In [17]:

```
# Create a scatter plot using hvPlot by setting
# `x="price_change_percentage_24h"` and `y="price_change_percentage_7d"`.
# Color the graph points with the labels found using K-Means and
# add the crypto name in the `hover_cols` parameter to identify
# the cryptocurrency represented by each data point.
k_plot = df_crypto_predictions.hvplot.scatter(
    x="price_change_percentage_24h",
    y="price_change_percentage_7d",
    title="KMeans Clusters - Original Scaled Data",
    by='clusters',
    hover_cols='coin_id'
)
k_plot
```

Out[17]:

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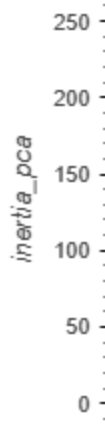
In [26]:

```
# Plot a line chart
# the different val
pca_elbow = df_elbo
    x="k",
    y="inertia_pca"
    title="Elbow Cu
    color='red',
    xticks=k
)
pca_elbow
```

Out[26]:



Answer the following questions

- **Question:** What is the best v
  - **Answer:**he best k val
- **Question:** Does it differ from
  - **Answer:** No, the original

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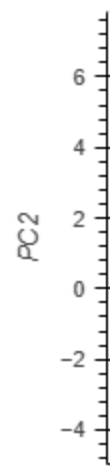
ethereum	-0.458261	0.45
tether	-0.433070	-0.16
ripple	-0.471835	-0.22
bitcoin-cash	-1.157800	2.04

In [31]:

```
# Create a scatter
# `x="PC1"` and `y=
# Color the graph p
# add the crypto na
# the cryptocurrenc
pca_plot = df_crypt
    x="PC1",
    y="PC2",
    title="KMeans C
    by='clusters',
    hover_cols='coi
)
pca_plot
```

Out[31]:



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Run

0
−2
−4

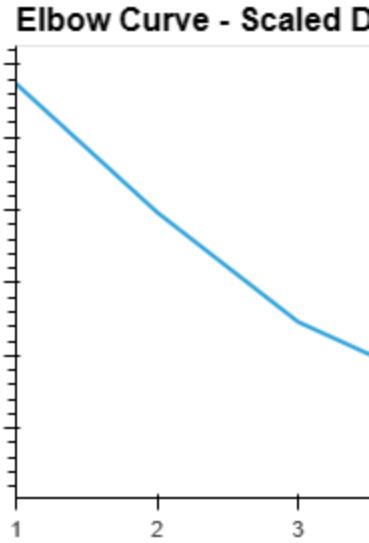
Visualize and Compare t

In this section, you will visually an

In [33]:

```
1 # Composite plot to
2 composite_scatter_d
3 composite_scatter_d
```

Out[33]:



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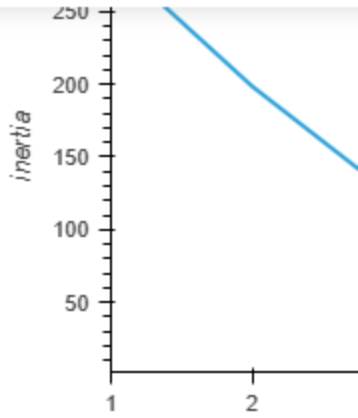
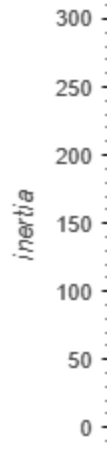


In [37]:

```
1 # Composite plot to
2 composite_scatter_c
3 composite_scatter_c
4
5 )
6
```

Out[37]:



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Run

In [39]:

```
# Composite plot to
# Side by side plot
k_plot + pca_plot
```

Out[39]: