

LA DATA VIZ C'EST QUOI ?

“La data visualisation, c'est l'art de raconter des chiffres de manière créative et ludique, là où les tableaux Excel échouent.
C'est en quelque sorte mettre en musique l'information chiffrée”

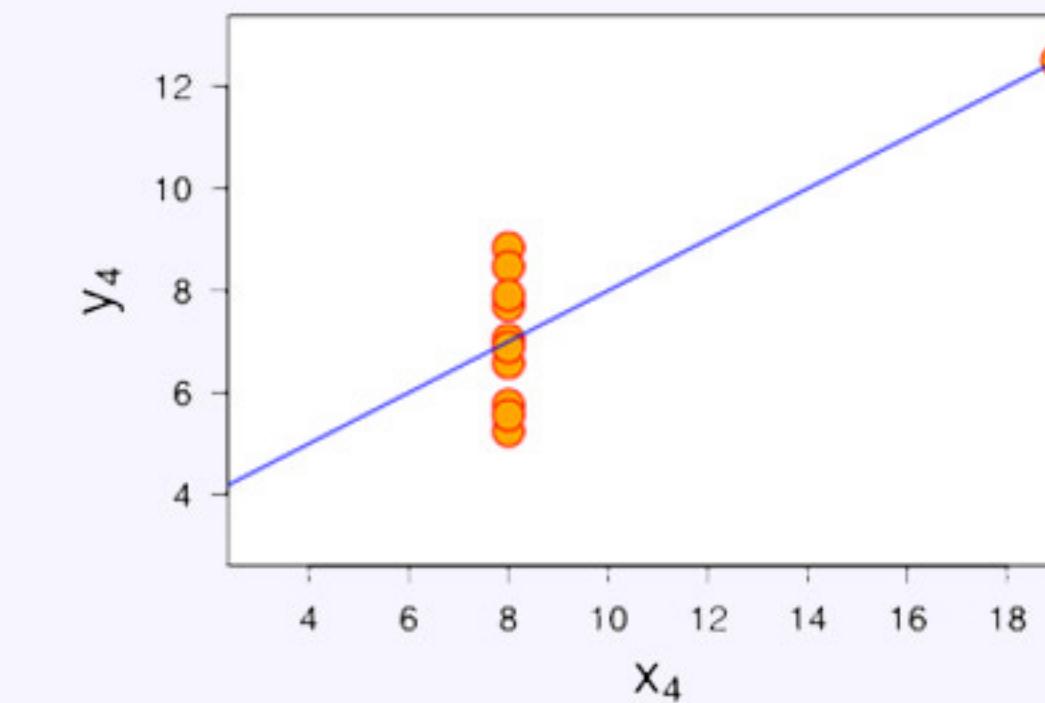
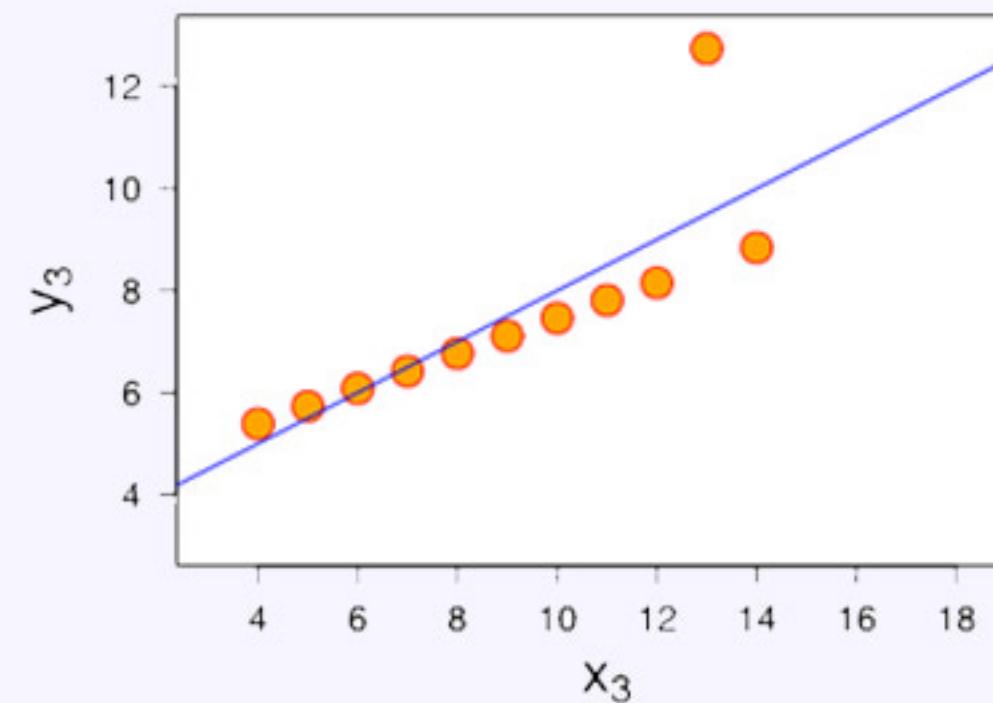
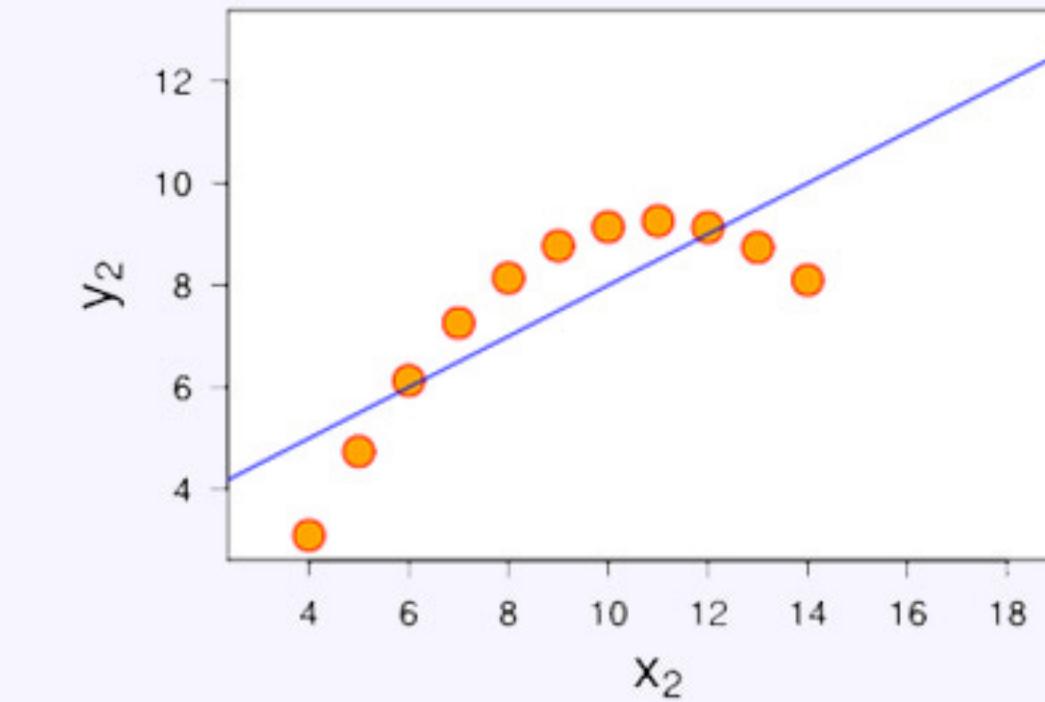
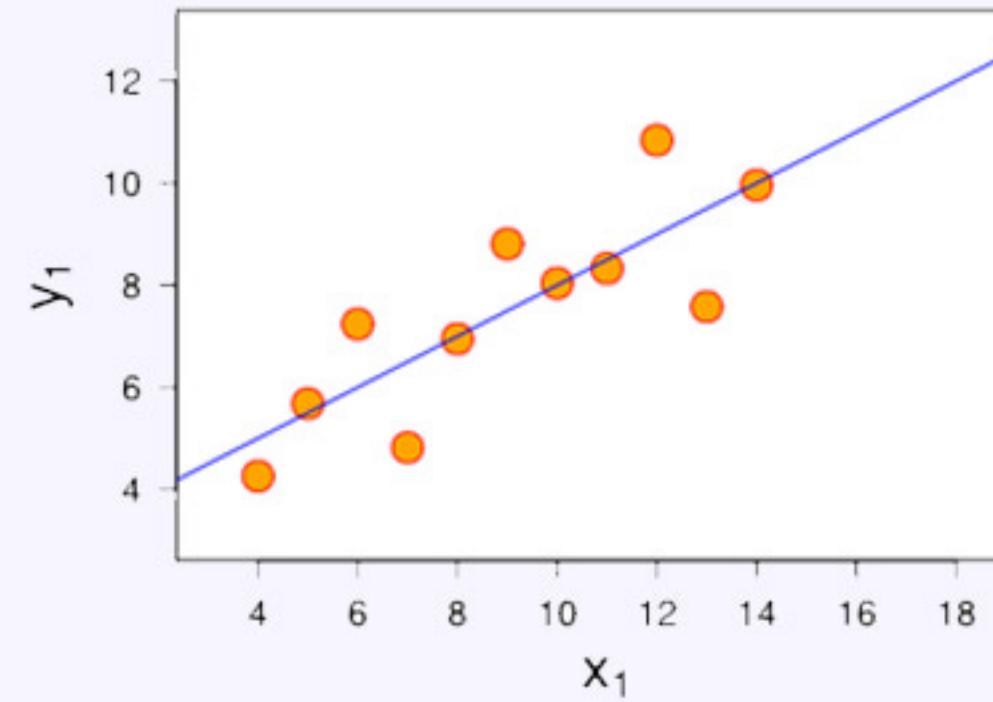
Charles Miglietti, co-fondateur de Toucan Toco.

Elle répond à deux enjeux stratégique en entreprise :

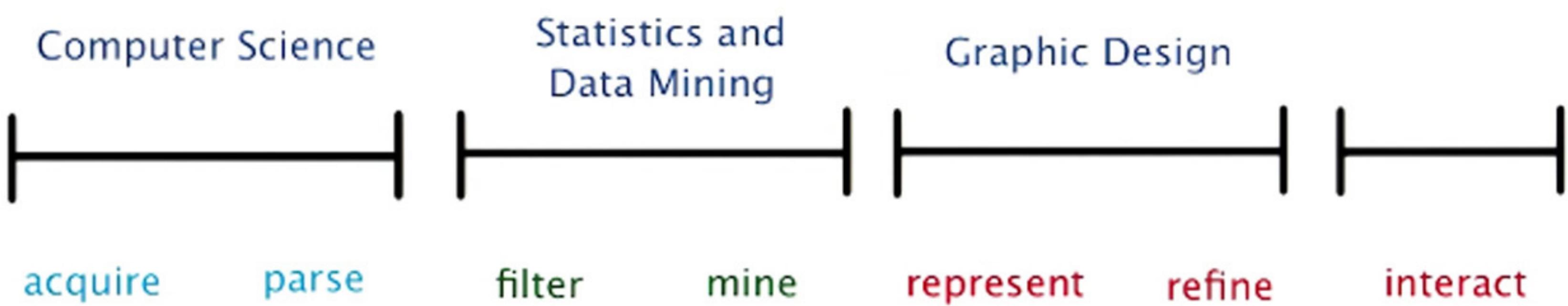
. La prise de décision

. La communication

Quartet d'Anscombe



Pour 4 jeux de données différents,
on obtient la même droite de régression



L'ouïe = 12.5 MB/s

le goût = 0.000016 MB/s

le toucher = 125 MB/s

L'odorat = 12.5 MB/s

La vue = 1250 MB/s

```
{"style": "L'ouïe", "value":12.5 },
{"style": "le goût", "value": 0.000016},
 {"style": "le toucher", "value":125},
 {"style": "L'odorat", "value": 12.5},
 {"style": "La vue", "value":1250 }
```



Data-Driven Documents



www.d3js.org

Librairie Java Script

Crée par Mike Bostock & Jeff Heer

Permet de créer des visualisation
structurer (explicite et sensée...)

Les variations de présentation sont infini ,
le code est réutilisable, c'est interactif !

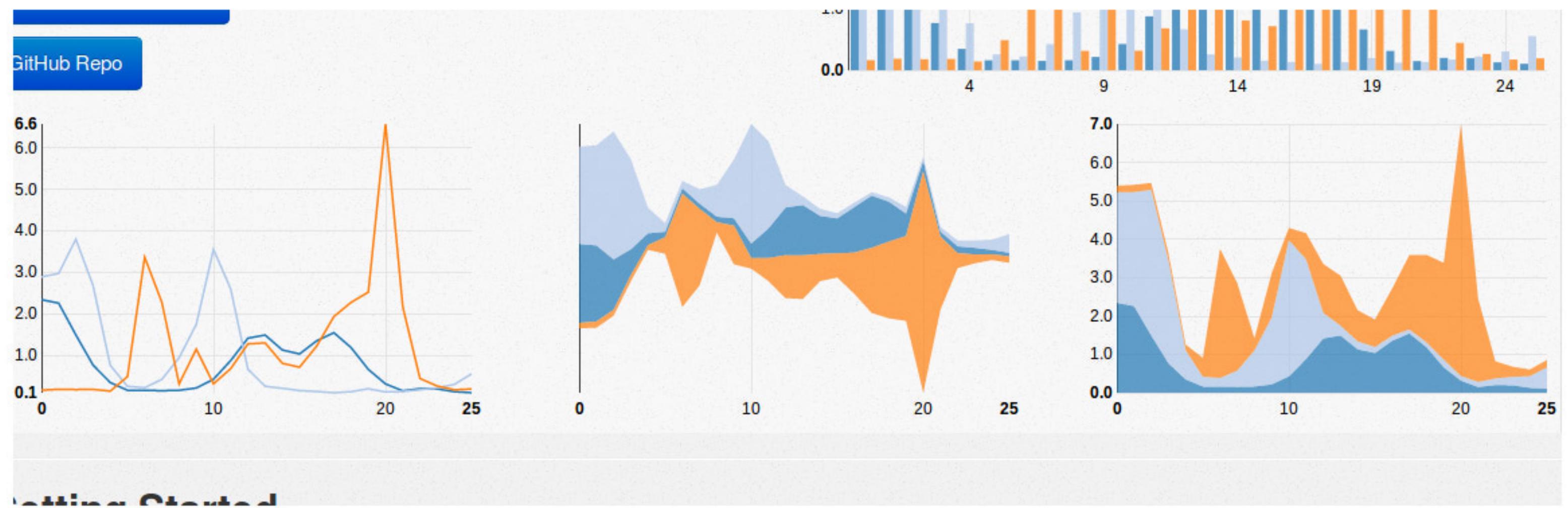
C'est BSD Open source license

<http://christopheviau.com/d3list/gallery.html>

<https://groups.google.com/forum/#!forum/d3-js>

NVD3

<http://nvd3.org/>



Dimple.js

<http://dimplejs.org/>

[Star 2,364](#) [Tweet](#)

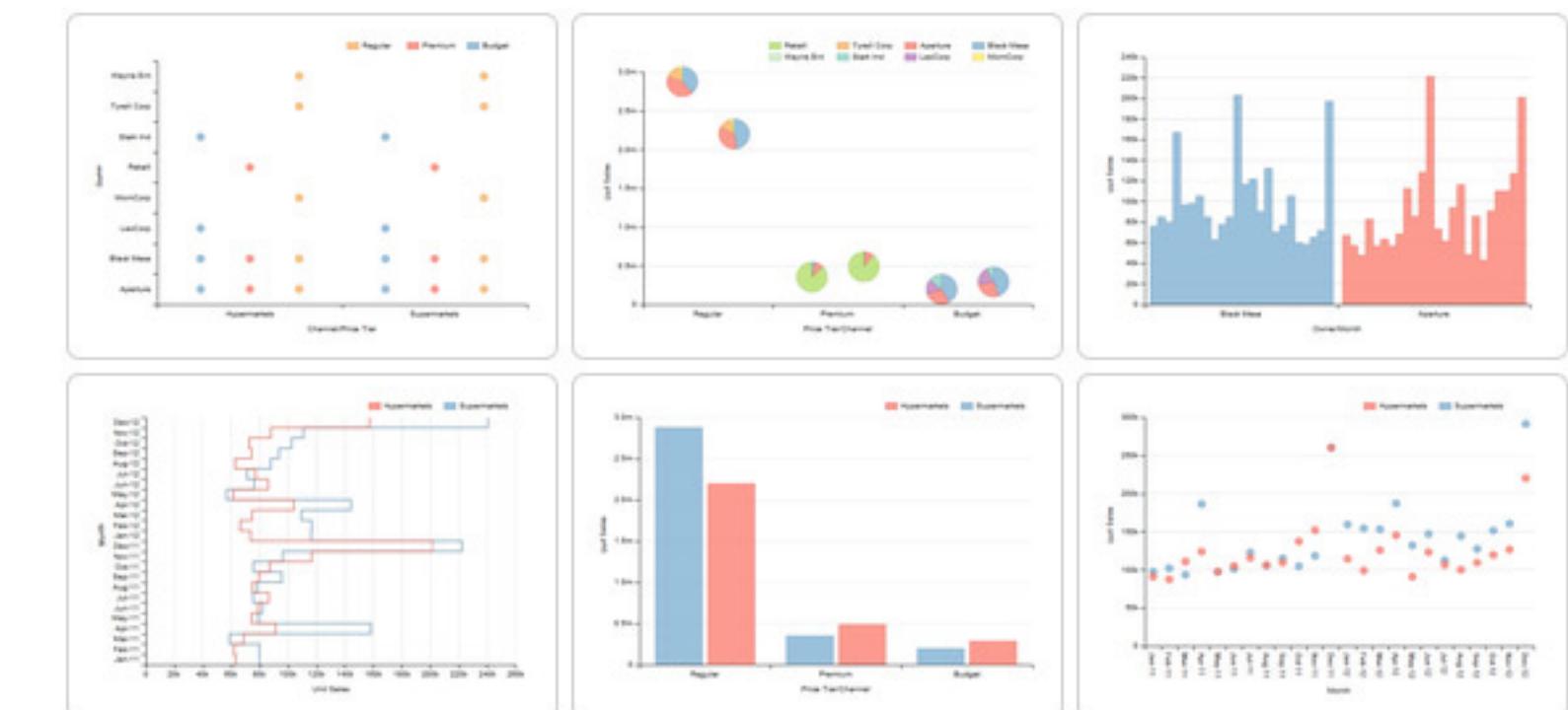
Libraries

[Full Javascript Library With Comments](#)
[Minified Javascript Library](#)
[Zip File](#)
[Tar Ball](#)

Resources

[Examples](#)
[Advanced Examples](#)
[View On GitHub](#)
[Full API Documentation](#)

Examples

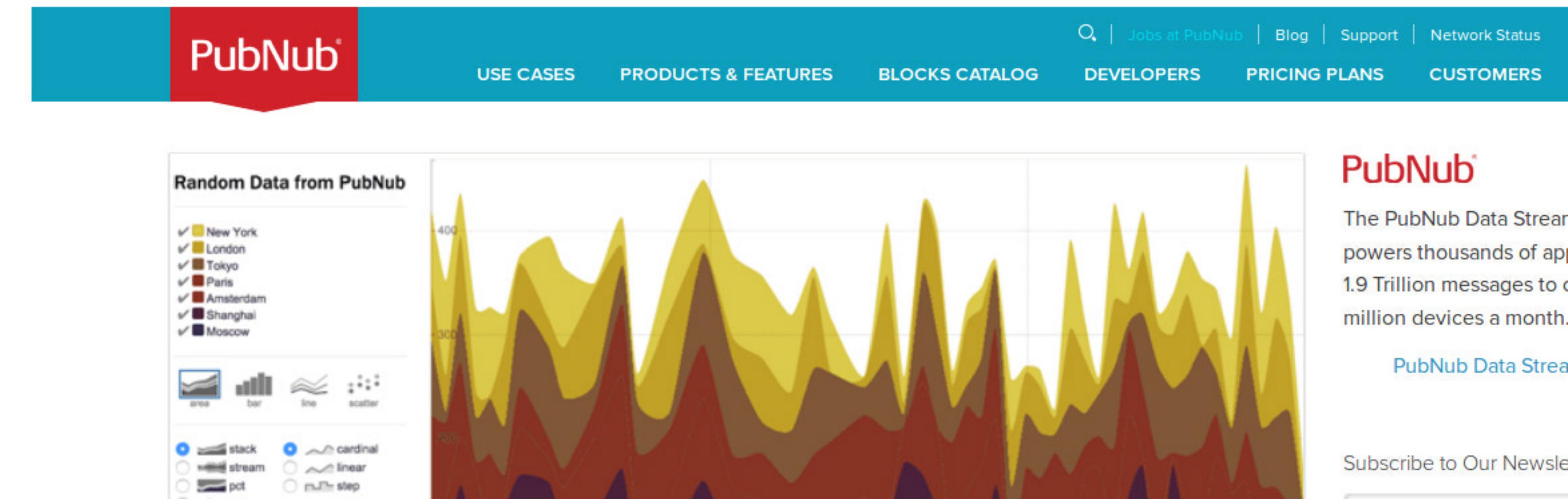


[See More Examples](#)

[GitHub Started](#)

