



Samhandling i  
Verdikjeden

# Agenda

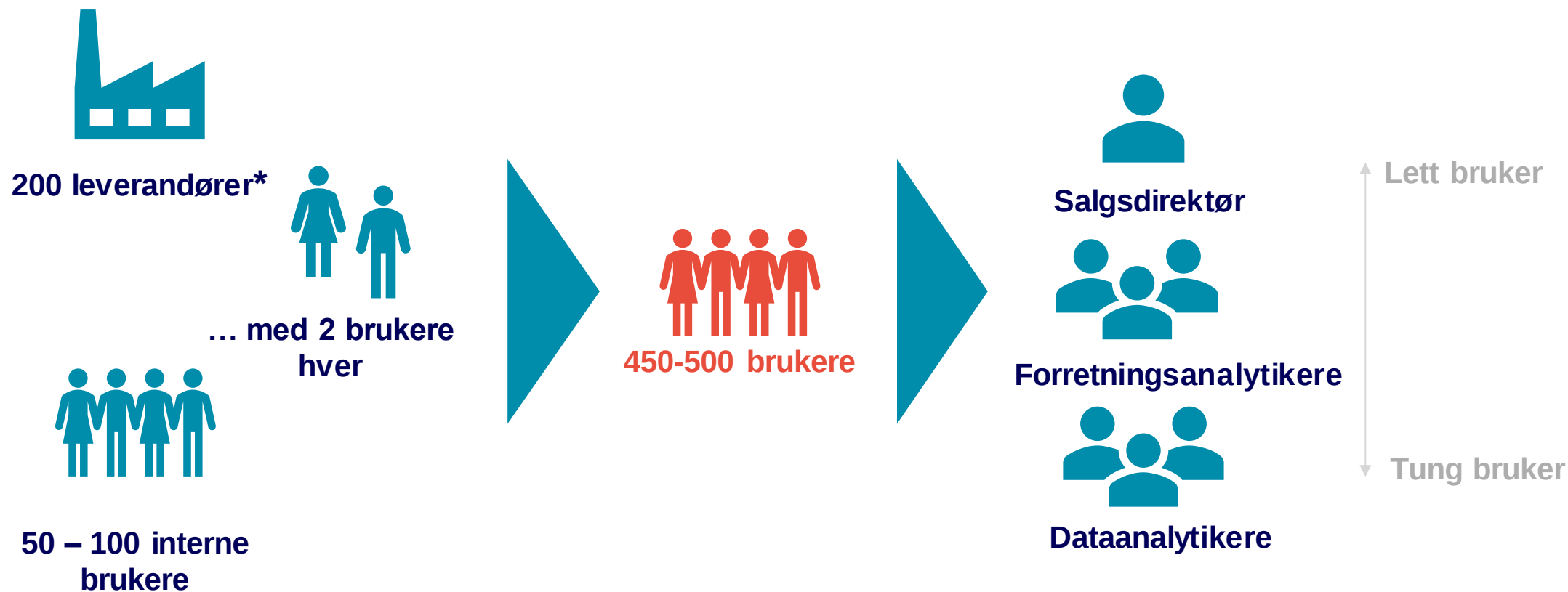
- Introduction of Samhandling i Verdikjeden (SiV)
- High level overview of architecture
- Front end design thinking
- SAP Analytics Cloud

**NorgesGruppen has a clear ambition to strengthen their relationship with their vendors**

NorgesGruppen goal is to be an attractive partner by offering their vendors an industry leading solution for information sharing and collaboration

