]
type = "data"
value = "0.004"
description = "Result of t-test analysis
on X and Y data."
generating_script = "{dynamic_link}"
timestamp = "{dynamic_timestamp}"
```

```
[table1_results]
value = ""
===== OLS Regression Results =====
Dep. Variable:                Y
R-squared:                    1.000
Model:                        OLS
Adj. R-squared:               1.000
Method:                        Least Squares
F-statistic:                   7.538e+28
Date:                          Tue, 03 Oct 2023
Prob (F-statistic):           1.07e-43
"""
description = "Table summarizing key
findings in scientific research."
generating_script = "{dynamic_link}"
timestamp = "{dynamic_timestamp}"
```

future integration as a
dynamic ledger

Composition

LaTeX

```
We can incorporate dynamic
data directly into a LaTeX
environment. For example the
value in $p =
\INSERT{test_p_value}$
has been dynamically
generated.
```

Markdown

```
# Section 1
We can similarly dynamically
insert data in markdown
files.

\INSERT{table1_results}
```

containerized environment