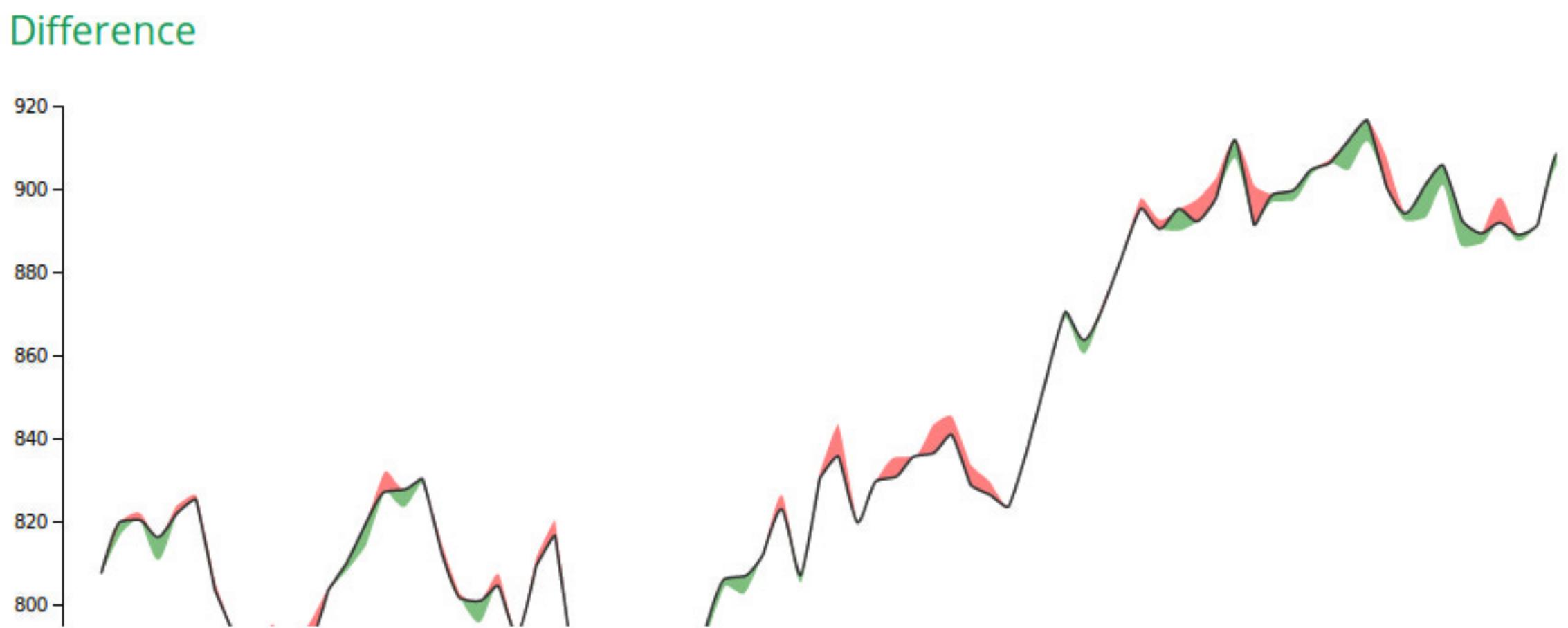
PubNub

<http://pubnub.com/>



D3-timeseries

mcaule.github.io/d3-timeseries/



Chartio

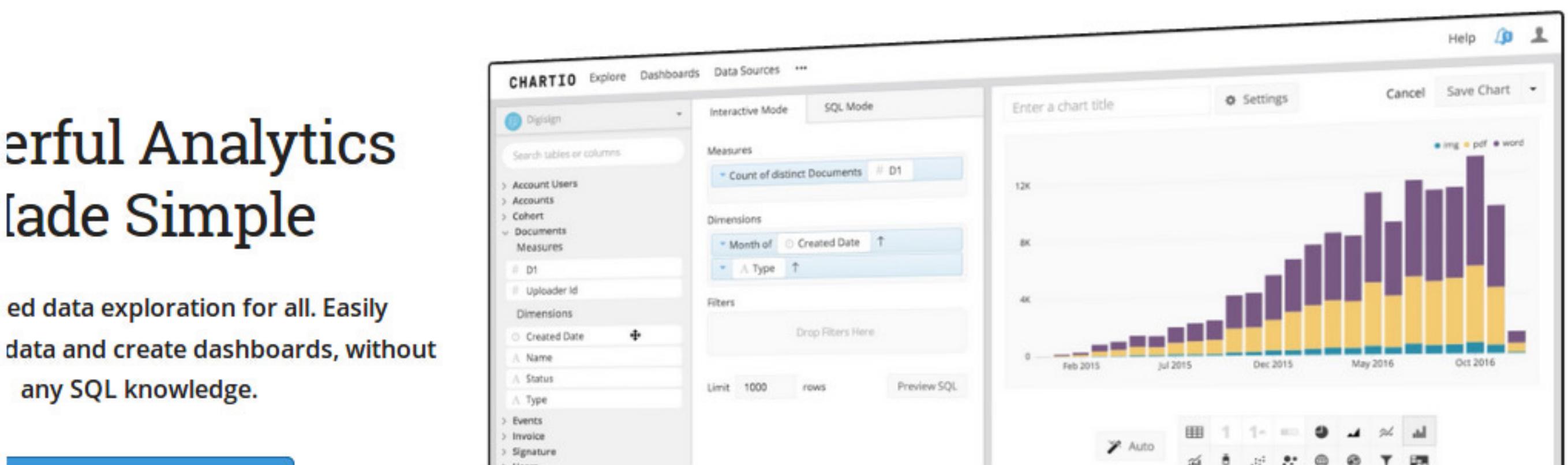
<https://chartio.com/>

Solutions Resources

Login [Get Started Free](#)

Powerful Analytics Made Simple

Unified data exploration for all. Easily load data and create dashboards, without any SQL knowledge.



RAW (open source)

<http://rawgraphs.io/>

RAWGraphs

The missing link between spreadsheets and data visualization.

USE IT NOW!

FORK IT ON GITHUB

SPECIAL COLLECTORS ISSUE

Display until
July 25, 2002
\$12.99

Rolling Stone

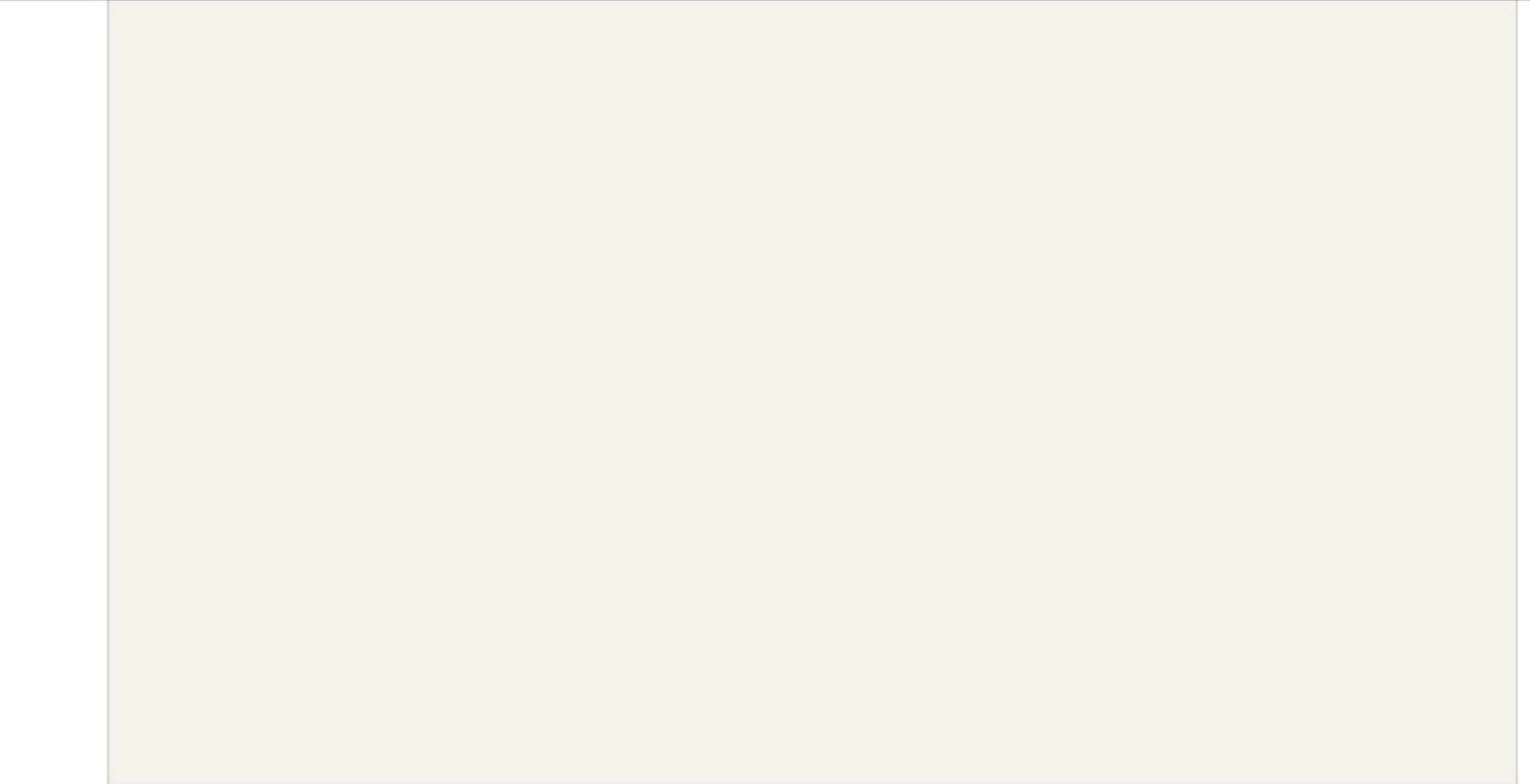
THE

500

GREATEST
ALBUMS
OF ALL TIME



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Creating SVG</title>
6     <link rel="stylesheet" href="main.css">
7     <script type="text/javascript" src="d3.min.js"></script>
8 </head>
9 <body>
10
11 <script>
12     var w = 800;
13     var h = 450;
14     var data = [12, 485, 337, 193, 79, 52, 20, 16, 30, 4, 7, 0.1];
15     var svg = d3.select("body").append("svg")
16         .attr("id", "chart")
17         .attr("width", w)
18         .attr("height", h);
19 </script>
20 </body>
21 </html>
```



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Creating the bars</title>
6     <link rel="stylesheet" href="main.css">
7     <script type="text/javascript" src="d3.min.js"></script>
8 </head>
9 <body>
10
11 <script>
12     var w = 800;
13     var h = 450;
14     var data = [12, 485, 337, 193, 79, 52, 20, 16, 30, 4, 7, 0.1];
15     var svg = d3.select("body").append("svg")
16         .attr("id", "chart")
17         .attr("width", w)
18         .attr("height", h);
19     svg.selectAll(".bar")
20         .data(data)
21         .enter()
22         .append("rect")
23         .attr("class", "bar")
24         .attr("x", 0)
25         .attr("y", function(d,i){
26             return i * 20;
27         })
28         .attr("width", function(d,i){
29             return d;
30         })
31         .attr("height", 19)
32     </script>
33 </body>
34 </html>
```



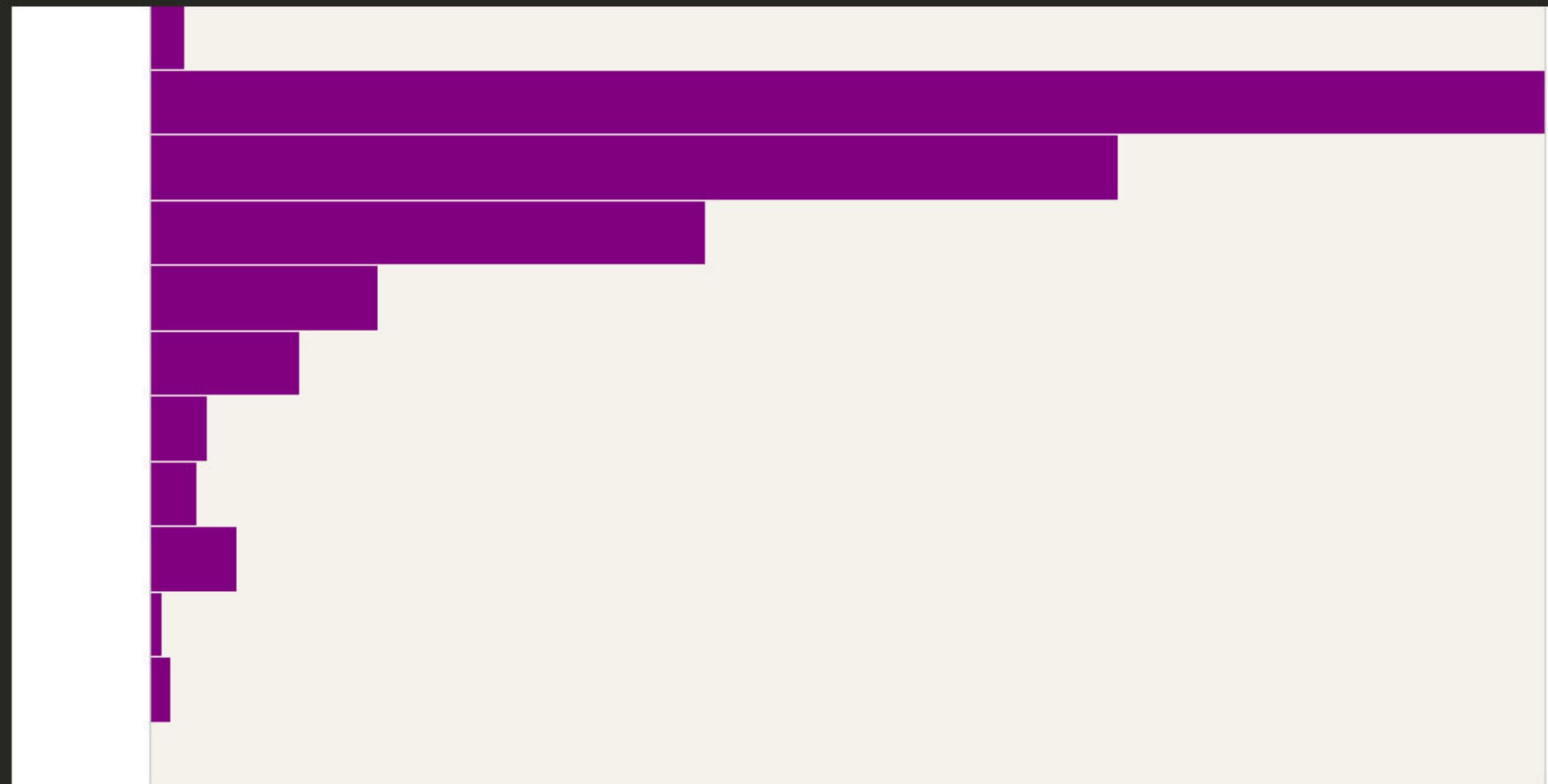
```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Scaling Data</title>
6     <link rel="stylesheet" href="main.css">
7     <script type="text/javascript" src="d3.min.js"></script>
8 </head>
9 <body>
10
11 <script>
12     var w = 800;
13     var h = 450;
14     var data =[12,485,337,193,79,52,20,16,30,4,7,0.1];
15     var x = d3.scale.linear()
16         .domain([0,d3.max(data)])
17         .range([0,w]);
18     var y = d3.scale.linear()
19         .domain([0,data.length])
20         .range([0,h]);
21     var svg = d3.select("body").append("svg")
22         .attr("id", "chart")
23         .attr("width", w)
24         .attr("height", h);
25     svg.selectAll(".bar")
26         .data(data)
27         .enter()
28         .append("rect")
29         .attr("class", "bar")
30         .attr("x", 0)
31         .attr("y", function(d,i){
32             return y(i);
33         })
34         .attr("width", function(d,i){
35             return x(d);
36         })
37         .attr("height", function(d,i){
38             return y(1)-1;
39         })
40     </script>
41 </body>
42 </html>
```



```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <meta charset="UTF-8">
5     <title>Styling</title>
6     <link rel="stylesheet" href="main.css">
7     <script type="text/javascript" src="d3.min.js"></script>
8 </head>
9 <body>
10
11 <script>
12     var w = 800;
13     var h = 450;
14     var data = [12, 485, 337, 193, 79, 52, 20, 16, 30, 4, 7, 0.1];
15     var x = d3.scale.linear()
16         .domain([0,d3.max(data)])
17         .range([0,w]);
18     var y = d3.scale.linear()
19         .domain([0,data.length])
20         .range([0,h]);
21     var svg = d3.select("body").append("svg")
22         .attr("id", "chart")
23         .attr("width", w)
24         .attr("height", h);
25     svg.selectAll(".bar")
26         .data(data)
27         .enter()
28         .append("rect")
29         .classed("bar", true)
30         .attr("x", 0)
31         .attr("y", function(d,i){
32             return y(i);
33         })
34         .attr("width", function(d,i){
35             return x(d);
36         })
37         .attr("height", function(d,i){
38             return y(1)-1;
39         })
40     </script>
41 </body>
42 </html>
```



```
1 body,html{
2     margin: 0;
3     padding: 0;
4     font-family: "Arial", sans-serif;
5     font-size: 0.95em;
6     text-align: center;
7 }
8 #chart{
9     background-color: #F5F2EB;
10    border: 1px solid #CCC;
11 }
12 .bar{
13     fill: purple;
14     shape-rendering: crispEdges;
15 }
```



```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Adding Text</title>
6   <link rel="stylesheet" href="main.css">
7   <script type="text/javascript" src="d3.min.js"></script>
8 </head>
9 <body>
10 <script>
11   var w = 800;
12   var h = 450;
13   var data =[12,485,337,193,79,52,20,16,30,4,7,0.1];
14   var x = d3.scale.linear()
15     .domain([0,d3.max(data)])
16     .range([0,w]);
17   var y = d3.scale.linear()
18     .domain([0,data.length])
19     .range([0,h]);6
20   var svg = d3.select("body").append("svg")
21     .attr("id", "chart")
22     .attr("width", w)
23     .attr("height", h);
24   svg.selectAll(".bar")
25     .data(data)
26     .enter()
27     .append("rect")
28     .classed("bar", true)
29     .attr("x", 0)
30     .attr("y", function(d,i){
31       return y(i);
32     })
33     .attr("width", function(d,i){
34       return x(d);
35     })
36     .attr("height", function(d,i){
37       return y(1)-1;
38     });
39   svg.selectAll(".bar-label")
40     .data(data)
41     .enter()
42     .append("text")
43     .classed("bar-label", true)
44     .attr("x", function(d,i){
45       return x(d);
46     })
47     .attr("dx", -4)
48     .attr("y", function(d,i){
49       return y(i);
50     })
51     .attr("dy", function(d,i){
52       return y(1)/1.5+2;
53     })
54     .text(function(d,i){
55       return d;
56     });
57   </script>
58 </body>
59 </html>

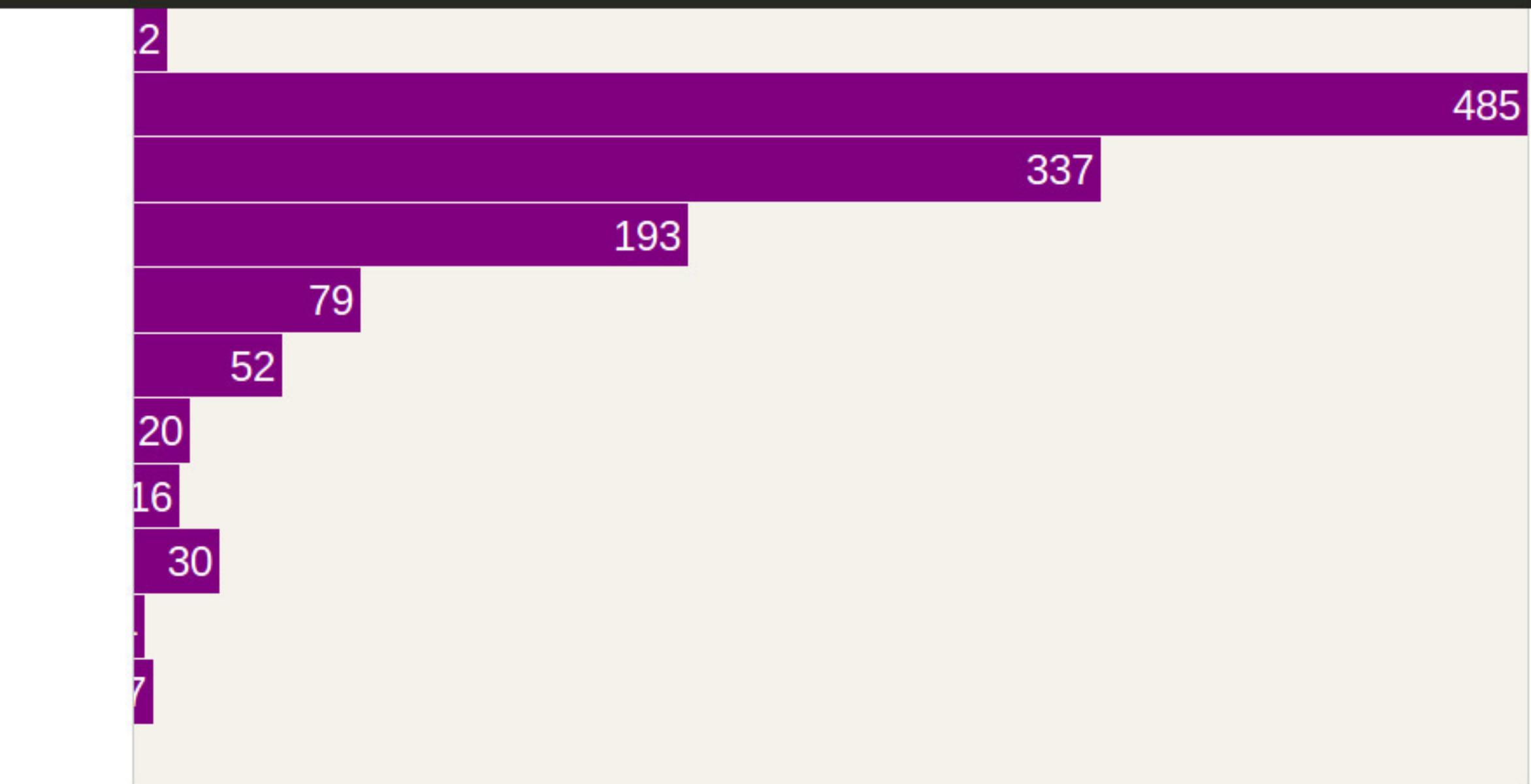
```



```

1 body,html{
2   margin: 0;
3   padding: 0;
4   font-family: "Arial", sans-serif;
5   font-size: 0.95em;
6   text-align: center;
7 }
8 #chart{
9   background-color: #F5F2EB;
10  border: 1px solid #CCC;
11 }
12 .bar{
13   fill: purple;
14   shape-rendering: crispEdges;
15 }
16 .bar-label{
17   fill: white;
18   text-anchor:end;
19   font-size: 24px;
20 }

```



```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <title>Adding flexibility</title>
6      <link rel="stylesheet" href="main.css">
7      <script type="text/javascript" src="d3.min.js"></script>
8  </head>
9  <body>
10 
11     <script>
12         var w = 800;
13         var h = 450;
14         var data = [12, 485, 337, 193, 79, 52, 20, 16, 30, 4, 7, 0.1];
15         var x = d3.scale.linear()
16             .domain([0,d3.max(data)])
17             .range([0,w]);
18         var y = d3.scale.linear()
19             .domain([0,data.length])
20             .range([0,h]);
21         var svg = d3.select("body").append("svg")
22             .attr("id", "chart")
23             .attr("width", w)
24             .attr("height", h);
25 
26         function plot(params){
27             this.selectAll(".bar")
28                 .data(params.data)
29                 .enter()
30                 .append("rect")
31                 .classed("bar", true)
32                 .attr("x", 0)
33                 .attr("y", function(d,i){
34                     return y(i);
35                 })
36                 .attr("width", function(d,i){
37                     return x(d);
38                 })
39                 .attr("height", function(d,i){
40                     return y(1)-1;
41                 });
42             this.selectAll(".bar-label")
43                 .data(params.data)
44                 .enter()
45                 .append("text")
46                 .classed("bar-label", true)
47                 .attr("x", function(d,i){
48                     return x(d);
49                 })
50                 .attr("dx", -4)
51                 .attr("y", function(d,i){
52                     return y(i);
53                 })
54                 .attr("dy", function(d,i){
55                     return y(1)/1.5+2;
56                 })
57                 .text(function(d,i){
58                     return d;
59                 });
60         }
61         plot.call(svg, {
62             data: data
63         });
64     </script>

```



```

1  body,html{
2      margin: 0;
3      padding: 0;
4      font-family: "Arial", sans-serif;
5      font-size: 0.95em;
6      text-align: center;
7  }
8  #chart{
9      background-color: #F5F2EB;
10     border: 1px solid #CCC;
11 }
12 .bar{
13     fill: purple;
14     shape-rendering: crispEdges;
15 }
16 .bar-label{
17     fill: white;
18     text-anchor:end;
19     font-size: 24px;
20 }

```