**→ Samhandling i Verdikjeden (SiV)**

# Vi estimerer 450-500 brukere som fordeler seg i ulike kategorier med ulike bruksmønstre

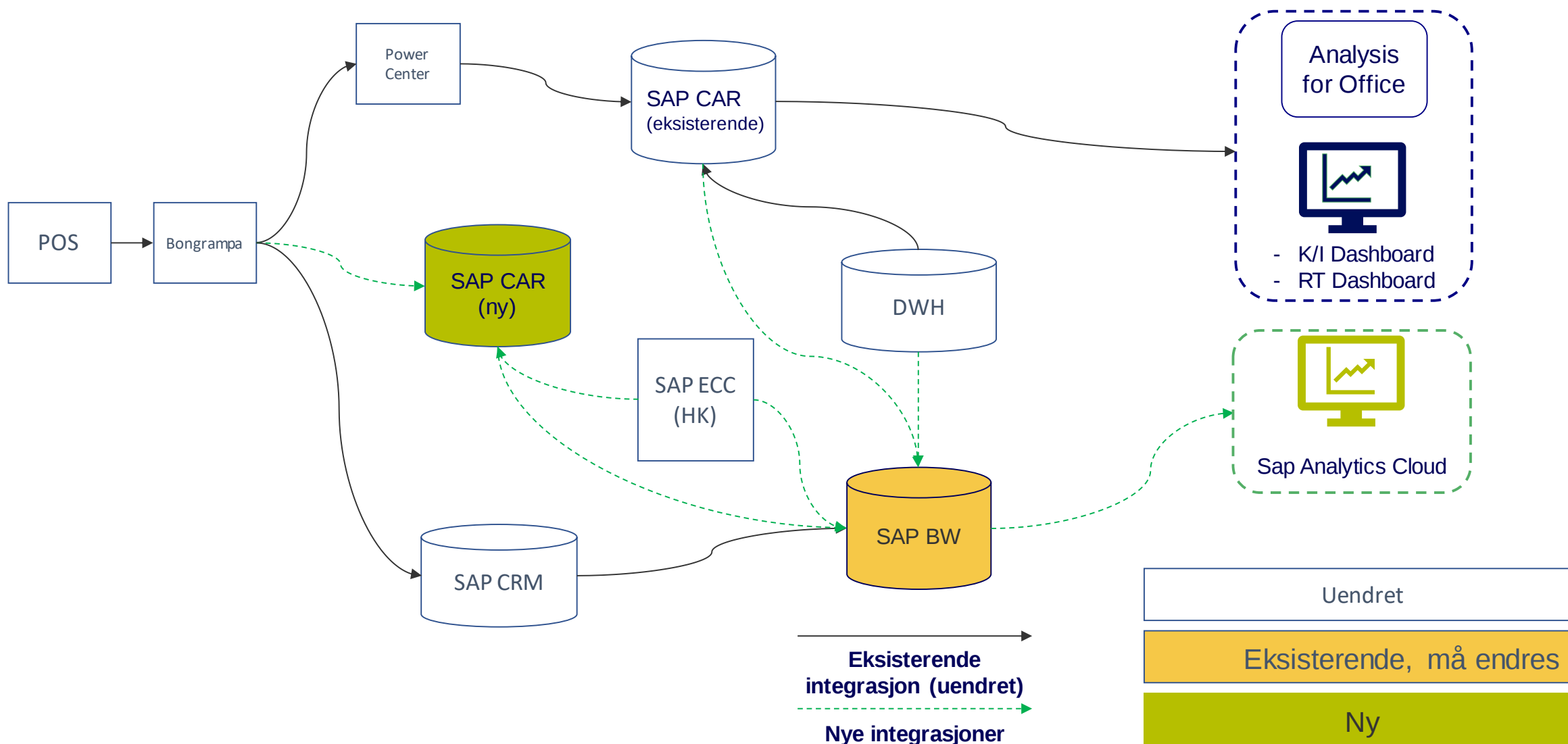


\* Leverandørportalen benyttes til sammenligning av 700 leverandører

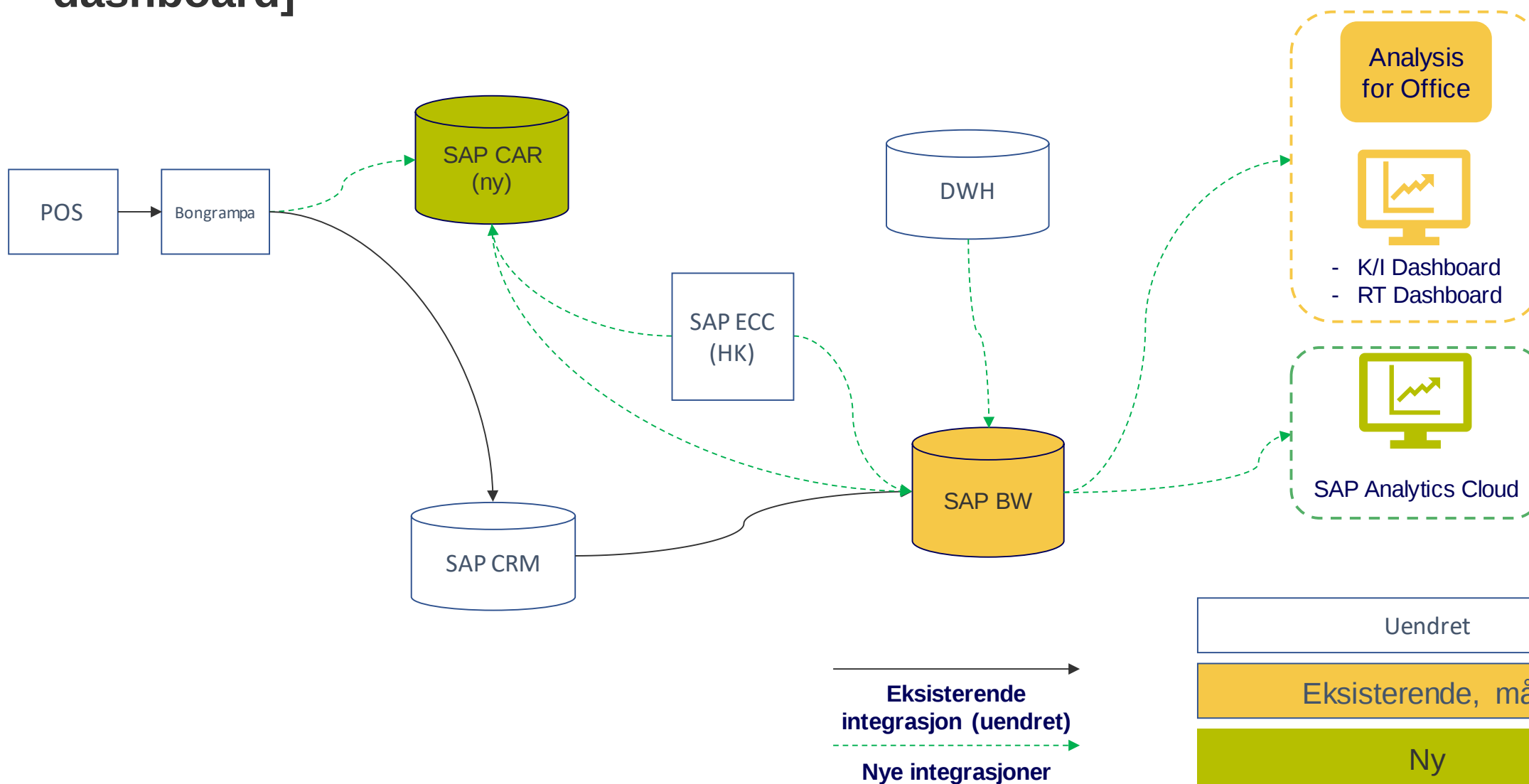
# High level architecture in SiV



# SAP Business Warehouse [Steg 1: SiV-scope]



# SAP BW as an analytical platform[Steg 2: SiV + AO & K/I dashboard]



# Dashboards in SiV



På salgsinnsikt vil det være behov for seks dynamiske rapporter samt en self-service rapportbygger



Executive  
overview



Vare



Distribusjon



Self-service  
rapportbygger



Kampanje



Nyhet



Svinn

Standardisert

Egendefinert

På forbrukerinnsikt vil det være behov for fem dynamiske rapporter samt en self-service rapportbygger



Sortiment



Handlekurv



Posisjonskart



Kampanje



Nyhet



Self-service  
rapportbygger

Standardisert

Egendefinert

# Forbrukerinnsikt: Nyheter

Mondelez

## Mine nyheter

- ☒ Kvikk Lunsj NY
- ☐ Nyhet 2
- ☐ Nyhet 3

## Referanseware

- ☒ Varegr: Sjokolade
- ☒ Kvikk Lunsj
- ☒ Stratos

## Profil/butikk

## Forbrukerprofil

- ☒ Prisbevisst
- ☒ Kvalitetsbevisst
- ☒ Tradisjonell

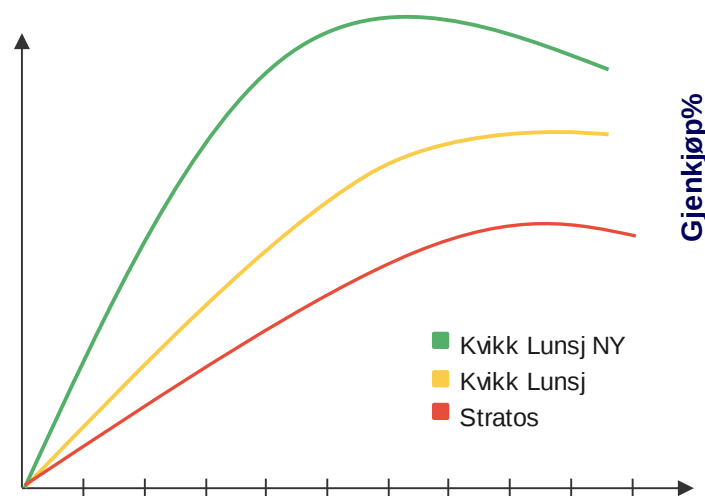
Dato/lanseingsvindu

2017 2018

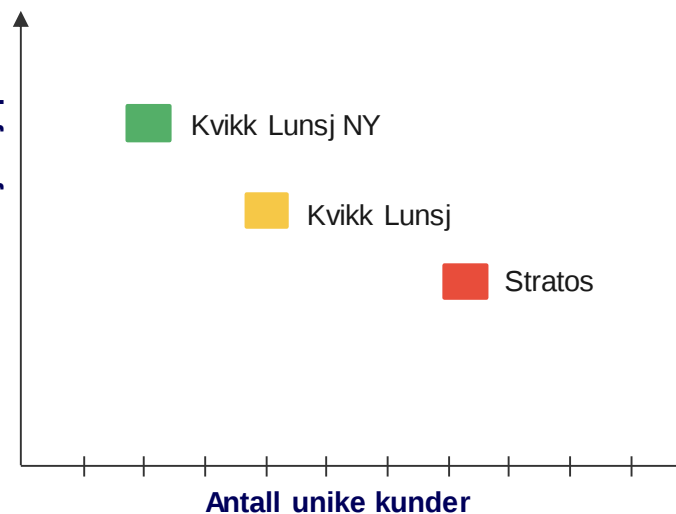
## Forbrukerlojalitet

| Vare                     | Sort. kode | Salg  | Antall | Lansert | Førstegangs-kjøp | Gjenkjøpsandel – antall gjenkjøp |     |     |
|--------------------------|------------|-------|--------|---------|------------------|----------------------------------|-----|-----|
|                          |            |       |        |         |                  | 1                                | 2   | 3+  |
| Kvikk Lunsj NY           | 31         | 2m    | 100k   | 2018    | 70%              | 70%                              | 67% | 65% |
| Referanse 1: Kvikk Lunsj | 31         | 3m    | 200k   | 1956    | 60%              | 65%                              | 45% | 40% |
| Referanse 2: Stratos     | 31         | 3,5 m | 250k   | 2008    | 76%              | 50%                              | 34% | 12% |

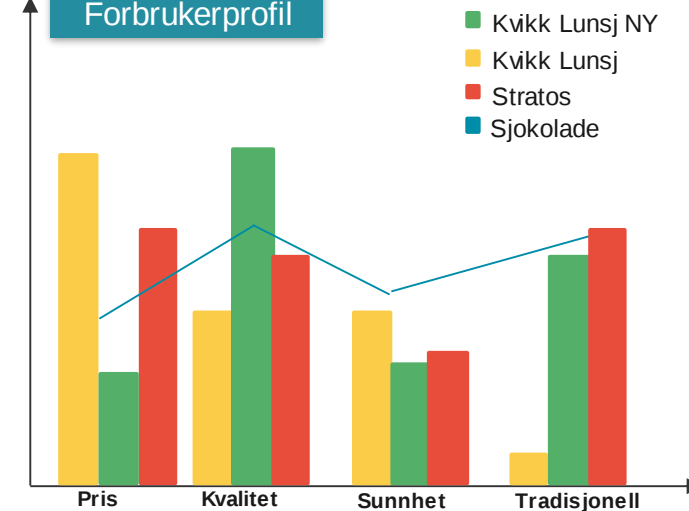
## Akkumulert gjenkjøp pr. uke etter lansering



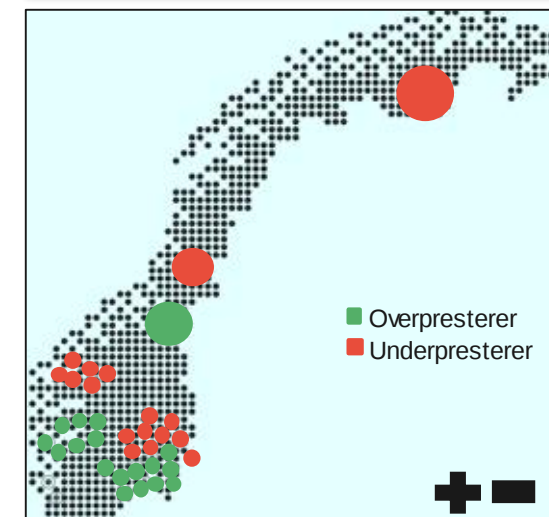
## Prøving og gjenkjøp



## Forbrukerprofil



## Omsetningsandel nyhet vs totalt



# Fobrukerinnsikt: Sortiment og produktportefølje

UNIL



## Mine varer



First Price Tacokit



First Price vare 2



First Price vare 3

## Referanse



Varegruppe  
Merke/brand  
Leverandør



Santa Maria Tacokit



Profil/butikk

## Forbrukerprofil



Prisbevisst



Kvalitetsbevisst



Tradisjonell

Dato

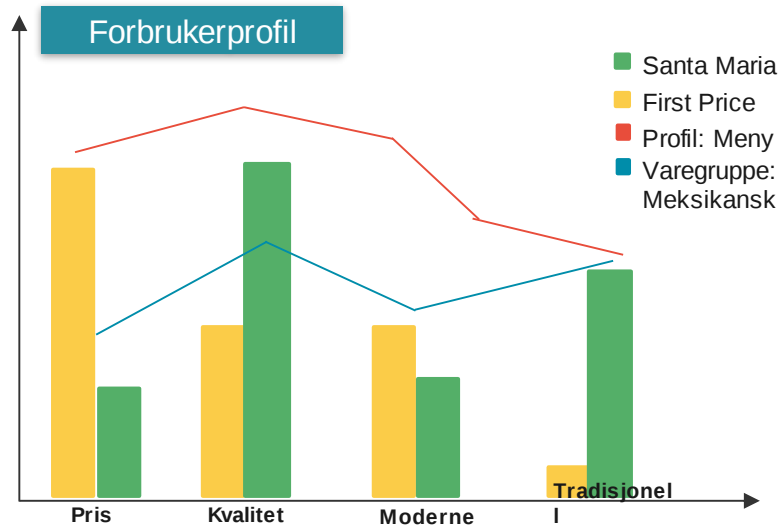
2017

2018

## Forbrukerlojalitet

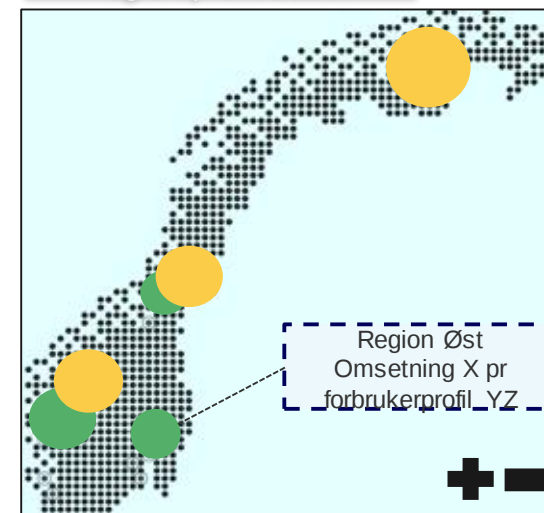
| Vare                       | Sort.-kode | Salg | Antall | Volum | Brutto% | Snitt rullering | Førstegangs-kjøp | Antall gjenkjøp – %-andel |     |     |
|----------------------------|------------|------|--------|-------|---------|-----------------|------------------|---------------------------|-----|-----|
|                            |            |      |        |       |         |                 |                  | 1                         | 2   | 3+  |
| + Snitt mine varer (UNIL)  |            | 400k | 400k   | 400k  | 3,4%    | 7,99            | 25%              | 70%                       | 67% | 65% |
| + Snitt brand: First Price |            | 500k | 500k   | 500k  | 2,3%    | 7,53            | 28%              | 80%                       | 76% | 74% |
| – Varegruppe: Meksikansk   |            | 300k | 300k   | 300k  | 2,2%    | 1,56            | 25%              | 40%                       | 34% | 24% |
| First Price Tacokit        | 21         | 280k | 280k   | 280k  | 3,4%    | 3,67            | 28%              | 65%                       | 45% | 40% |
| Konk: Santa Maria Tacokit  | 31         | 220k | 220k   | 220k  | X       | 5,67            | 26%              | 50%                       | 34% | 12% |

