

Verwandeln Sie Daten in Produkte

Neue Möglichkeiten für Startups, Mittelstand und Konzerne

21. März 2019



Timo Tautenhahn
Senior Solution Consultant
Tableau Software EMEA

Icon Legende



= Webinar



= Whitepaper



= Tiefergehende Informationen?

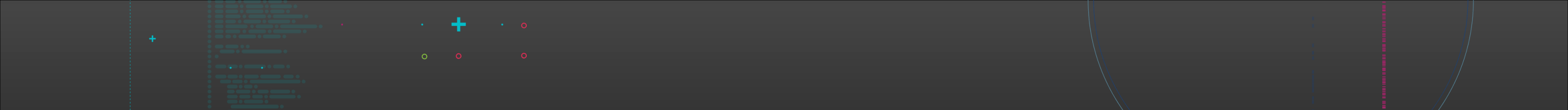


Tableau
Stand

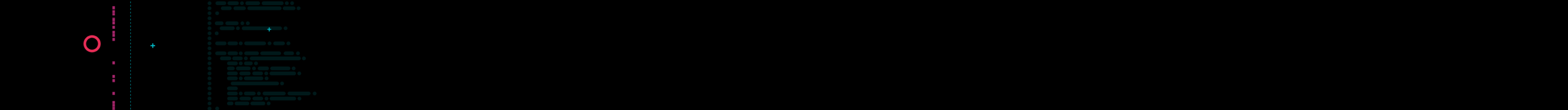




Let's go!



Adobe





Product Manager Data Monetization (m/f)

Language

DE EN

Drive with us the digital transformation of BASF and implement the future processes and ways of working with our data. Digital solutions, processes and services will play an essential role in our future business. This is why we founded BASF 4.0. We report to the CEO and the project head is our chief digital officer.

We are driven by organizational elements such as

Your Skills

e-commerce and/or digital marketing

Scrum, Kanban, SAFe

startup experience



Timo Tautenhahn
Senior Solution Consultant
Germany, Austria, Switzerland, Eastern Europe and CIS





Timo Tautenhahn

Senior Solution Consultant

Germany, Austria, Switzerland, Eastern Europe and CIS

tableaufans.com

Pages

1.008

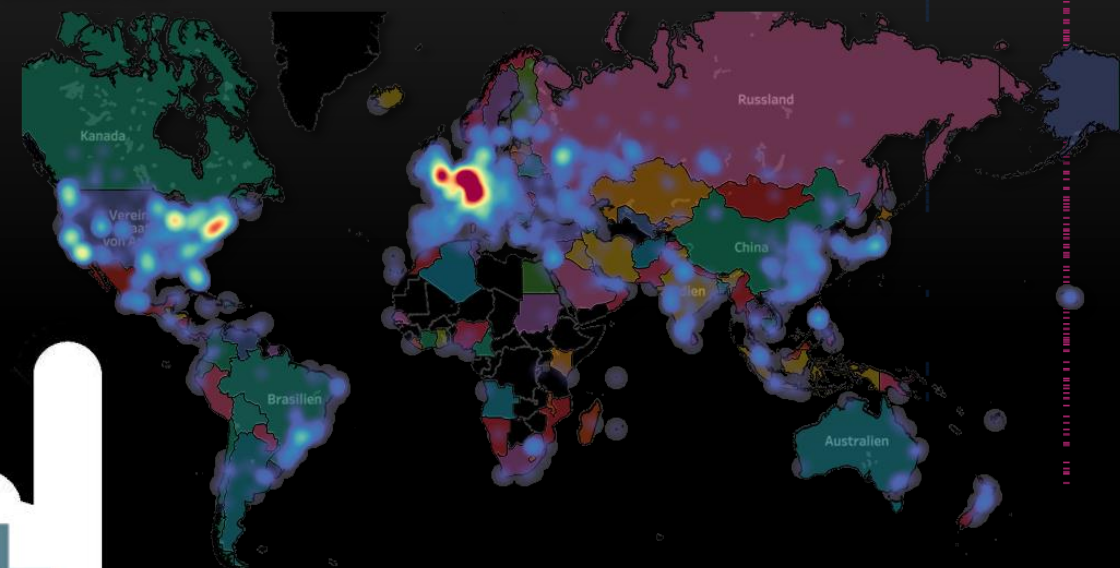
Countries

135

Cities

3.219

Global Overview



Data Connection: Sep 24th 2018

Session Flow

CRISP Research

Forecast Global Data Economy

225 Mrd €
2018 Umsatz Global für Datenprodukte

<https://www.tableau.com/de-de/learn/webinars/embedded-analytics-crisp-turn-data-into-products>

CUSTOMERS

DATA POLYSTAR

— Timo Tautenhahn —
Questions, comments, feelings?

ttautenhahn@tableau.com
www.tableufans.com

Big Picture

MAKE vs BUY

Customers

Inspiration

Q&A

MAKE

```
<code><pre>class="row-1 row-first row-last">
  <code><pre>class="col-1 col-first">
    <code><pre>class="view-field view-field-title">
      <code><pre>class="view-field view-field-cc-product">
        <code><pre>class="field-content">
          <code><pre>href="/yellowleather/products/show/tauty-1">
        </pre></code>
      </pre></code>
    </pre></code>
  </pre></code>
</pre></code>
class="col-2 col-last">
  <code><pre>class="view-field view-field-title">
    <code><pre>class="view-field view-field-cc-product">
      <code><pre>class="field-content">
        <code><pre>href="/yellowleather/products/show/tauty-1">
      </pre></code>
    </pre></code>
  </pre></code>
</pre></code>
class="view-field view-field-display-price">
</pre></code>
</pre></code>
```

BUY

User Interface

Platform

Inspiration

Automated Data Flow

Innovations

Session Flow

CRISP Research

Forecast Global Data Economy

Year	Revenue (Billion \$)
2014	10
2015	20
2016	40
2017	80
2018	150
2019	250
2020	350

225 Mrd €
2018 Umsatz Global für Datenprodukte

<https://www.tableau.com/de-de/learn/webinars/embedded-analytics-crisp-turn-data-into-products>

CUSTOMERS

DATA REGISTER

— Timo Tautenhahn

Questions, comments, feelings?

ttautenhahn@tableau.com
www.tableaufans.com

Big Picture

MAKE vs BUY

Customers

Inspiration

Q&A

MAKE

```
class "row-1 row-first row-last"
  class "col-1 col-first"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          href "/yellow/other/products/what/comp-1"
    class "col-2"
      class "view-field view-field-display-price"
  class "col-3 col-last"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          href "/yellow/other/products/what/comp-1"
    class "view-field view-field-display-price"
  class "col-4 col-last"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          href "/yellow/other/products/what/comp-1"
    class "view-field view-field-display-price"
```

BUY

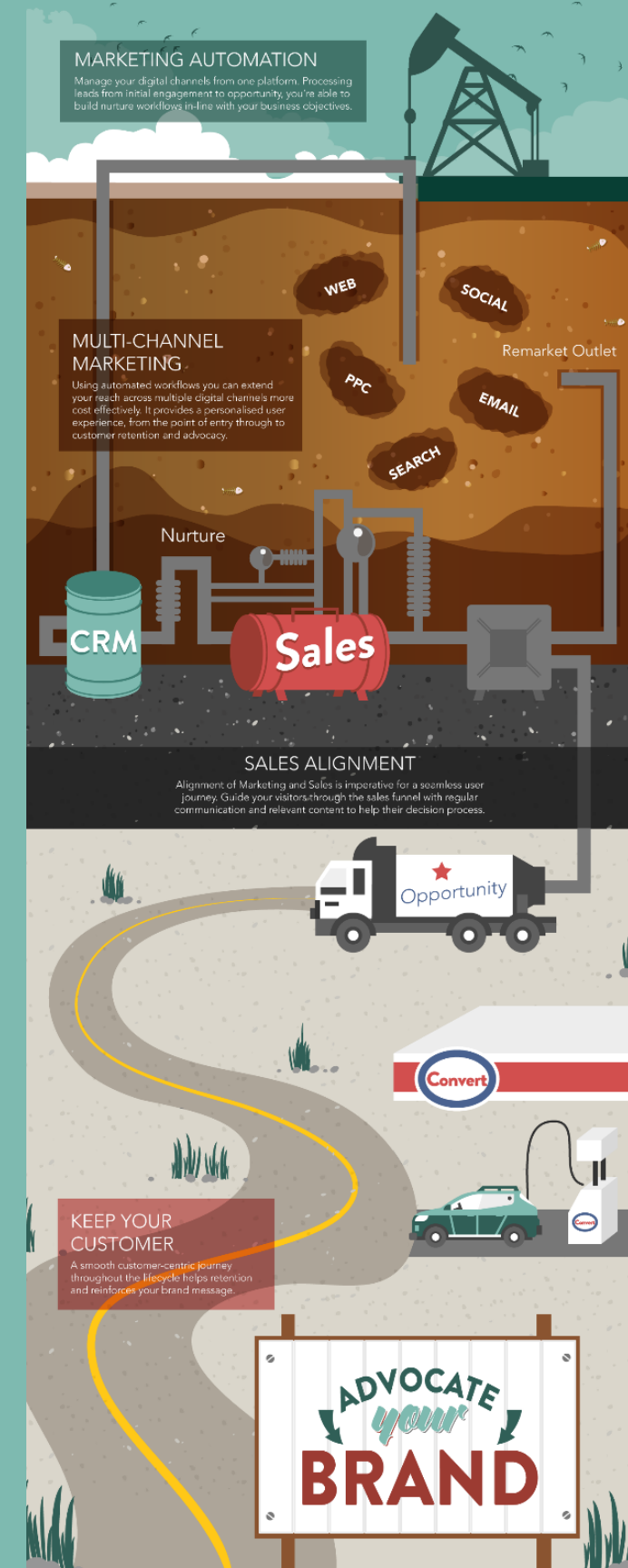
Inspiration

- User Interface
- Platform
- Automated Data Flow
- Innovations



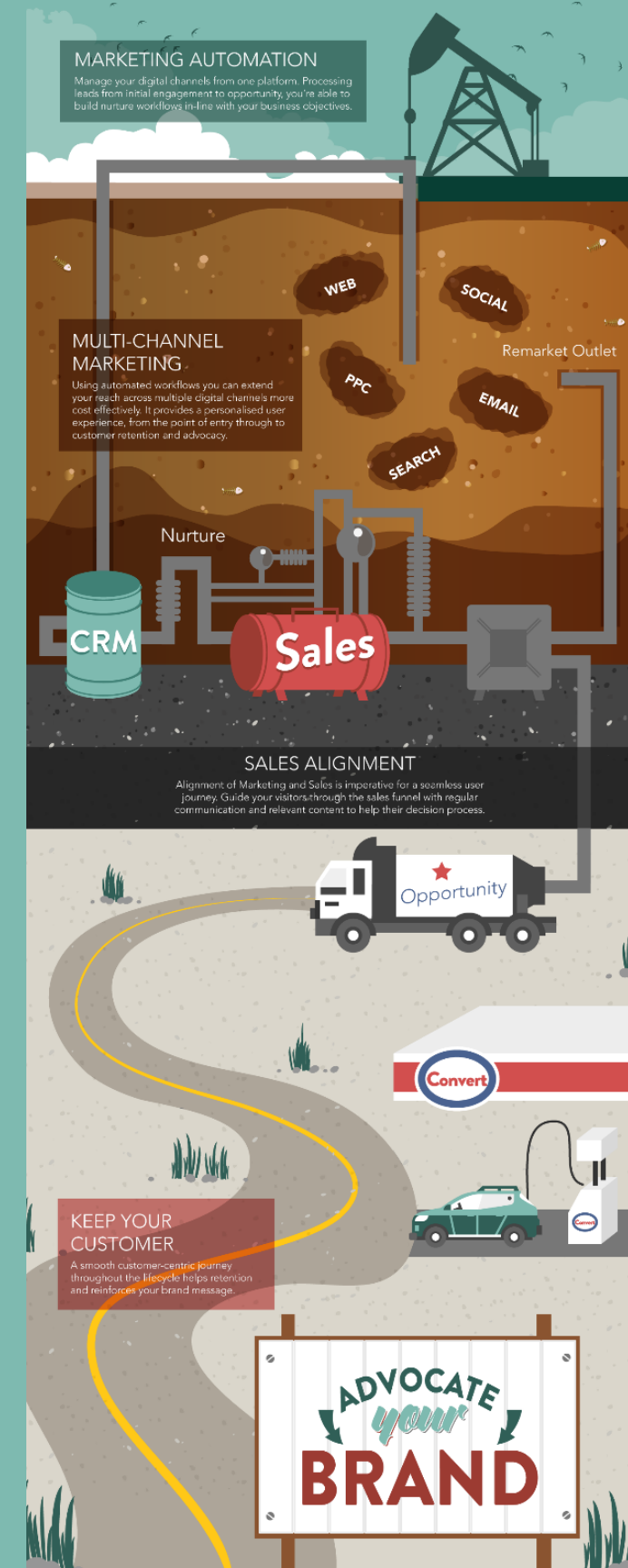
DATA IS THE NEW OIL

but do you have the resource to refine it?



DATA IS THE NEW OIL

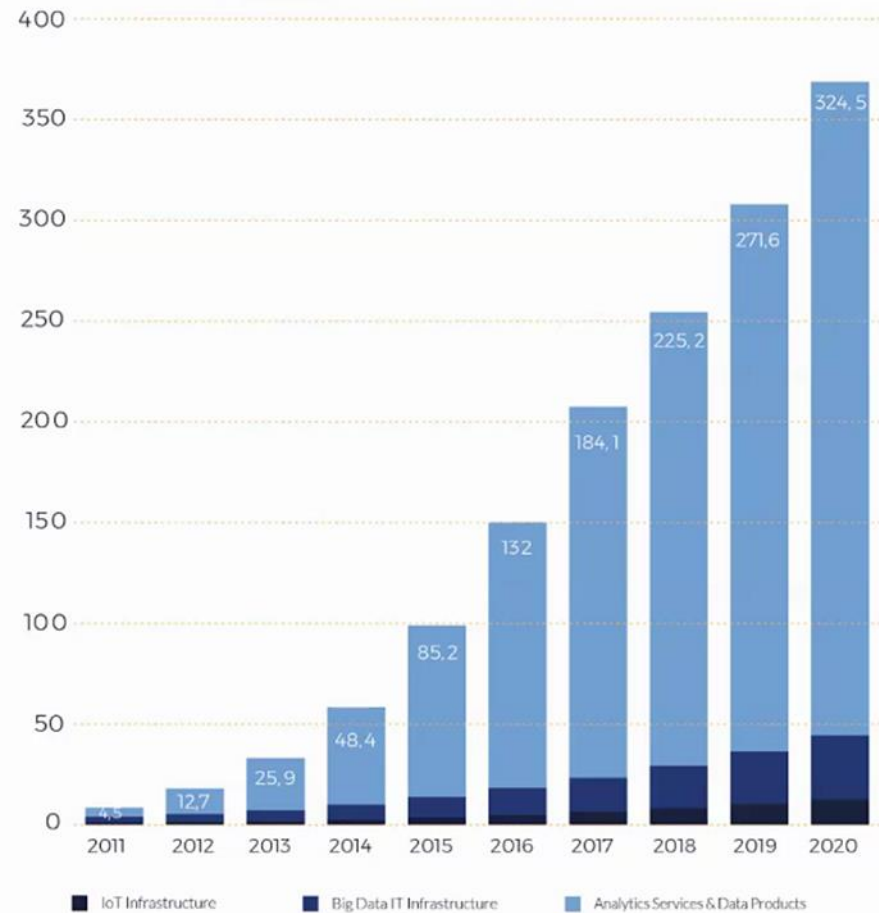
but do you have the resource to refine it?



CRISP Research

Forecast Global Data Economy

// Global Market for Analytics Services & Data Products (in Mrd. €)



// Quelle: © crisp research AG, 2018

learn. build. grow.



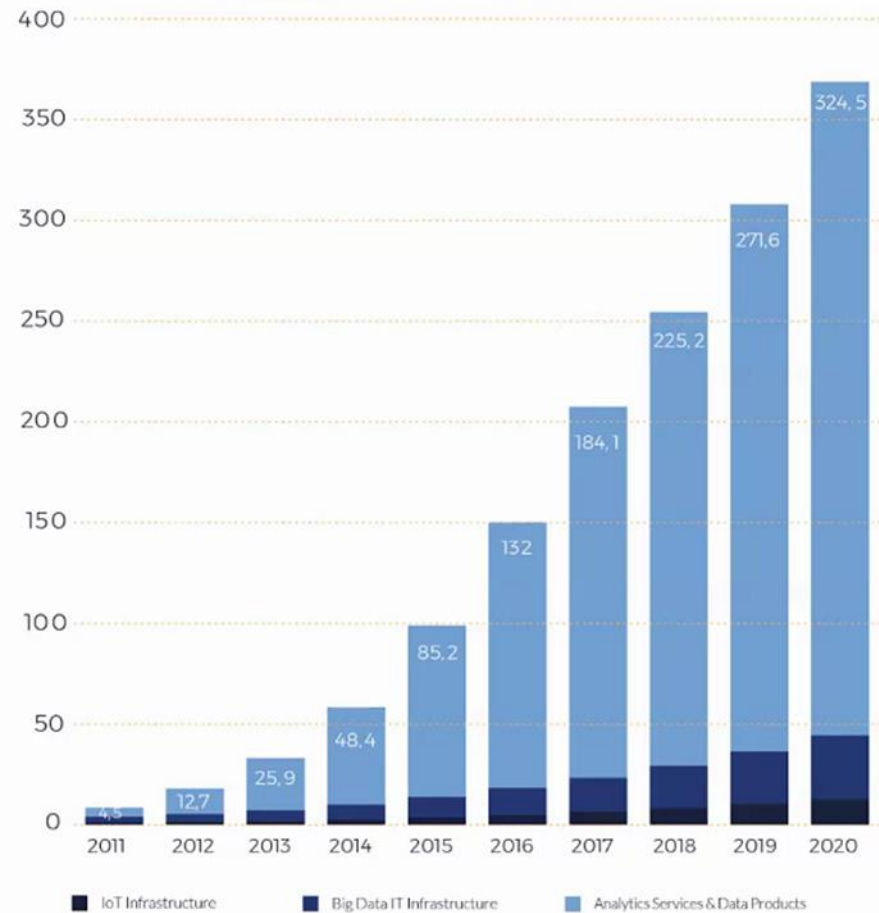
271,6 Mrd €

Globaler Umsatz von Datenprodukten in 2019

CRISP Research

Forecast Global Data Economy

// Global Market for Analytics Services & Data Products (in Mrd. €)



- **Innovationsprozesse**
 - Explorative, Strategic, ...
- **Geschäftsmodelltypen**
 - Digital Platform Analytics, APIs, ...



<https://www.tableau.com/learn/webinars/turn-data-products-data-scientist-data-business-owner>

MAKE



BUY

MAKE

- Manuell
- Zeitaufwendig
- Abhängig von Individuen
- Je mehr Datenquellen, desto schwieriger
- Fehleranfällig

Order Number	Customer Identifier	Order Status	Requested Pick-t	Tax Amount	Order Amount	↑ P
201766-6300005	C00005	Complete	6/6/2017	0.6	5	
201766-6300014	C00014	In Transit	6/6/2017	1.68	14	
201766-6300017	C00017	Processing	6/6/2017	2.04	17	
201766-6300024	C00024	Complete	6/6/2017	2.88	24	
201766-6300026	C00026	Complete	6/6/2017	3.12	26	
201766-6300054	C00054	In Transit	6/6/2017	6.48	54	
201766-6300055	C00055	Complete	6/6/2017	6.6	55	
201766-6300083	C00083	Complete	6/6/2017	9.96	83	
201766-6300105	C00105	In Transit	6/6/2017	12.6	105	
201766-6300106	C00106	In Transit	6/6/2017	12.72	106	
201766-6300115	C00115	Complete	6/6/2017	13.8	115	
201766-6300126	C00126	In Transit	6/6/2017	15.12	126	
201766-6300135	C00135	Complete	6/6/2017	16.2	135	
201766-6300138	C00138	In Transit	6/6/2017	16.56	138	
201766-6300141	C00141	In Transit	6/6/2017	16.92	141	
201766-6300142	C00142	In Transit	6/6/2017	17.04	142	
201766-6300144	C00144	In Transit	6/6/2017	17.28	144	
201766-6300152	C00152	In Transit	6/6/2017	18.24	152	
201766-6300157	C00157	In Transit	6/6/2017	18.84	157	
201766-6300161	C00161	In Transit	6/6/2017	19.32	161	
201766-6300165	C00165	In Transit	6/6/2017	19.8	165	
201766-6300171	C00171	In Transit	6/6/2017	20.52	171	
201766-6300177	C00177	In Transit	6/6/2017	21.24	177	
201766-6300185	C00185	In Transit	6/6/2017	22.2	185	
201766-6300187	C00187	In Transit	6/6/2017	22.44	187	
201766-6300191	C00191	In Transit	6/6/2017	22.92	191	
201766-6300197	C00197	In Transit	6/6/2017	23.64	197	
201766-6300222	C00222	In Transit	6/6/2017	26.64	222	
201766-6300224	C00224	In Transit	6/6/2017	26.88	224	
201766-6300225	C00225	In Transit	6/6/2017	27	225	
201766-6300232	C00232	In Transit	6/6/2017	27.84	232	
201766-6300235	C00235	Complete	6/6/2017	28.2	235	
201766-6300255	C00255	Complete	6/6/2017	30.6	255	
2017512-600416	C00416	Complete	5/12/2017	49.92	416	
2017515-600416	C00416	Complete	5/15/2017	49.92	416	
2017515-600417	C00417	Complete	5/15/2017	50.04	417	
2017516-600563	C00563	Complete	5/16/2017	67.56	563	
2017516-600566	C00566	Complete	5/16/2017	67.92	566	
2017516-600568	C00568	Complete	5/16/2017	68.16	568	
2017516-600568	C00568	Complete	5/16/2017	68.16	568	
2017516-600571	C00571	Complete	5/16/2017	68.52	571	
2017516-600596	C00596	Complete	5/16/2017	71.52	596	
2017516-600598	C00598	Complete	5/16/2017	71.76	598	
2017516-600611	C00611	Complete	5/16/2017	73.32	611	
2017516-600621	C00621	Complete	5/16/2017	74.52	621	
2017516-600625	C00625	Complete	5/16/2017	75	625	
2017516-600631	C00631	Complete	5/16/2017	75.72	631	

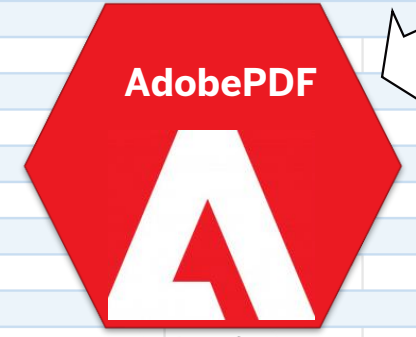
EXCEL



MAKE

- Manuell
- Zeitaufwendig
- Abhängig von Individuen
- Je mehr Datenquellen, desto schwieriger
- Fehleranfällig
- Noch mehr manueller Aufwand
- Limitiertes Datenvolumen
- Skalierungsproblem
- Statisch

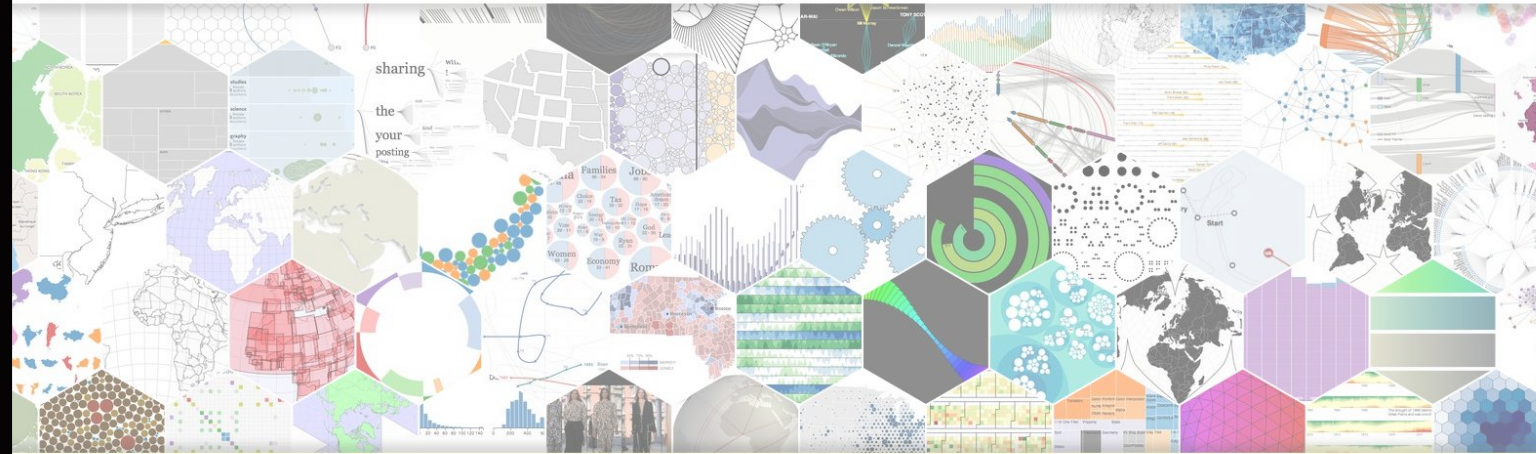
Order Number	Customer Identifier	Order Status	Requested Pick-t	Tax Amount	Order Amount	P
201766-6300005	C00005	Complete	6/6/2017	0.6	5	
201766-6300014	C00014	In Transit	6/6/2017	1.68	14	
201766-6300017	C00017	Processing	6/6/2017	2.04	17	
201766-6300024	C00024	Complete	6/6/2017	2.88	24	
201766-6300026	C00026	Complete	6/6/2017	3.12	26	
201766-6300054	C00054	In Transit	6/6/2017	6.48	54	
201766-6300055	C00055	Complete	6/6/2017	6.6	55	
201766-6300083	C00083	Complete	6/6/2017	9.96	83	
201766-6300105			6/6/2017	12.6	105	
201766-6300106			6/6/2017	12.72	106	
201766-6300115			6/6/2017	13.8	115	
201766-6300126			6/6/2017	15.12	126	
201766-6300135			6/6/2017	16.2	135	
201766-6300138			6/6/2017	16.56	138	
201766-6300141			6/6/2017	16.92	141	
201766-6300142			6/6/2017	17.04	142	
201766-6300144			6/6/2017	17.28	144	
201766-6300152			6/6/2017	18.24	152	
201766-6300157			6/6/2017	18.84	157	
201766-6300161			6/6/2017	19.32	161	
201766-6300165			6/6/2017		165	
201766-6300171			6/6/2017		171	
201766-6300177			6/6/2017		177	
201766-6300185			6/6/2017		185	
201766-6300187			6/6/2017		187	
201766-6300191	C00191	In Transit			191	
201766-6300197	C00197	In Transit			197	
201766-6300222	C00222	Complete			222	
201766-6300224	C00224				224	
201766-6300225	C00225				225	
201766-6300232	C00232		6/6/2017		232	
201766-6300235	C00235		6/6/2017	28.2	235	
201766-6300255	C00255		6/6/2017	30.6	255	
2017512-600416	C00416		5/12/2017	49.92	416	
2017515-600416	C00416		5/15/2017	49.92	416	
2017515-600417	C00417		5/15/2017	50.04	417	
2017516-600563	C00563		5/16/2017	67.56	563	
2017516-600566	C00566	Complete	5/16/2017	67.92	566	
2017516-600568	C00568	Complete	5/16/2017	68.16	568	
2017516-600568	C00568	Complete	5/16/2017	68.16	568	
2017516-600571	C00571	Complete	5/16/2017	68.52	571	
2017516-600596	C00596	Complete	5/16/2017	71.52	596	
2017516-600598	C00598	Complete	5/16/2017	71.76	598	
2017516-600611	C00611	Complete	5/16/2017	73.32	611	
2017516-600621	C00621	Complete	5/16/2017	74.52	621	
2017516-600625	C00625	Complete	5/16/2017	75	625	
2017516-600631	C00631	Complete	5/16/2017	75.72	631	



MAKE

- Programmierkenntnisse bei Erstellung
- Programmierkenntnisse bei Anpassungen
- Datenanbindung
- Data Governance
- Security
- Monitoring

D3 Data-Driven Documents



Like visualization and creative coding? Try interactive JavaScript notebooks in [Observable!](#)

D3.js is a JavaScript library for manipulating documents based on data. D3 helps you bring data to life using HTML, SVG, and CSS. D3's emphasis on web standards gives you the full capabilities of modern browsers without tying yourself to a proprietary framework, combining powerful visualization components and a data-driven approach to DOM manipulation.

[See more examples.](#)

Download the latest version (5.7.0) here:

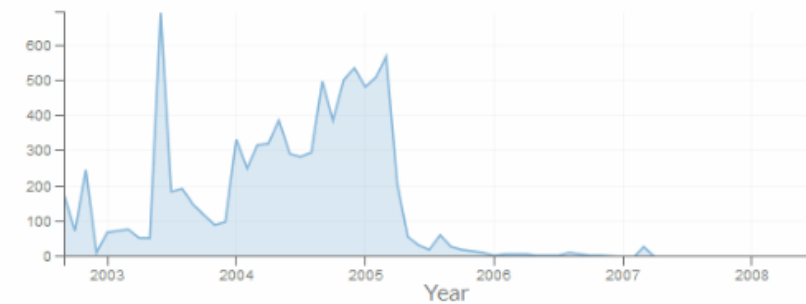
- [d3.zip](#)

To link directly to the latest release, copy this snippet:

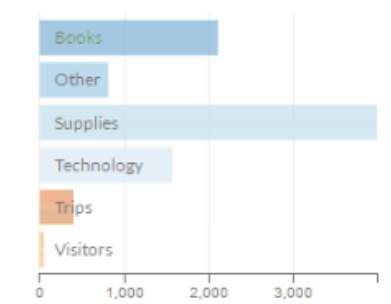
```
<script src="https://d3js.org/d3.v5.min.js"></script>
```

The full source and tests are also available for download on [GitHub](#).

Number of Donations



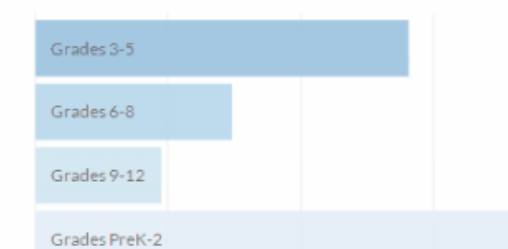
Donation Count for Resources



Funding Status



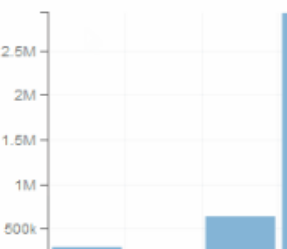
Donation Count by Grade

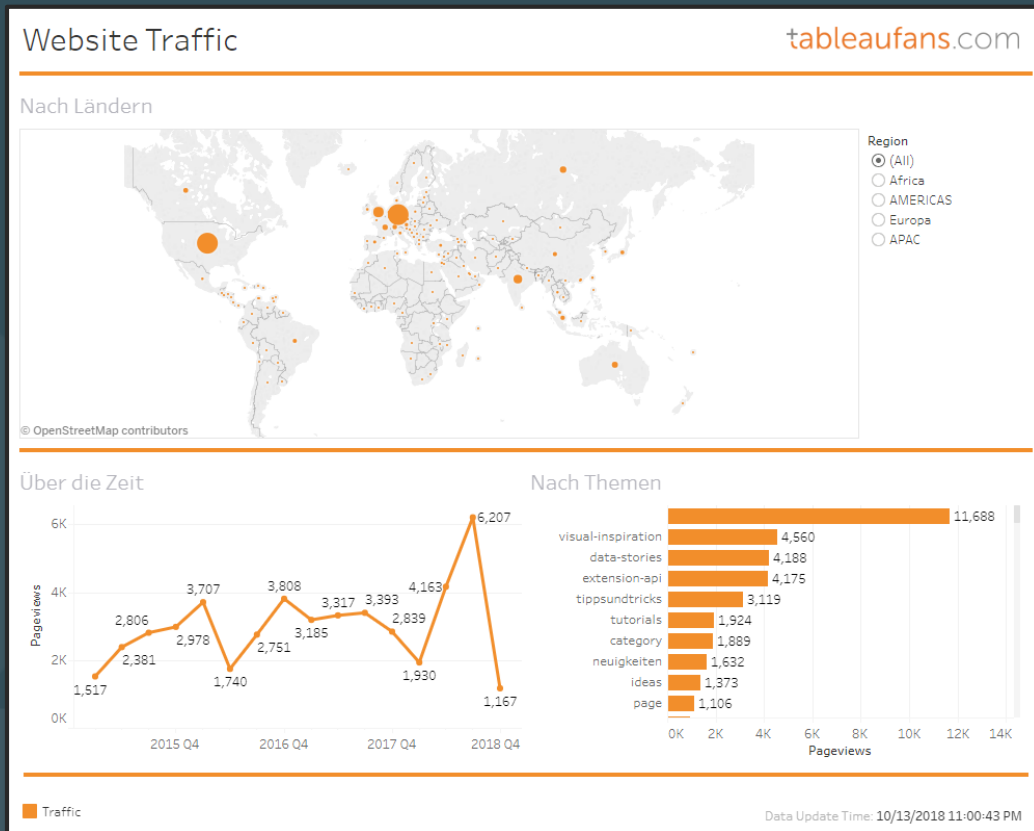


Donation Count by Poverty Level



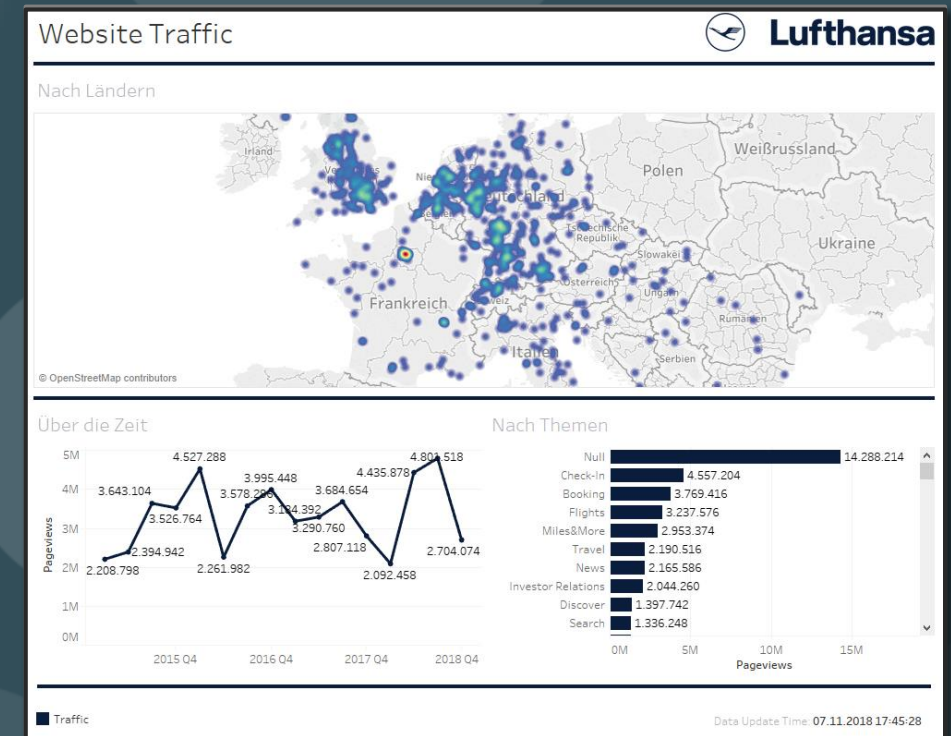
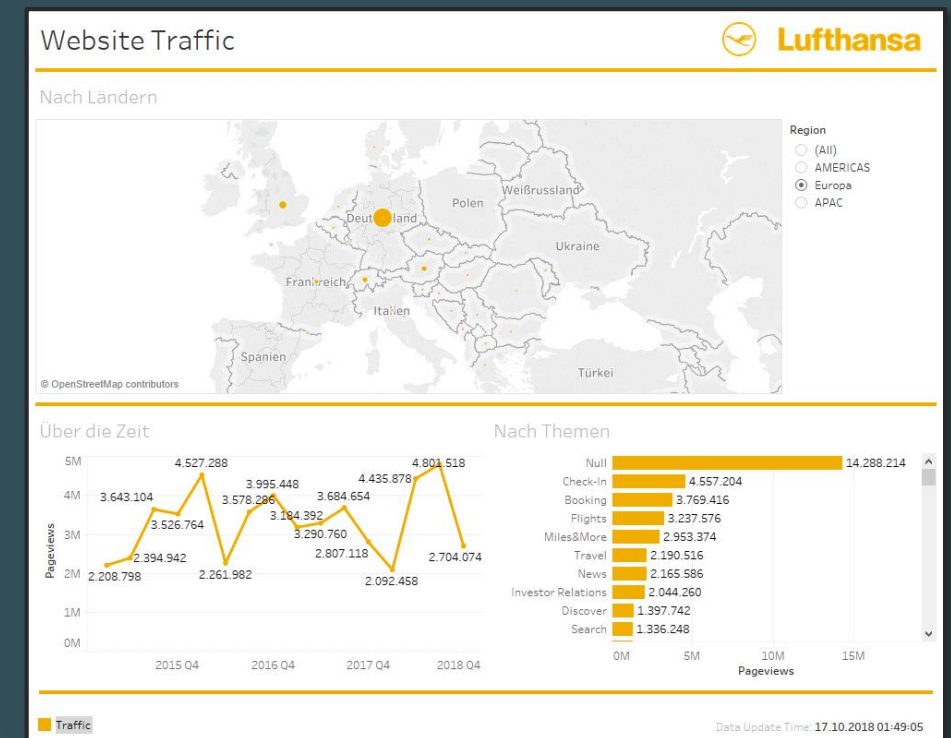
Donation Amount by State (\$)





5min DEMO

- Datenquelle austauschen
- Google Analytics
- Datenbank
- Look and Feel
- Logo
- Farben



MAKE

- Initialer Erstellungsaufwand
- Programmierkenntnisse
- Zeit für Anpassungen
- Datenquellen vereinen
- Abhängig von Individuen
- Datenmengen
- Security
- Integration
- Skalierbarkeit
- Monitoring
- Manuelle Bereitstellung
- Fehleranfälligkeit
- Mobile
- Time-to-Market

BUY

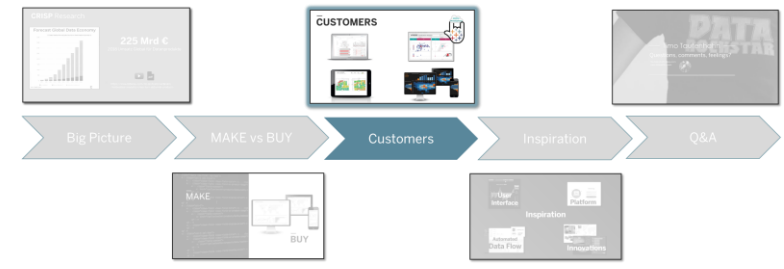
- Geschwindigkeit der Erstellung
- Anpassungen vom Fachbereich
- Security
- Monitoring
- Skalierung
- +100k User**
- Time-to-Market



 **questback**

MAKE

BUY



Siemens MindSphere

Siemens' next BIG THING

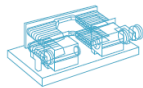
Milestones of a 170-year history

SIEMENS
Ingenuity for life

1816 – 1892
Company founder,
visionary and inventor



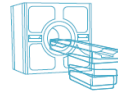
1866
The dynamo makes
electricity part of
everyday life



1959
SIMATIC makes
Siemens a leader in
automation technology



1983
First magnetic resonance
imaging scanner goes
into operation



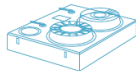
2012
Test operation of the
world's largest rotor for
offshore wind turbines



Werner von Siemens

Siemens innovations over the past 170 years

1847
Pointer telegraph
lays the foundation
of Siemens as a
global company



1925
Siemens electrifies
the Irish Free State
with a hydroelectric
power plant



1975
Breakthrough of
high-voltage direct
current (HVDC)
transmission



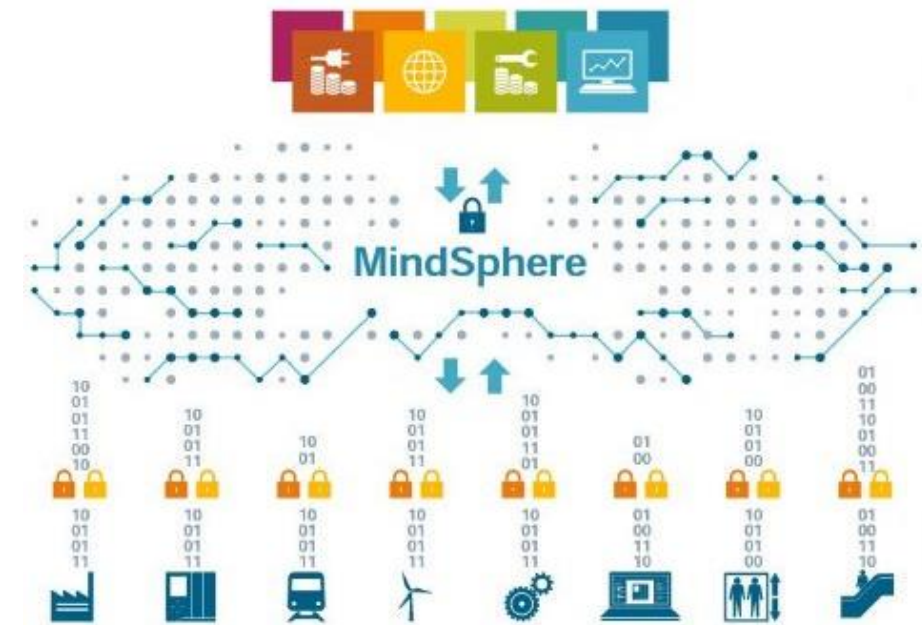
2010
TIA Portal takes
automation a stage
further



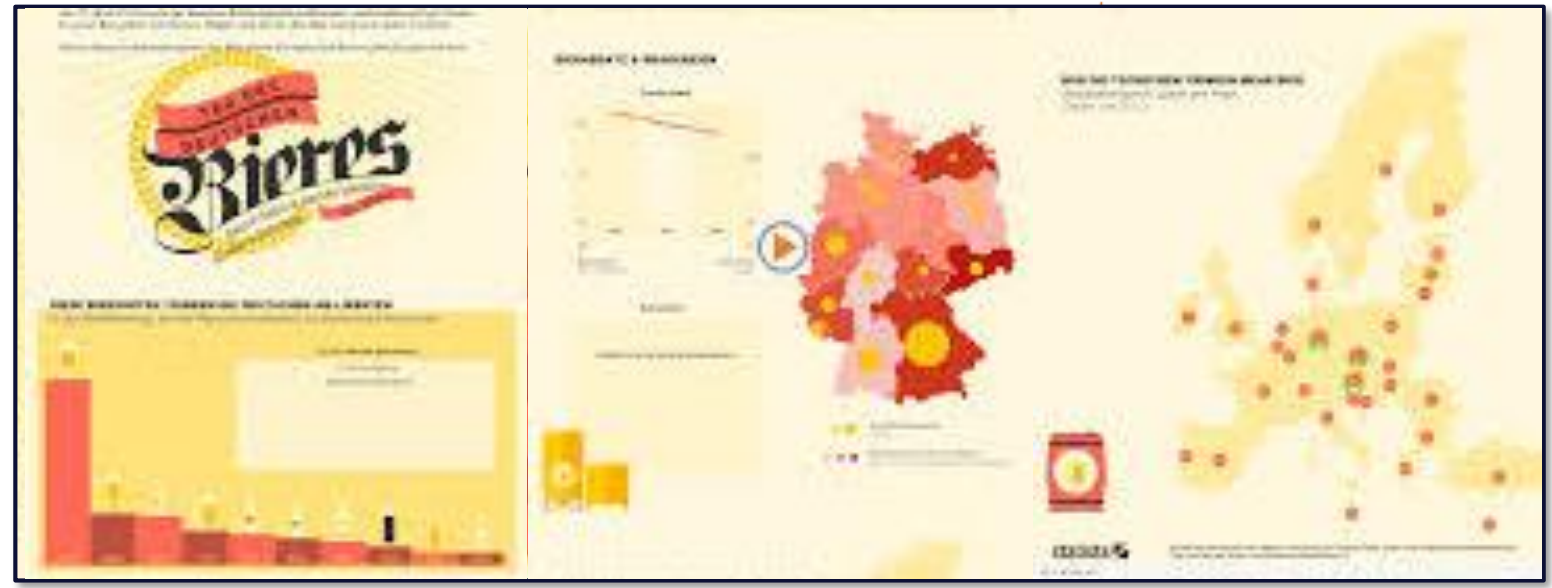
2017
MindSphere, the
cloud-based
operating system
for the Internet of
Things



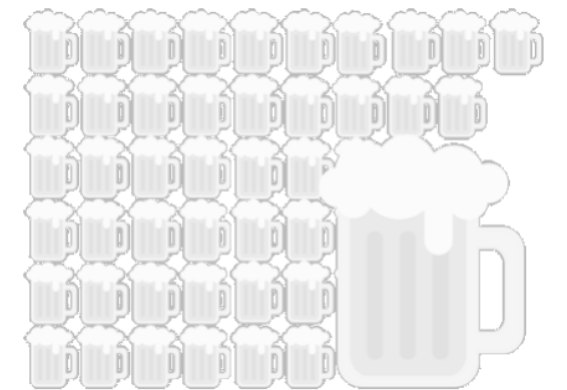
© Siemens AG 2018



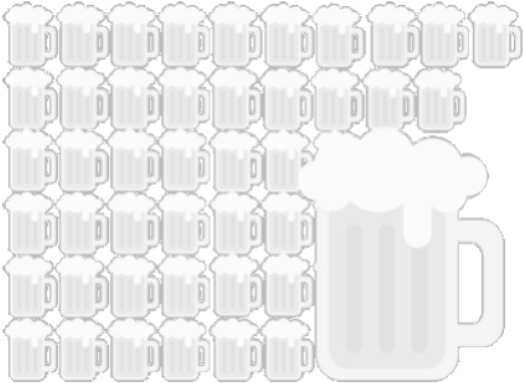
Siemens **MindSphere**



Siemens MindSphere



Siemens MindSphere

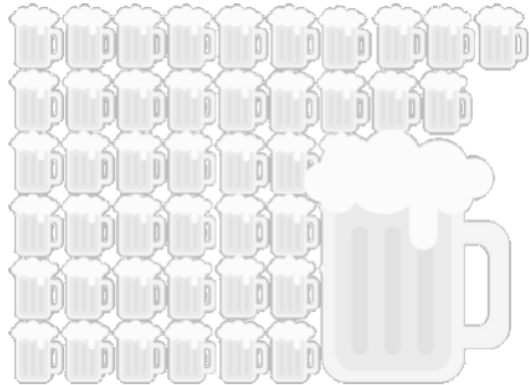



BreweryMachines

MachineBuilder

Customer

Siemens MindSphere



BreweryMachines 

MachineBuilder

Customer

Siemens MindSphere



MachineBuilder



Customer

Siemens MindSphere




BreweryMachines

MachineBuilder

Customer

Siemens MindSphere

BreweryMachines



MachineBuilder





Customer

Siemens MindSphere

BreweryMachines 


Service 

MachineBuilder

Customer

Siemens MindSphere

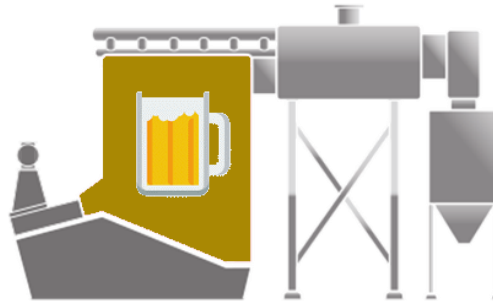



BreweryMachines

MachineBuilder

Customer

Siemens MindSphere



MachineBuilder

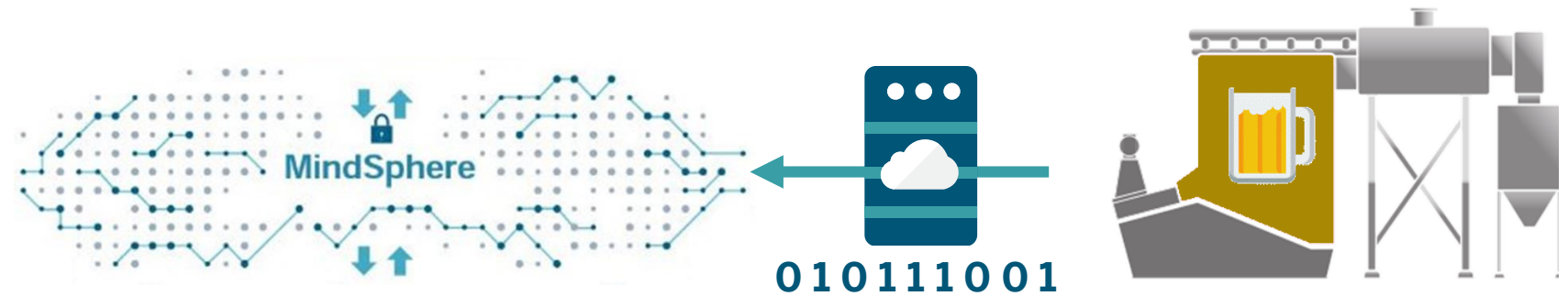
Siemens
MindSphere

Customer

Siemens MindSphere



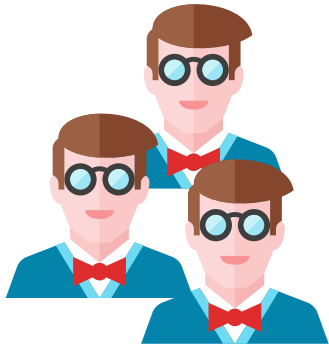
MachineBuilder



Siemens
MindSphere

Customer

Siemens MindSphere



Apps



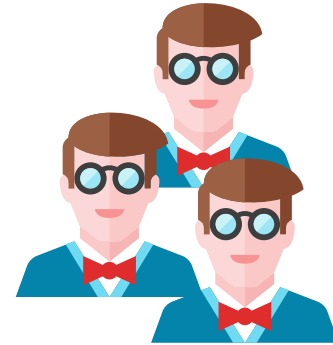
BreweryMachines

MachineBuilder

Siemens
MindSphere

Customer

Siemens MindSphere



Requires **Coding**



MachineBuilder

Siemens
MindSphere

Customer

Siemens MindSphere



MachineBuilder

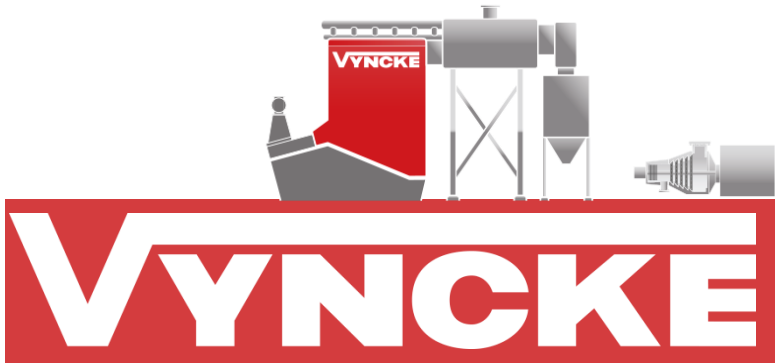


Siemens
MindSphere



Customer

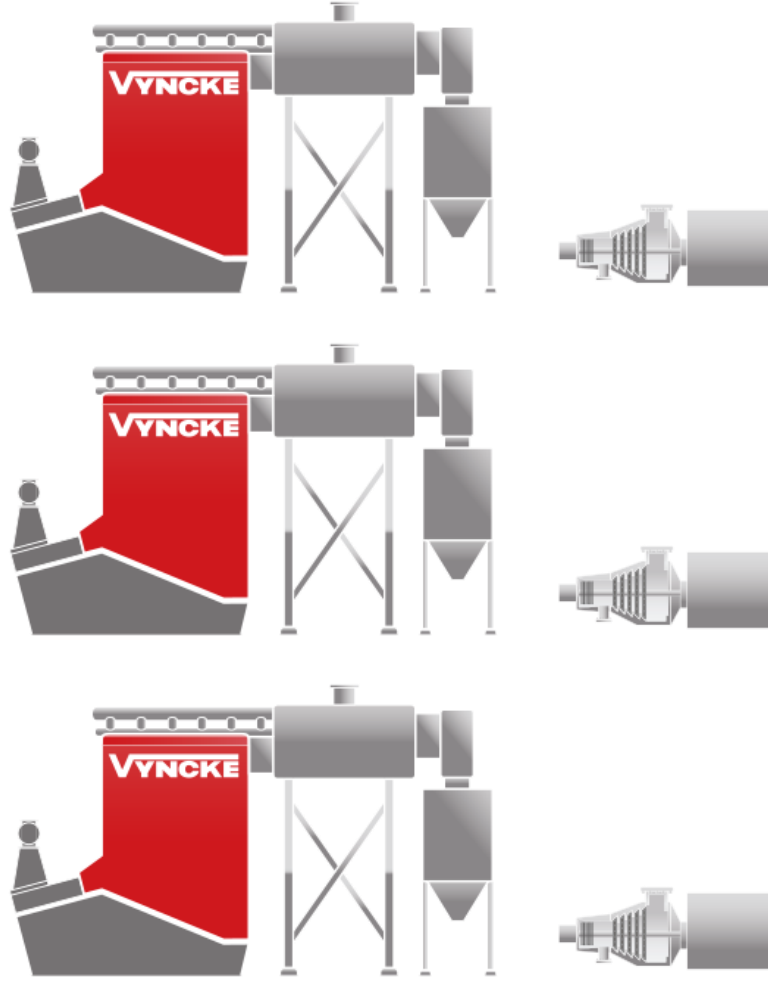
Siemens MindSphere



MachineBuilder



Siemens MindSphere



Customers

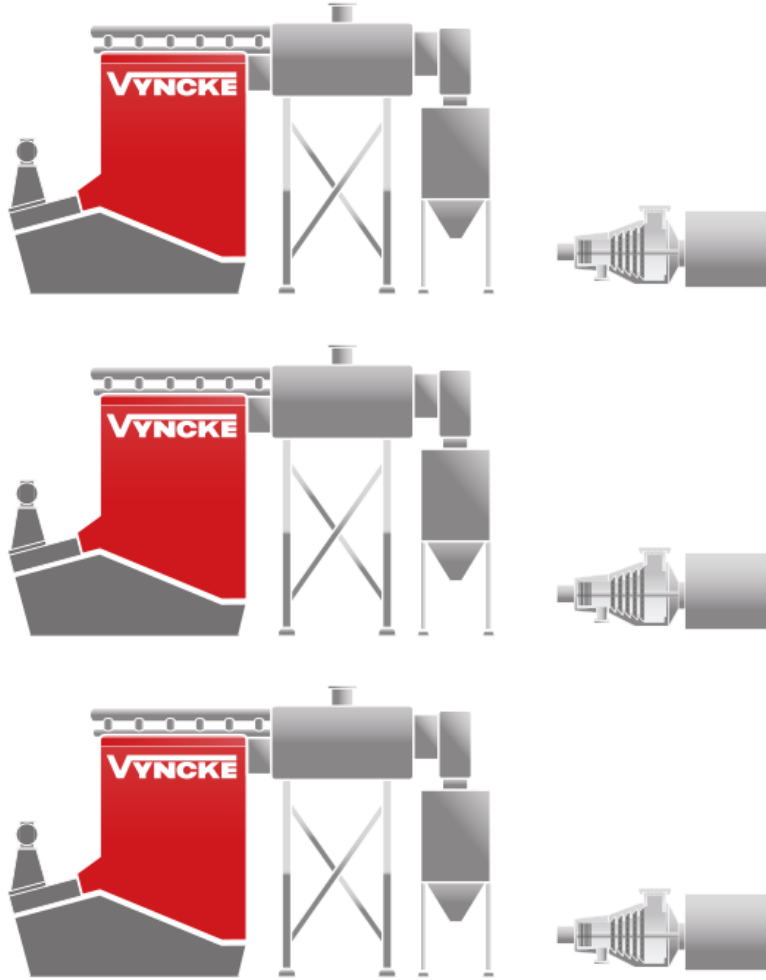
Siemens MindSphere



MachineBuilder

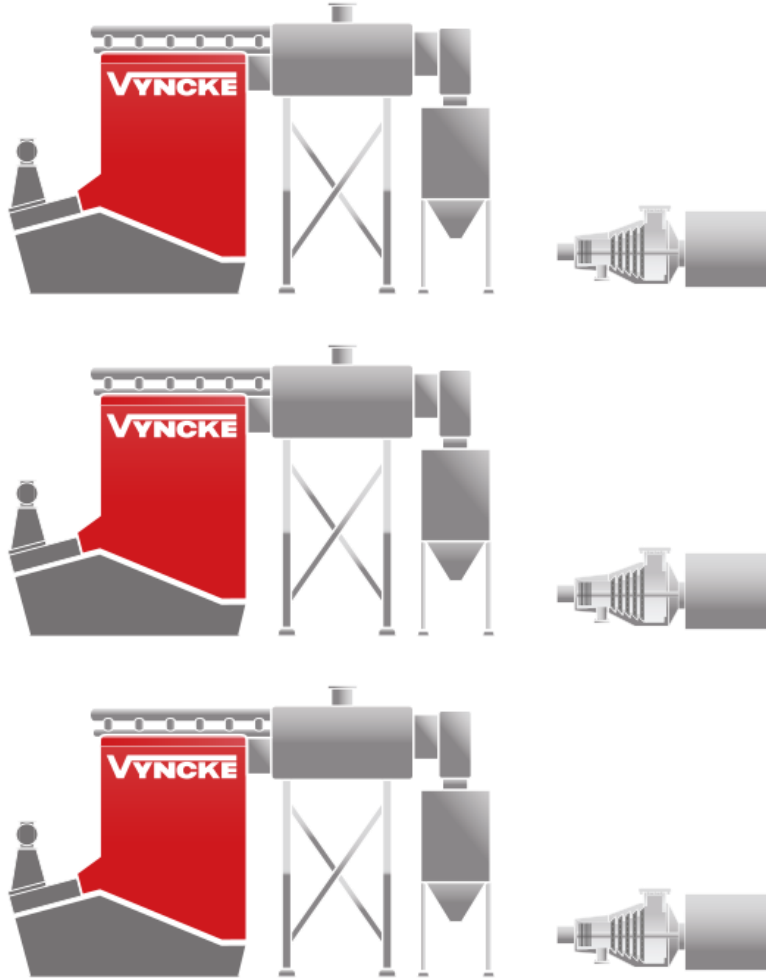


Siemens
MindSphere



Customers

Siemens MindSphere



MachineBuilder

Siemens
MindSphere

Customers

Siemens MindSphere



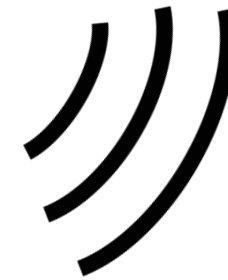
MachineBuilder

Siemens
MindSphere

Customers



Minodes





Minodes

Minodes

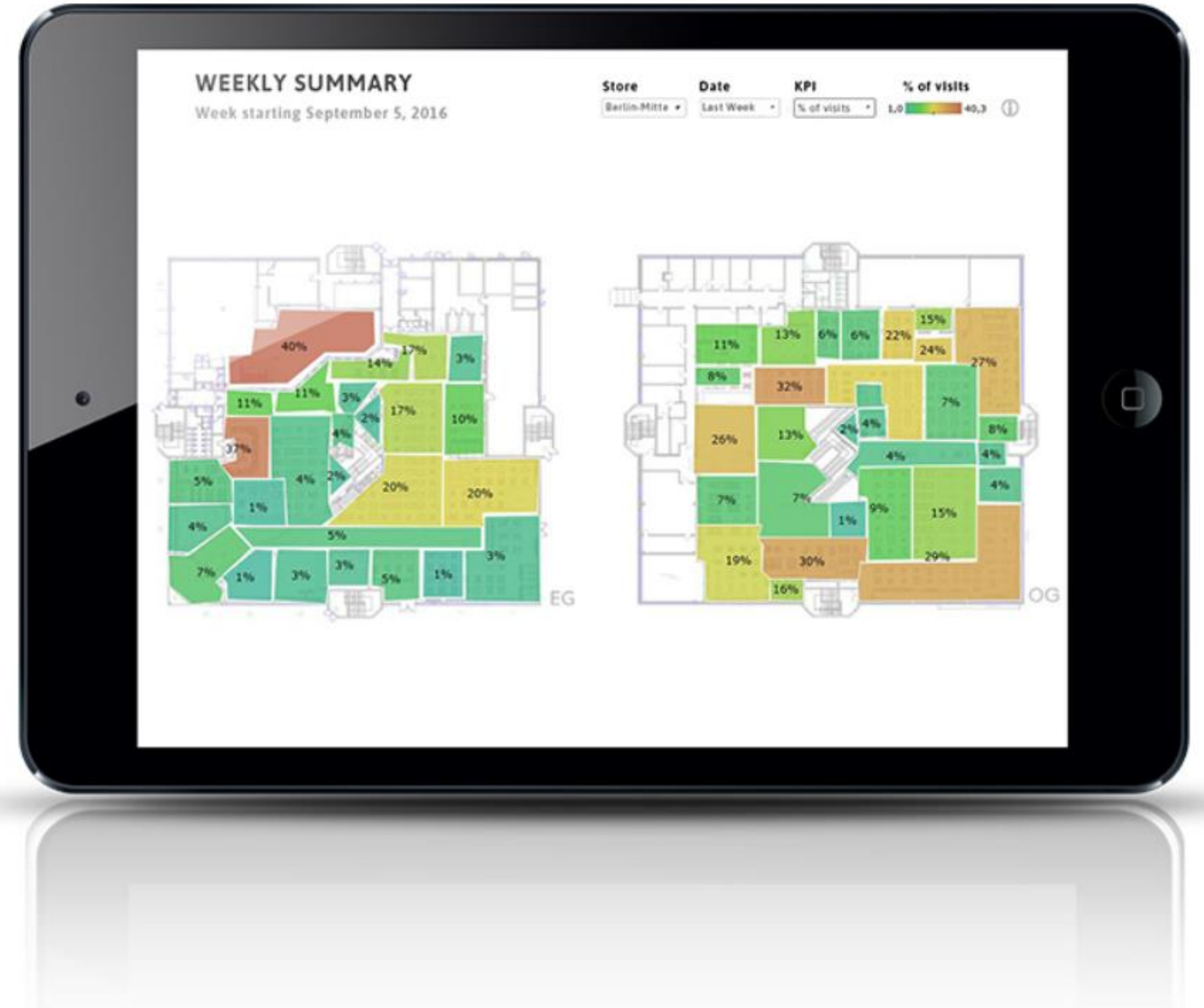




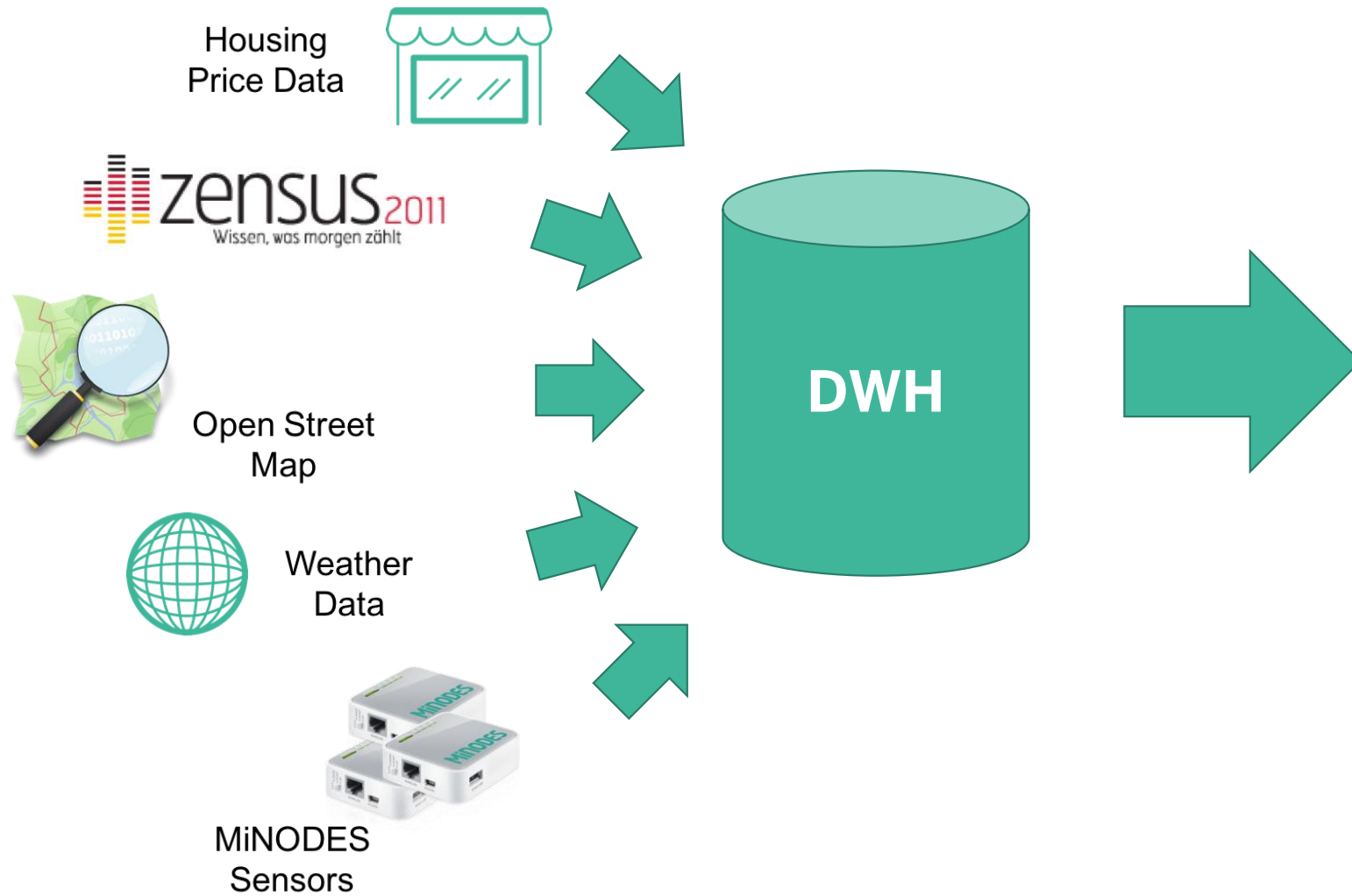
Tableau im Einsatz Retail Analytics im Einzelhandel

<https://www.tableau.com/de-de/learn/webinars/tableau-im-einsatz-retail-analytics-im-einzelhandel>

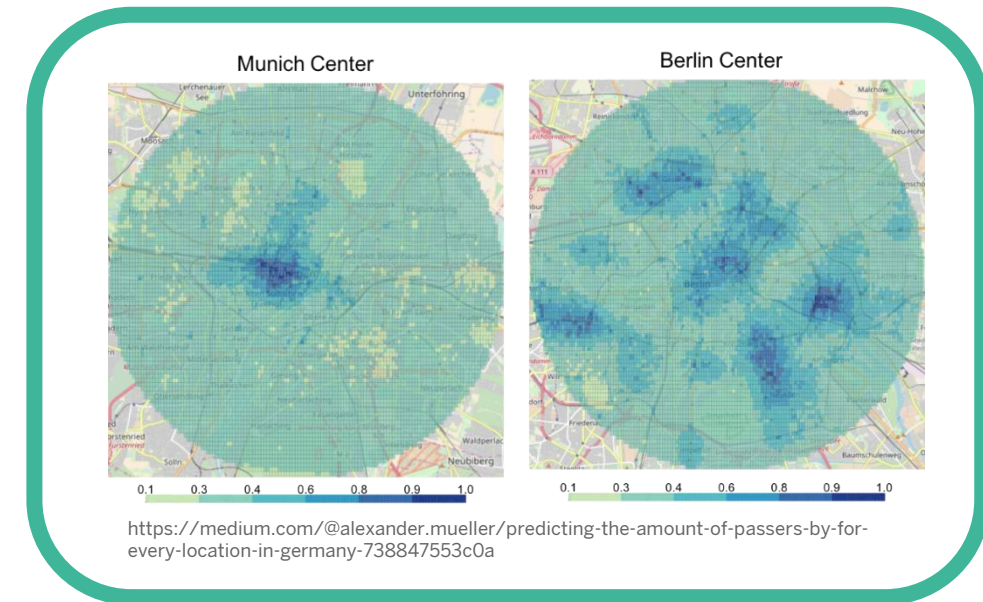
Minodes

A *Telefónica* NEXT COMPANY

Minodes



Webinar: Standortplanung



<https://www.tableau.com/de-de/learn/webinars/tableau-im-einsatz-analyse-von-mobilfunkdaten-zur-standortplanung-und-optimierung>

Session Flow

CRISP Research

Forecast Global Data Economy

225 Mrd €
2018 Umsatz Global für Datenprodukte

<https://www.tableau.com/de-de/learn/webinars/embedded-analytics-crisp-turn-data-into-products>

CUSTOMERS

DATA REGISTER

— Timo Tautenhahn

Questions, comments, feelings?

t.tautenhahn@tableau.com
www.tableaufans.com

Big Picture

MAKE vs BUY

Customers

Inspiration

Q&A

MAKE

```
class "row-1 row-first row-last"
  class "col-1 col-first"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          a href="/yellow/learn/products/what-is-embedded-analytics"
            Embedded Analytics
        /a
      /class
    /class
  /class
  class "col-2"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          a href="/yellow/learn/products/what-is-embedded-analytics"
            Embedded Analytics
        /a
      /class
    /class
  /class
  class "col-3 col-last"
    class "view-field view-field-title"
      class "view-field view-field-in-product"
        class "field-content"
          a href="/yellow/learn/products/what-is-embedded-analytics"
            Embedded Analytics
        /a
      /class
    /class
  /class
end
```

BUY

Inspiration

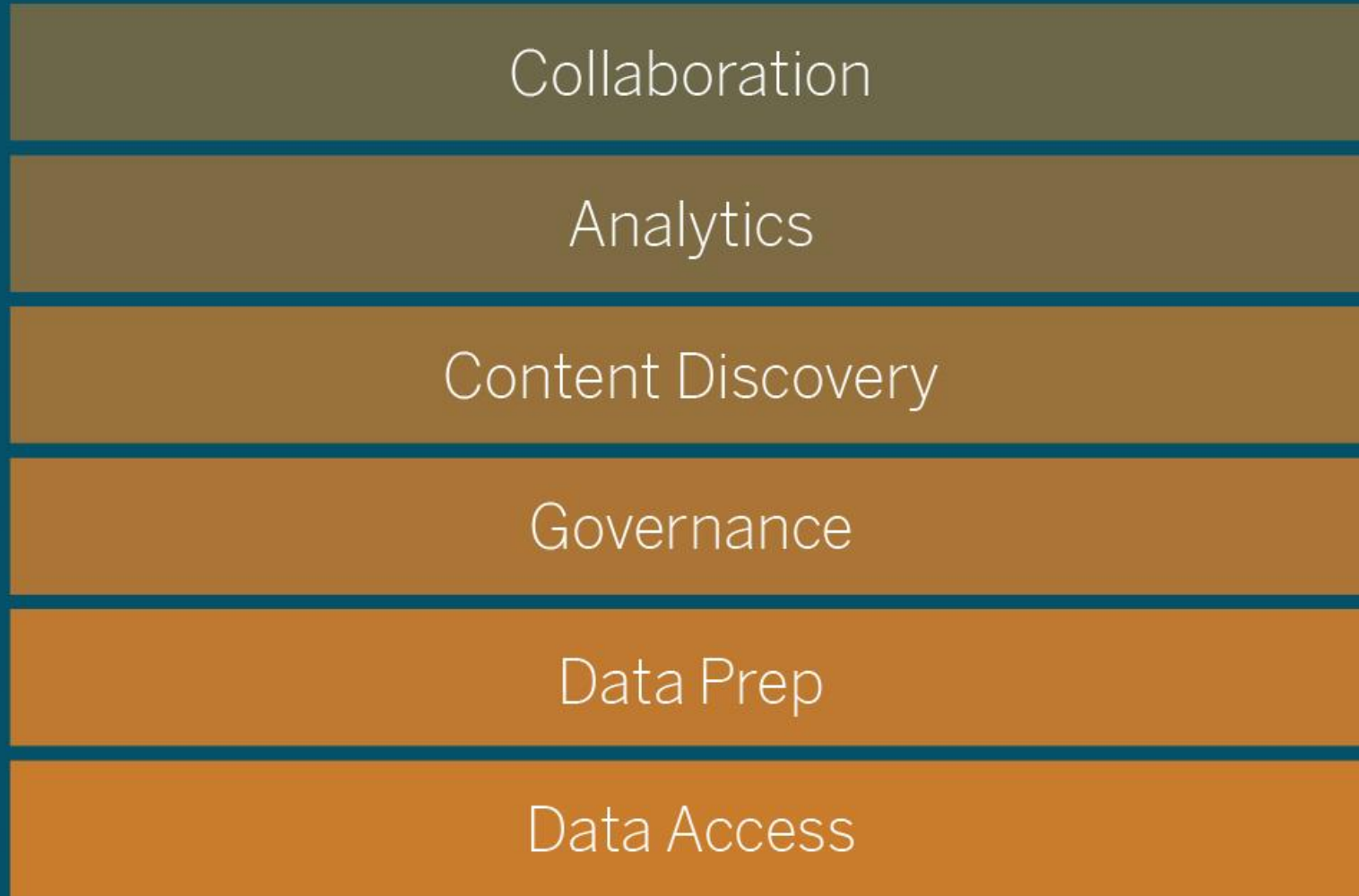
- User Interface
- Platform
- Automated Data Flow
- Innovations



INTERACT

- DESKTOP
- BROWSER
- MOBILE
- EMBEDDED

Security & Compliance



Extensibility & APIs

DEPLOYMENT

- ON-PREMISES
- CLOUD
- HOSTED
- WINDOWS
- LINUX
- MAC
- MULTI-TENANT

INTERACT

- DESKTOP
- BROWSER
- MOBILE
- EMBEDDED

Collaboration

Analytics

Content Discovery

Governance

Data Prep

Data Access

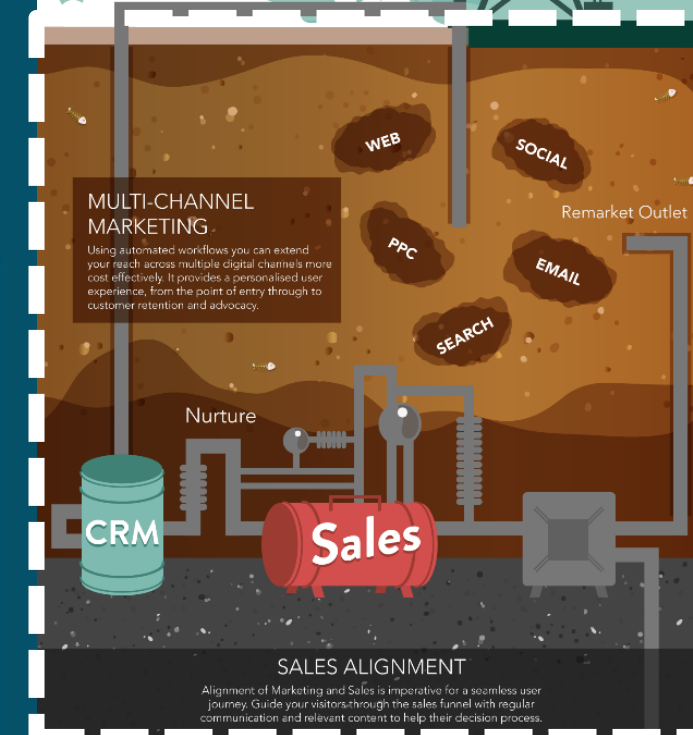
Security & Compliance

DEPLOYMENT

- ON-PREMISES
- CLOUD
- HOSTED
- WINDOWS
- LINUX
- MAC
- MULTI-TENANT

MARKETING AUTOMATION

Manage your digital channels from one platform. Processing leads from initial engagement to opportunity, you're able to build nurture workflows in-line with your business objectives.



ADVOCATE your BRAND

Tableau Prep helps people prepare data for analysis

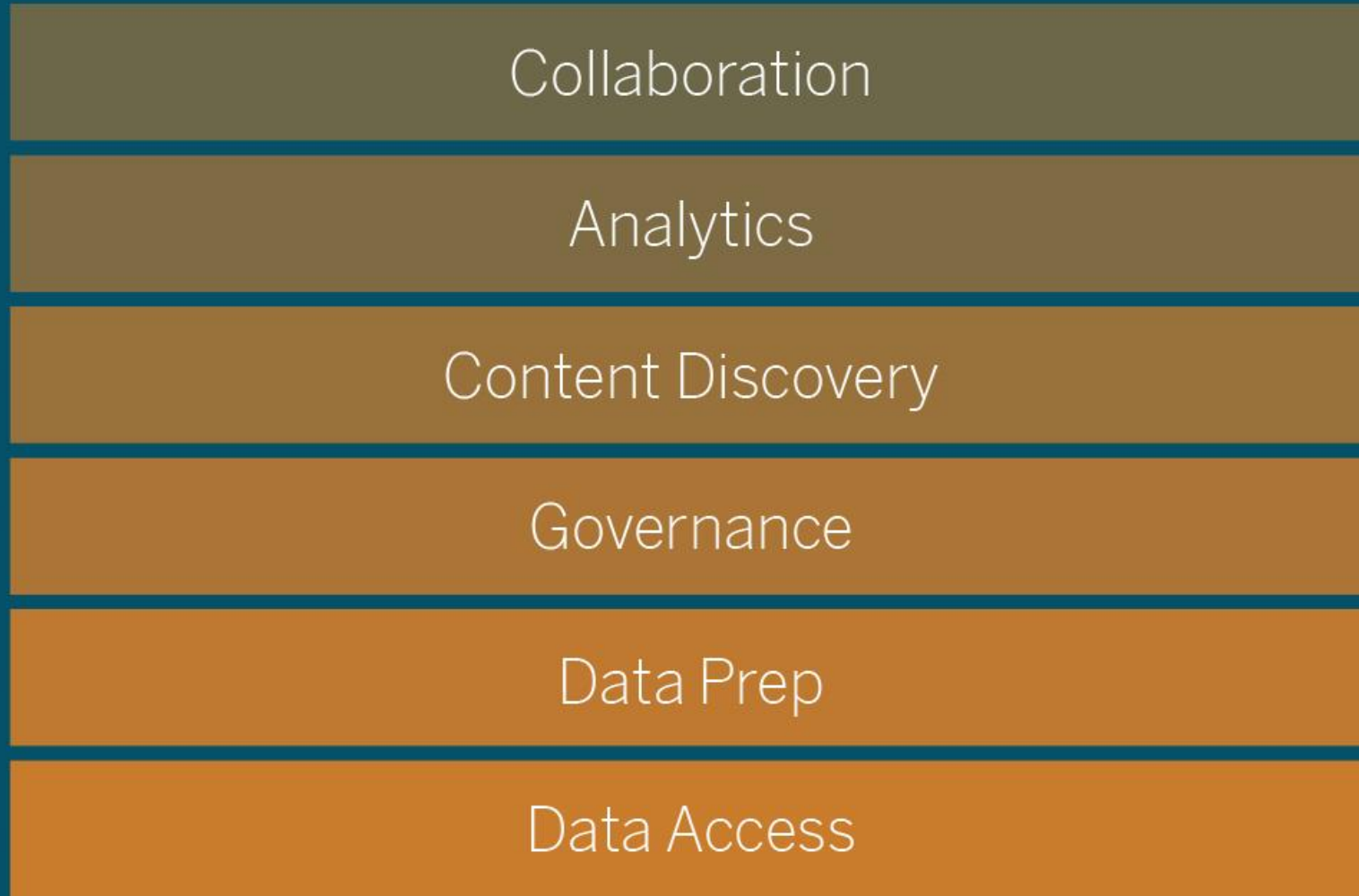
The screenshot displays the Tableau Prep interface. At the top, a data flow diagram shows 'Orders (East)', 'Orders (West)', 'Orders (Central)', and 'Orders (South)' being combined into 'All Orders'. This is followed by 'Orders + Returns', 'Split Customer', and 'Create 'All Order...'. Below the flow, a toolbar includes 'Keep Only', 'Exclude', and 'Edit Value' options. The main workspace is divided into several panes: 'State' (11 rows), 'Row ID' (2K rows), 'Order ID' (822 rows), 'Segment' (3 rows), and 'Customer ID'. A tooltip for the 'Corporate' segment shows 510 rows, all highlighted. At the bottom, a data table is visible.

Sales	Quantity	Profit	Discount	Region	State	Row ID	Order ID	Segment	Customer ID
18.648	7	-12.432	0.7	South	North Carolina	231	US-2015-156216	Corporate	EA-14035
178.384	2	22.298	0.2	South	Florida	315	CA-2015-167850	Corporate	AG-10525
15.552	3	5.4432	0.2	South	Florida	316	CA-2015-167850	Corporate	AG-10525
39.072	6	9.768	0.2	South	North Carolina	404	CA-2015-155208	Corporate	SP-20650
10.368	2	3.6288	0.2	South	North Carolina	705	CA-2015-138527	Corporate	BN-11470
166.84	5	18.7695	0.2	South	North Carolina	706	CA-2015-138527	Corporate	BN-11470
15.216	1	2.2824	0.2	South	North Carolina	707	CA-2015-138527	Corporate	BN-11470
11.36	2	5.3392	0	South	Louisiana	764	CA-2015-162775	Corporate	CS-12250

INTERACT

- DESKTOP
- BROWSER
- MOBILE
- EMBEDDED

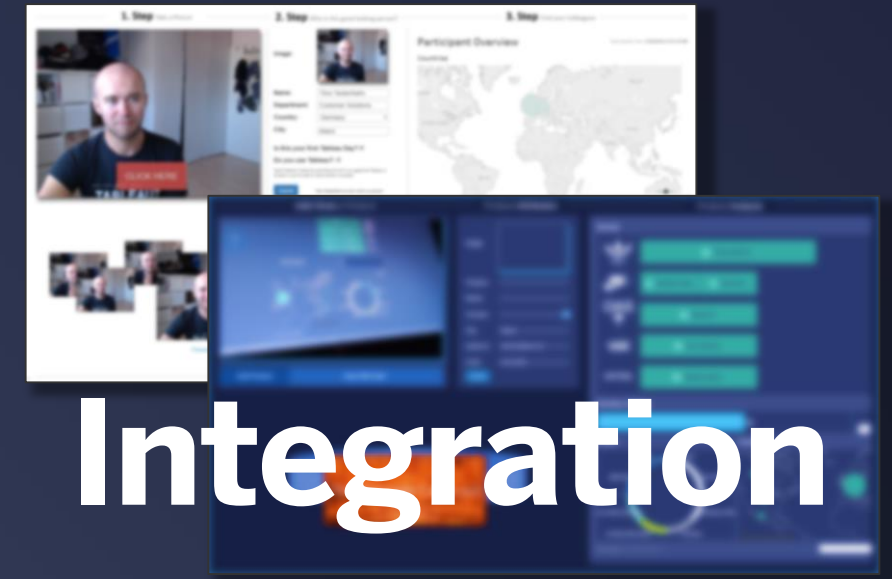
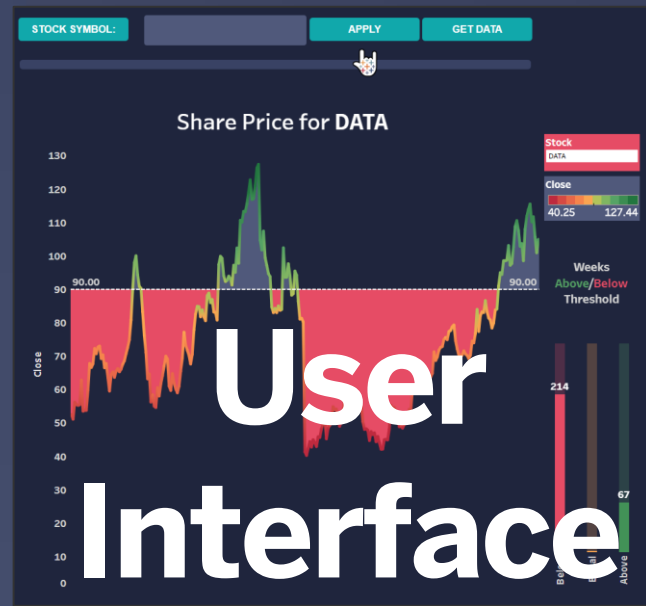
Security & Compliance



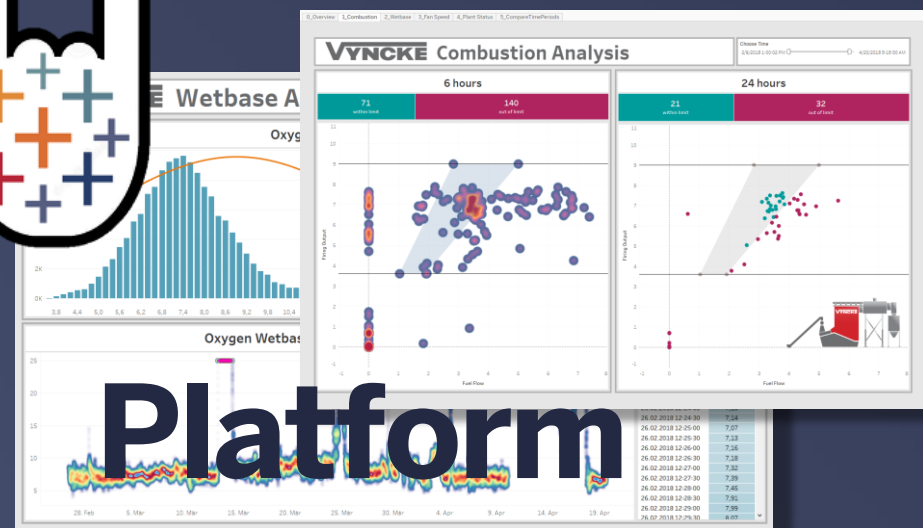
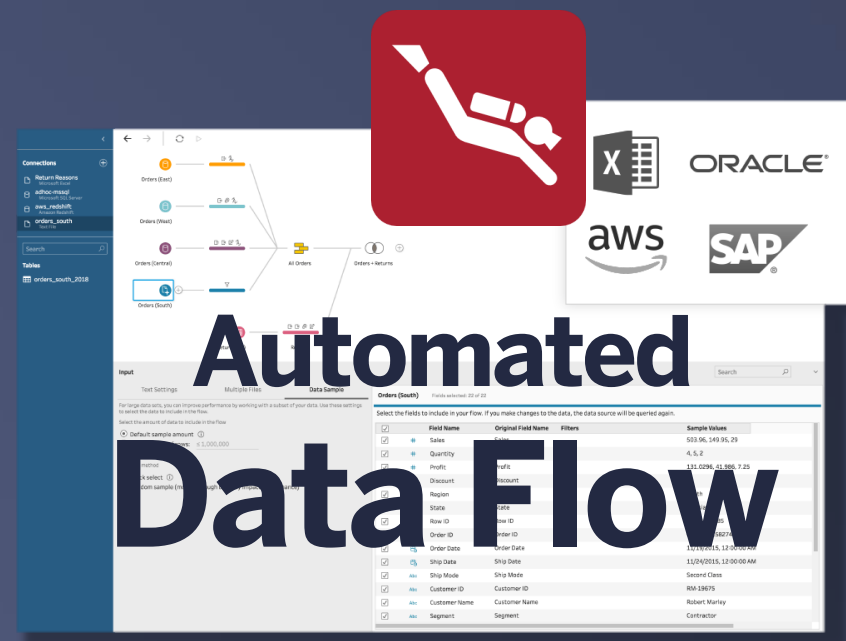
Extensibility & APIs

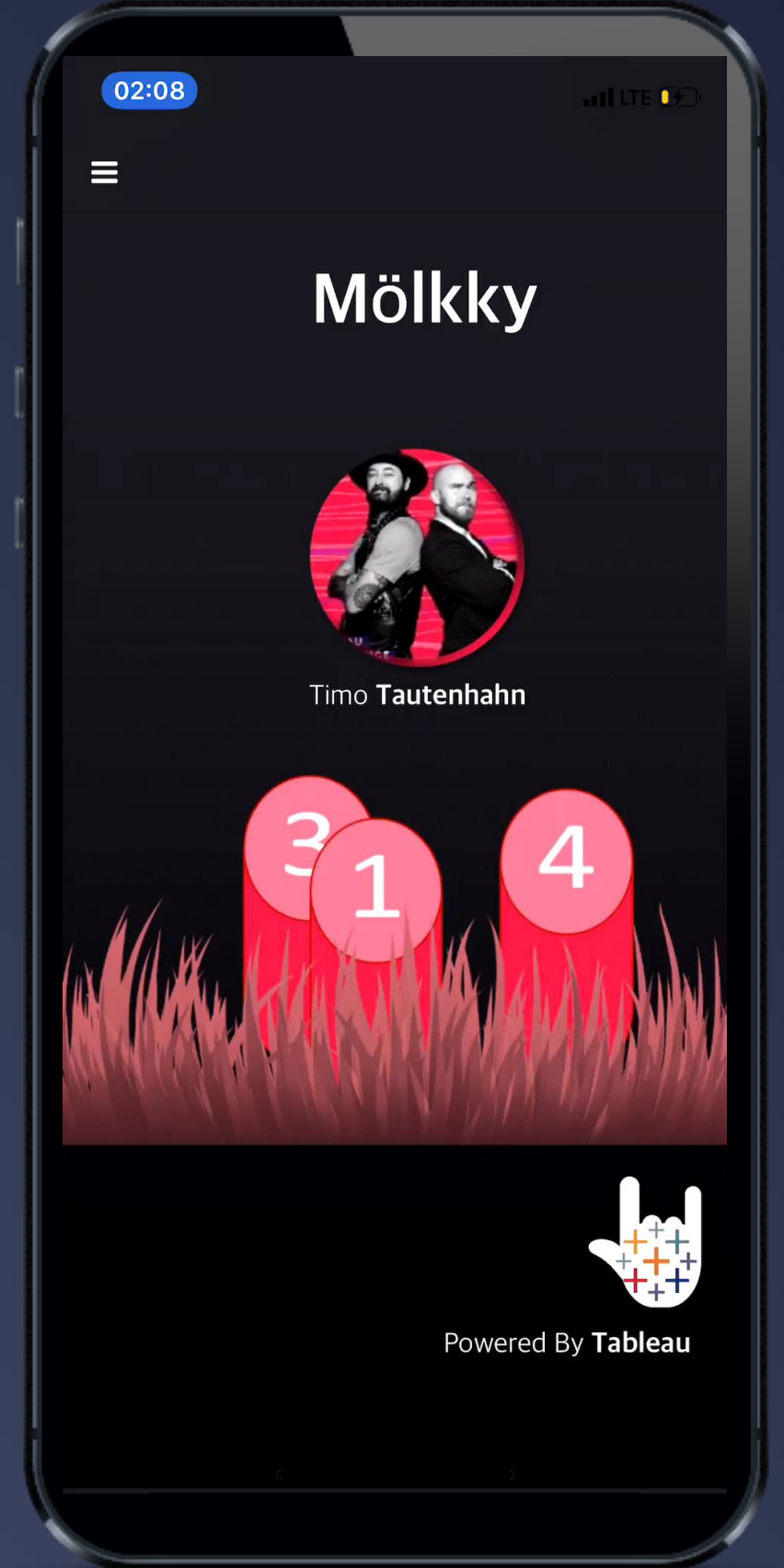
DEPLOYMENT

- ON-PREMISES
- CLOUD
- HOSTED
- WINDOWS
- LINUX
- MAC
- MULTI-TENANT



Inspiration





Session Flow

CRISP Research

Forecast Global Data Economy

225 Mrd €
2018 Umsatz Global für Datenprodukte

<https://www.tableau.com/de-de/learn/webinars/embedded-analytics-crisp-turn-data-into-products>

CUSTOMERS

DATA REGISTER

— Timo Tautenhahn —
Questions, comments, feelings?

ttautenhahn@tableau.com
www.tableaufans.com

Big Picture

MAKE vs BUY

Customers

Inspiration

Q&A

MAKE

```
<code>class="row-1 row-first row-last">
  <code>class="col-1 col-first">
    <code>class="view-field view-field-title">
    <code>class="view-field view-field-content">
    <code>class="field-content">
    <code>class="col-2">
    <code>class="view-field view-field-title">
    <code>class="view-field view-field-content">
    <code>class="field-content">
    <code>class="col-3 col-last">
    <code>class="view-field view-field-title">
    <code>class="view-field view-field-content">
    <code>class="field-content">
    <code>class="view-field view-field-display-price">
    </code></pre>

BUY


```

Inspiration

- User Interface
- Platform
- Automated Data Flow
- Innovations



DATA
ROCKSTAR

— Timo Tautenhahn —

Questions, comments, feelings?

ttautenhahn@tableau.com
www.tableaufans.com