## Forbrukerprofil



Omsetningsandel pr. forbrukerprofil mot profil- og varegruppesnitt

## Omsetningsandel pr region/profil/butikk



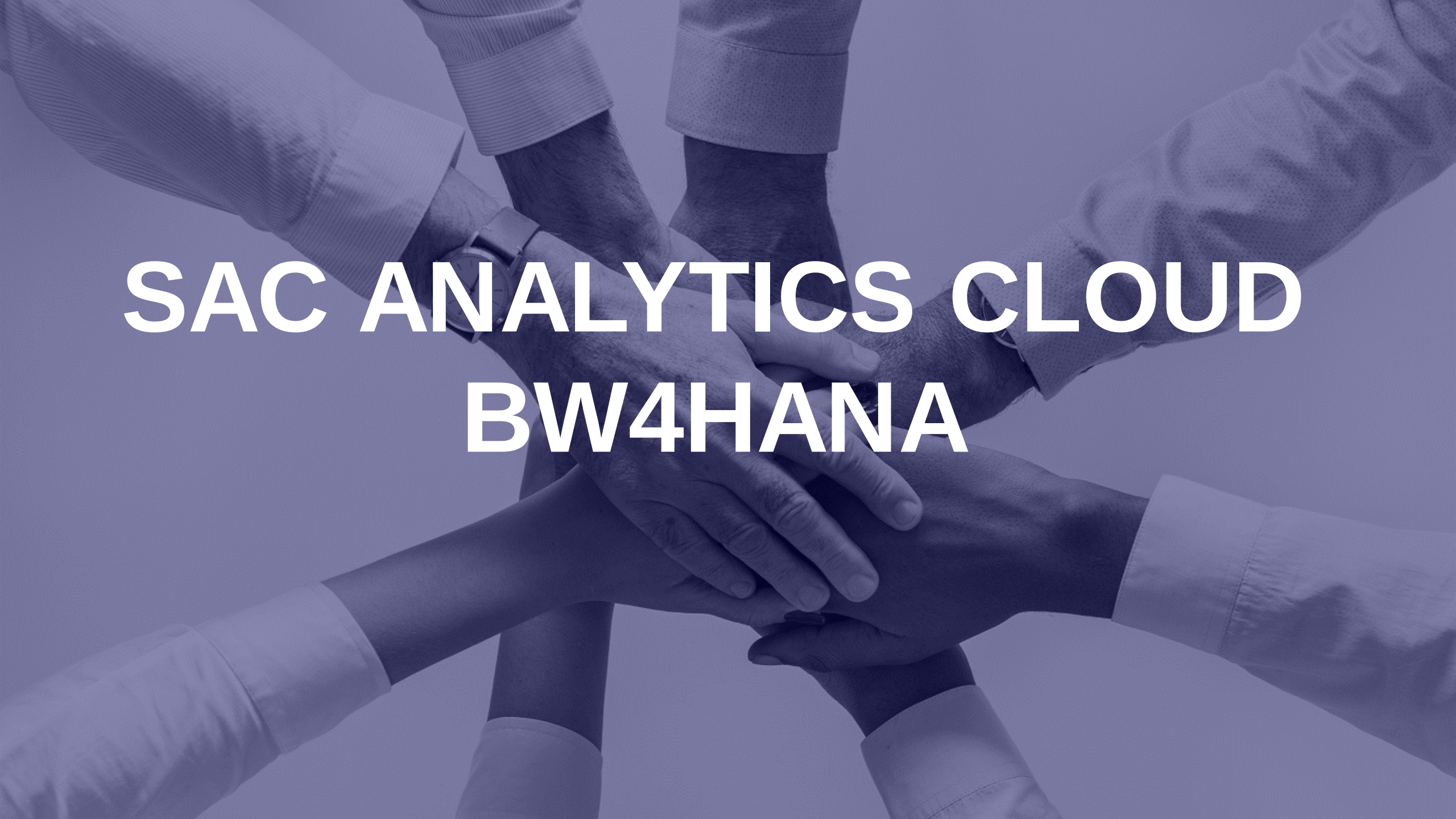
# Front end design thinking



# Design thinking

- UX designer and NG product owner are working together with 5 suppliers to get input on the design and KPIs for the dashboards
  - What kind of information to you want to see (KPIs, correlation between numbers, timeframe, etc)
  - How would you like it to be presented (table/graph, position on dashboard)
  - What kind of "help" information do you require
- Mockup sketches of the dashboards
- Test out design and functionality in SAC based on feedback

**Presenting the correct information in a way that  
makes sense**



# **SAC ANALYTICS CLOUD BW4HANA**

# On sales insight, six dynamic reports as well as a self-service report builder will be needed



Executive overview



Vare



Distribusjon



Self-service rapportbygger



Kampanje



Nyhet



Svinn

Standardisert

Egendefinert

# Consumer insights will require five dynamic reports as well as a self-service report builder



Sortiment



Handlekurv



Posisjonskart



Kampanje



Nyhet



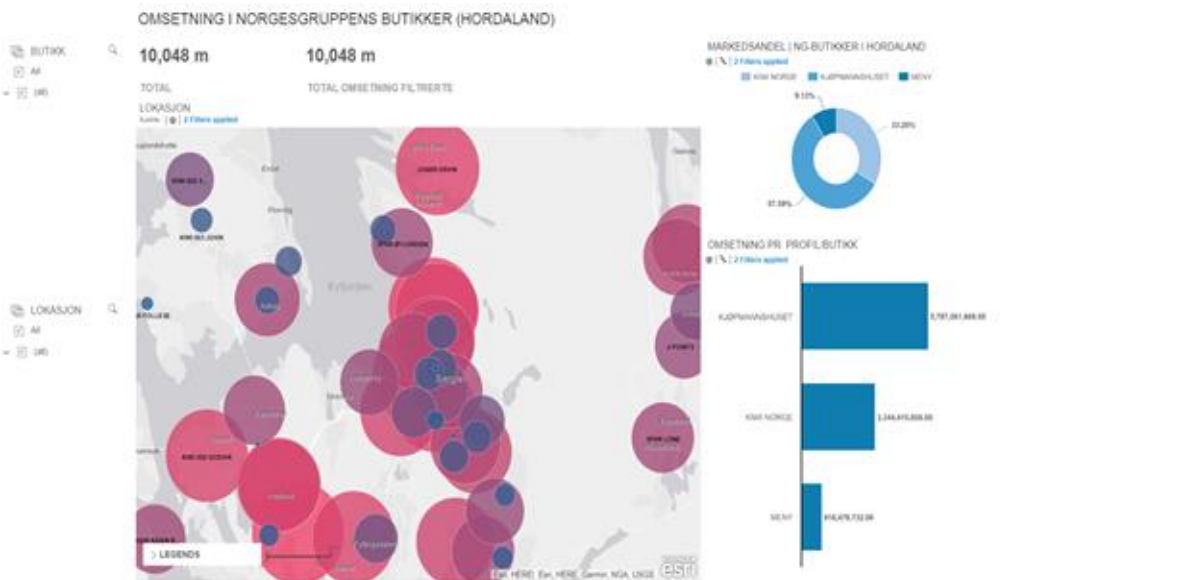
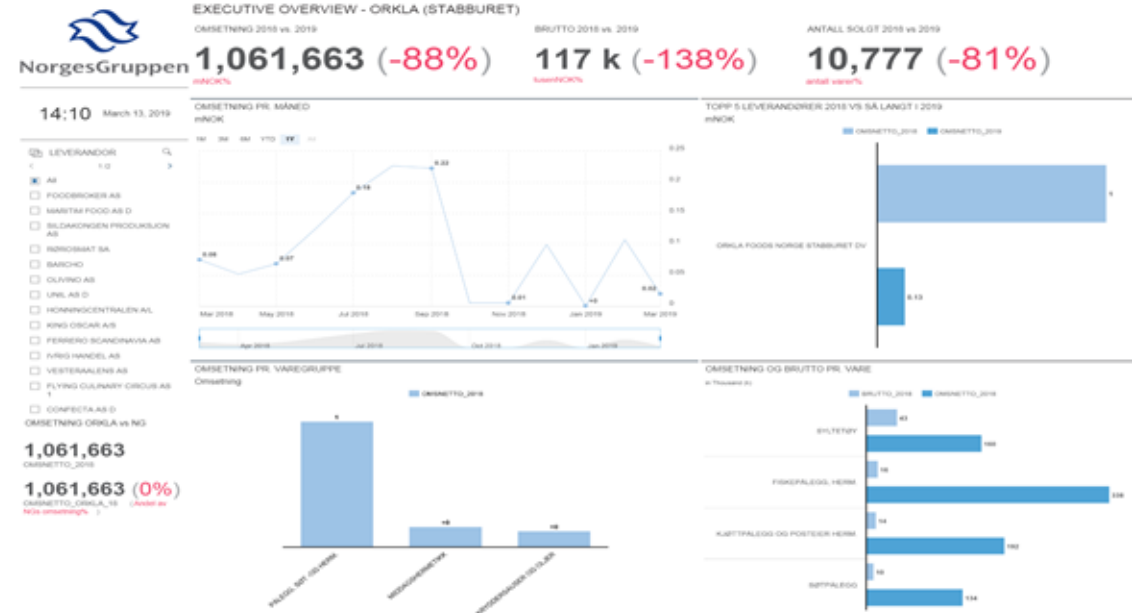
Self-service  
rapportbygger

Standardisert

Egendefinert

# Proof of concept

- The purpose of PoC is to check how well different BI tools can deliver on SiV's needs, as well as build a demo dashboard.
  - Model constructed in SAC.
  - Based on mock data
-



## Story: Limitations experienced during the test period

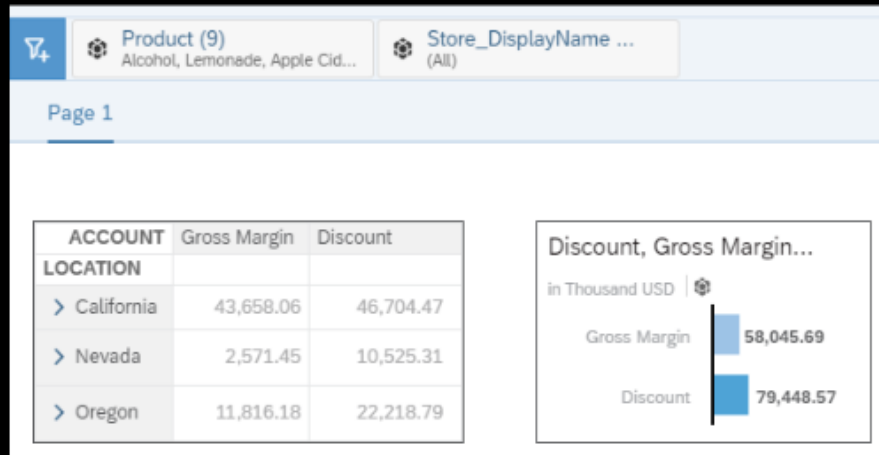
|                                                 |                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Week-dimension</b>                           | SAC does not come with the week as the default time dimension. This must therefore be defined in the back-end. You will probably lose some graphs like time series as standard visualizations in front. This must therefore be built in a customized way in order to show this, with the logic defined in SAP BW. |
| <b>Adaptations:<br/>Formatting / extra info</b> | Unable to add extra information to "tool tips" in graphs (showing dimensions and target numbers only by default)                                                                                                                                                                                                  |
|                                                 | Unable to add additional information to graphic elements enlargement (pop-ups)                                                                                                                                                                                                                                    |
|                                                 | Each user must set up their own language and number formatting (one-time job). Cannot be defined at dashboard level                                                                                                                                                                                               |
|                                                 | It is only possible to format self-defined, calculated columns. It was not possible to change formatting on measures coming directly from the model.                                                                                                                                                              |
| <b>Adjustments: Exports</b>                     | Excel exports are limited to .csv per. now.                                                                                                                                                                                                                                                                       |
|                                                 | Additional formatting and customization of export to Excel / .csv is not supported                                                                                                                                                                                                                                |
|                                                 | .ppt / PDF export is limited at the page or story level, one cannot choose to export one specific graph to PDF / .ppt                                                                                                                                                                                             |
| <b>Adjustments: Tables</b>                      | In tables it was only possible to sort based on target figures and not dimensions                                                                                                                                                                                                                                 |
|                                                 | Unable to add search functionality to tables                                                                                                                                                                                                                                                                      |
|                                                 | In-cell graphs in tables can be added, but one is limited to one graph per cell. table and do not have full flexibility on formatting it.                                                                                                                                                                         |

# Application Design | Levels of Abstraction

## STORY



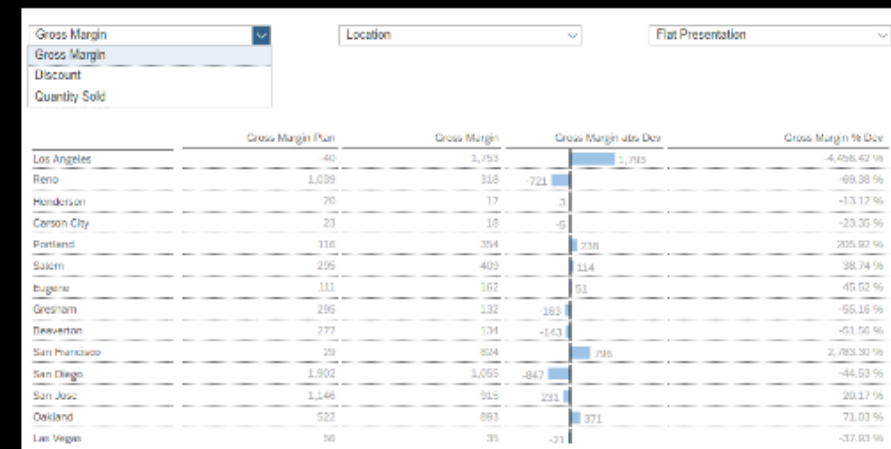
Cover  
standard  
scenarios



## APPLICATION



Cover  
custom  
scenarios



- Applications and Stories share functionality and widgets
- Applications and Stories provide same user experience
- Applications and Stories are different artifacts
- Applications and Stories are created with different Design Environments

# Functionalities to use

# Functionalities to use: Bookmarking

Include the Components

Select the components to be included in this bookmark set.

Search

Layout

Canvas

Panel\_Content

Btn\_BM\_Manage

Button\_BM\_Create

Table

Button\_AddToRow

Button\_AddToCol

Button\_RowRemove

Button\_ColRemove

CheckboxGroups\_Dimensions\_Label

CheckboxGroup\_Free

OKCancel

Measures

set selected

Remove all

set all

Create Bookmark

Manage Bookmarks

Nettosalg beløp

Nettosalg PF (%)

Nettosalg NG (%)

KPI 9

Nettosalg beløp

Dimensions

Columns

Nøkkeltall

Remove

|            |            |
|------------|------------|
| AKERSHUS   | 17,291,635 |
| AUST-AGDER | 4,043,614  |
| BUSKERUD   | 17,147,518 |

SAP Analytics Cloud

SAP Analytics Cloud

+

DE41FECF74CEE3;mode=present;bookmarkId=34354671-9313-4913-a683-612785528802

# Functionalities to use: Bookmarking

## Measures

set selected

Remove all

set all

Create Bookmark

Manage Bookmarks

☒ Nettosalg beløp

☒ Nettosalg PF (%)

☒ Nettosalg NG (%)

## Dimensions

## Columns

Remove

☐ Nøkkeltall

## Rows

Remove

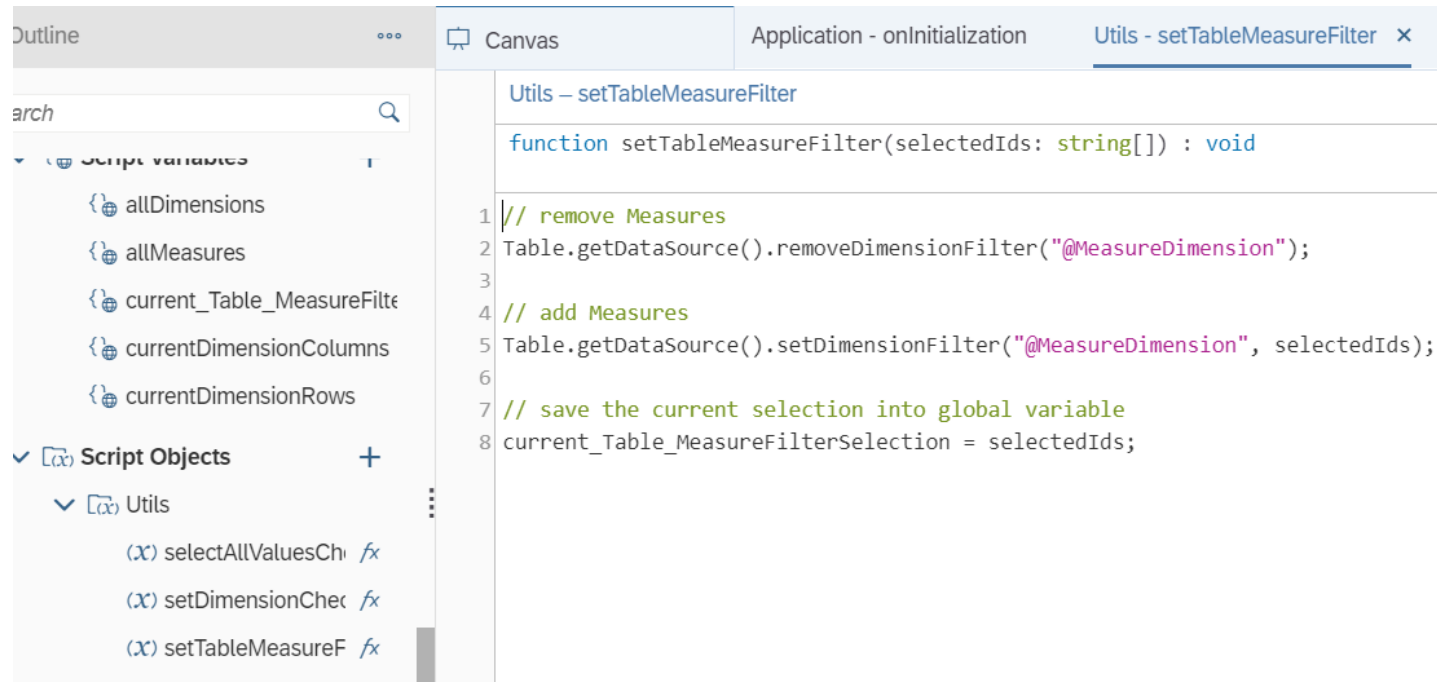
☐ Fylke

## KPI 9



|                  | Nettosalg beløp | Nettosalg PF (%) | Nettosalg NG (%) | Prestasjon (%) |
|------------------|-----------------|------------------|------------------|----------------|
| AKERSHUS         | 17,291,635      | 12.66            | 14.56            | -14.90         |
| AUST-AGDER       | 4,043,614       | 2.97             | 2.92             | 1.60           |
| BUSKERUD         | 17,147,518      | 12.56            | 11.27            | 10.30          |
| FINNMARK         | 967,658         | 0.72             | 0.56             | 21.80          |
| HEDMARK          | 9,188,670       | 6.75             | 5.50             | 18.60          |
| HORDALAND        | 12,460,072      | 9.13             | 9.05             | 0.80           |
| MØRE OG ROMSDAL  | 7,907,900       | 5.82             | 4.71             | 18.90          |
| NORDLAND         | 1,817,077       | 1.34             | 1.04             | 22.20          |
| OPPLAND          | 11,610,307      | 8.53             | 6.84             | 19.80          |
| OSLO             | 12,431,370      | 9.13             | 10.86            | -18.80         |
| ROGALAND         | 9,393,595       | 6.90             | 6.66             | 3.40           |
| SOGN OG FJORDANE | 1,789,435       | 1.32             | 1.13             | 14.40          |

# Functionalities to use: Filter



The screenshot displays a software development environment with a sidebar on the left and a main editor area on the right.

**Left Sidebar (Outline):**

- Search bar:
- Script Variables:
  - allDimensions
  - allMeasures
  - current\_Table\_MeasureFilter
  - currentDimensionColumns
  - currentDimensionRows
- Script Objects:
  - Utils:
    - selectAllValuesCh /fx
    - setDimensionCher /fx
    - setTableMeasureF /fx

**Right Editor Area:**

Tab: **Utils - setTableMeasureFilter**

Code:

```
function setTableMeasureFilter(selectedIds: string[]) : void

1 // remove Measures
2 Table.getDataSource().removeDimensionFilter("@MeasureDimension");
3
4 // add Measures
5 Table.getDataSource().setDimensionFilter("@MeasureDimension", selectedIds);
6
7 // save the current selection into global variable
8 current_Table_MeasureFilterSelection = selectedIds;
```

# Functionalities to use: Manipulate rows and columns

## Measures

set selected

Remove all

set all

☒ Nettosalg beløp

☐ Nettosalg PF (%)

☐ Nettosalg NG (%)

☐ Prestasjon (%)

## Dimensions

### Columns

☐ @MeasureDimension

Remove

### Rows

☐ YFYLKENVN

Remove

### Free

add to Column

add to Row

☐ YGTIN

☐ YVARENAVN

## KPI 9

Fylke

| Measures         | Nettosalg beløp | Nettosalg PF (%) | Nettosalg NG (%) | Prestasjon (%) |
|------------------|-----------------|------------------|------------------|----------------|
| <b>Fylke</b>     |                 |                  |                  |                |
| AKERSHUS         | 17,291,635      | 12.66            | 14.56            | -14.90         |
| AUST-AGDER       | 4,043,614       | 2.97             | 2.92             | 1.60           |
| BUSKERUD         | 17,147,518      | 12.56            | 11.27            | 10.30          |
| FINNMARK         | 967,658         | 0.72             | 0.56             | 21.80          |
| HEDMARK          | 9,188,670       | 6.75             | 5.50             | 18.60          |
| HORDALAND        | 12,460,072      | 9.13             | 9.05             | 0.80           |
| MØRE OG ROMSDAL  | 7,907,900       | 5.82             | 4.71             | 18.90          |
| NORDLAND         | 1,817,077       | 1.34             | 1.04             | 22.20          |
| OPPLAND          | 11,610,307      | 8.53             | 6.84             | 19.80          |
| OSLO             | 12,431,370      | 9.13             | 10.86            | -18.80         |
| ROGALAND         | 9,393,595       | 6.90             | 6.66             | 3.40           |
| SOGN OG FJORDANE | 1,789,435       | 1.32             | 1.13             | 14.40          |
| TELEMARK         | 5,699,536       | 4.18             | 4.89             | -17.10         |
| TROMS            | 1,304,135       | 0.96             | 0.75             | 22.40          |
| TRØNDELAG        | 4,866,728       | 3.58             | 3.32             | 7.20           |
| VEST-AGDER       | 4,167,943       | 3.06             | 3.40             | -10.90         |
| VESTFOLD         | 6,948,114       | 5.09             | 8.02             | -57.30         |
| ØSTFOLD          | 8,372,965       | 6.14             | 5.63             | 8.30           |

# Functionalities to use: Custom Popup

Dimension: 

GTIN



KPI 9  


| Measures      | Nettosalg beløp | Nettosalg NG (%) |
|---------------|-----------------|------------------|
| GTIN          |                 |                  |
| 7058040458605 | 75,181          | 5.55             |
| 7058040458506 | 80,661          | 5.94             |
| 7055596059256 | 3,640           | 100.00           |
| 7055596059218 | 8,782           | 59.83            |
| 7310960024477 | 35              | 100.00           |
| 7310960713654 | 609,719         | 5.55             |
| 7310960022190 | 163             | 78.98            |
| 7035620030116 | 489,995         | 5.55             |
| 7058040657305 | 549,185         | 5.55             |
| 7035620008450 | 111,216         | 5.55             |
| 703428202801  | 26              | 100.00           |
| 7058040455208 | 296,000         | 5.55             |

# Functionalities to use: Send parameters from an analytic application to a story

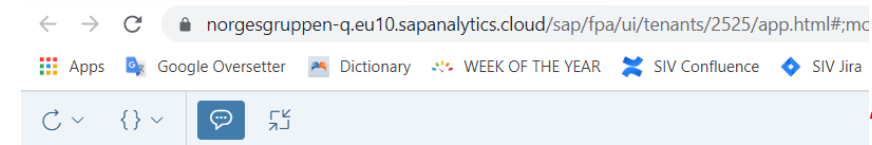
```
Canvas Button_1 - onClick x Button_2 - onClick

Button_1 - onClick

Called when the user clicks the button.
function onClick() : void

1 /*
2 In order to get IDs: https://norgesgruppen-q.eu10.sapanalytics.cloud/api/v1/stories?include=models
3 You can get it from REST API: https://help.sap.com/doc/14cac91febef464dbb1efce20e3f1613/release/en-US/index.html
4 */
5 NavigationUtils.openStory("D474AEFD01BF8072CDD9FA2AEFA2CF",
6     "6113a6bb-8672-49ff-aa27-b03e586eafb8",
7     [UrlParameter.create("f01Model", "t.2.C5WSFXIVSKGLUK6078AN10BTVK:C5WSFXIVSKGLUK6078AN10BTVK"),
8       UrlParameter.create("f01Dim", "Country"),
9       UrlParameter.create("f01Val", "US"),
10      UrlParameter.create("mode", "edit")
11    ]);
12
13
14
```

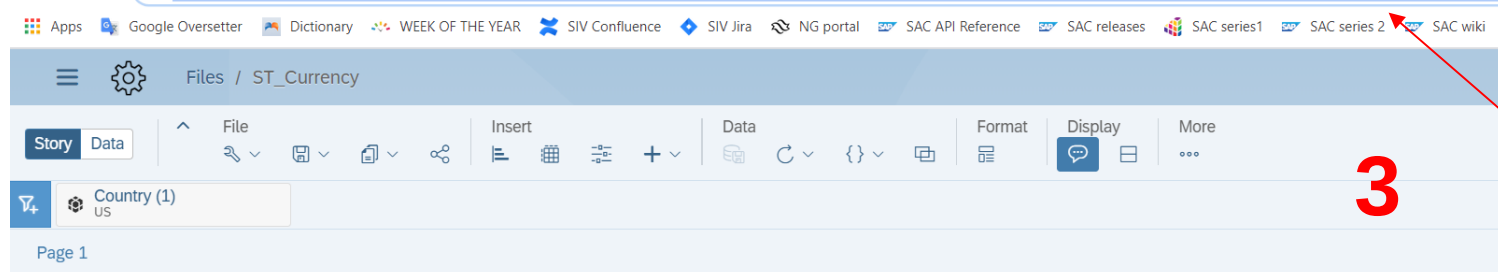
1



2

KPI 9  
Fylke

| Measures        | Nettosalg beløp | Nettosalg NG (%) |
|-----------------|-----------------|------------------|
| AKERSHUS        | 17,291,635      | 14.56            |
| AUST-AGDER      | 4,043,614       | 2.92             |
| BUSKERUD        | 17,147,518      | 11.27            |
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| OPPLAND         | 11,610,307      | 6.84             |
| OSLO            | 12,431,370      | 10.86            |
| ROGALAND        | 9,393,595       | 6.66             |
|                 | 1,789,435       | 1.13             |



3

D474AEFD01BF8072CDD9FA2AEFA2CF;f01Model=t.2.C5WSFXIVSKGLUK6078AN10BTVK:C5WSFXIVSKGLUK6078AN10BTVK;f01Dim=Country;f01Val=US

GRILSTAD AS

Hittil i år: 1. jan. 2020 - 1. mars 2020

Salg i verdi

1 216 221 480 978,64

Hittil i år  
Siste 4 uker

1 635 956,00  
423 112 029,00

Subtitle

Nettosalg

0 Nettosalg

1

Functionalities to use:  
Send variables from an  
analytic application to  
another analytic  
application

2

← → ↻ :/2525/app.html#;mode=present;view\_id=appBuilding;appld=D2B382F3BECFC3E3754C83ACCBCEFC6E;p\_selectedIdSupplier=GRILSTAD%20AS;p\_selectedNamSupplier=GRILSTAD%20AS ☆  
Apps Google Oversetter Dictionary WEEK OF THE YEAR SIV Confluence SIV Jira NG portal SAC API Reference SAC releases SAC series1 SAC series 2 SAC wiki R Pa



Mine nøkkeltall  
Se overordnet

## Mine nøkkeltall

se status, prestasjon og avvik for mine produkter

GRILSTAD AS

Hittil i år: 1. jan. 2020 - 1. mars 2020

Salg i verdi

in %, Thousand USD

Dev

## PRESTASJON

Svinn Actual  
-∞ 40,00% 7

3



Atria Norge AS

Hittil i år: 1. jan. 2020 - 1. mars 2020

### Salg i verdi

1 216 221 480 978,64

Hittil i år  
Siste 4 uker

1 635 956,00  
423 112 029,00

Subtitle

4 000 000 000

Nettosalg

2 000 000 000

0

Nettosalg

Siste 4 uker

0

25 000 000

Siste 4 uker

### PRESTASJON

Svinn  
Actual



Svinn  
Actual



Svinn  
Actual



Svinn  
Actual



#### Mine nøkkeltall

Se overordnet status, prestasjon og avvik for mine varer



#### Mine sortiment

Se nøkkeltall og få forbrukerinnsikt om dine varer



#### Mine nøkkeltall

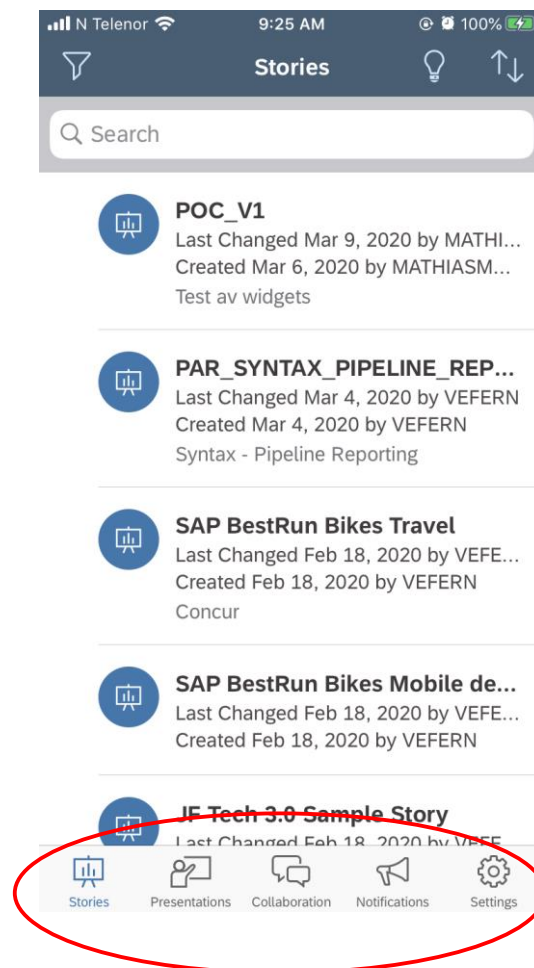
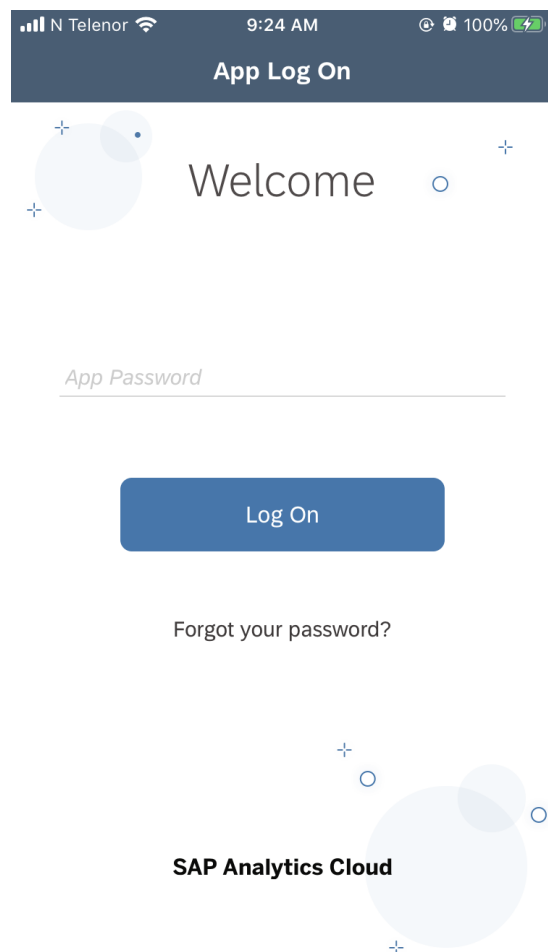
Se overordnet status, prestasjon og avvik for mine varer



#### Mine kampanjer

Se overordnet status

# SAC – Mobile app



SAC – Mobile app does not yet support Analytic Application. Just Stories. Probably in nextcoming releases.

# Analytic Application: Responsive layout

Responsive 1241 x 1270 50% Online

**NG - Innsikt**

**Grilstad**

Hittil i år: 1. jan. 2020 - 1. mars 2020

**Salg i verdi**

1,216,221,480,978.64

Hittil i år: 1,635,956.00  
Siste 4 uker: 423,112,029.00

**PRESTASJON**

Svinn Actual: 40.00% 70.00% +∞

Gross Margin % Di: 0% 20,000

2015 2016 2017

Mine kampanjer  
Se overordnet status

Layout - responsiveLayout

```
function responsiveLayout() : void
{
    Panel_3.getLayout().setWidth(LayoutValue.Auto);
    Panel_3.getLayout().setLeft(LayoutValue.create(1, LayoutUnit.Percent));
    Panel_3.getLayout().setRight(LayoutValue.create(1, LayoutUnit.Percent));
    Panel_3.getLayout().setHeight(LayoutValue.create(360, LayoutUnit.Pixel));
    Panel_3.getLayout().setTop(LayoutValue.create(488, LayoutUnit.Pixel));
    Panel_3.getLayout().setBottom(LayoutValue.Auto);
    Panel_3.setVisible(true);

    Panel_4.getLayout().setWidth(LayoutValue.Auto);
    Panel_4.getLayout().setLeft(LayoutValue.create(1, LayoutUnit.Percent));
    Panel_4.getLayout().setRight(LayoutValue.create(1, LayoutUnit.Percent));
    Panel_4.getLayout().setHeight(LayoutValue.create(960, LayoutUnit.Pixel));
    Panel_4.getLayout().setTop(LayoutValue.create(848, LayoutUnit.Pixel));
    Panel_4.getLayout().setBottom(LayoutValue.Auto);
    Panel_4.setVisible(true);
}
```

Galaxy S5 360 x 640 95% Online

Responsive

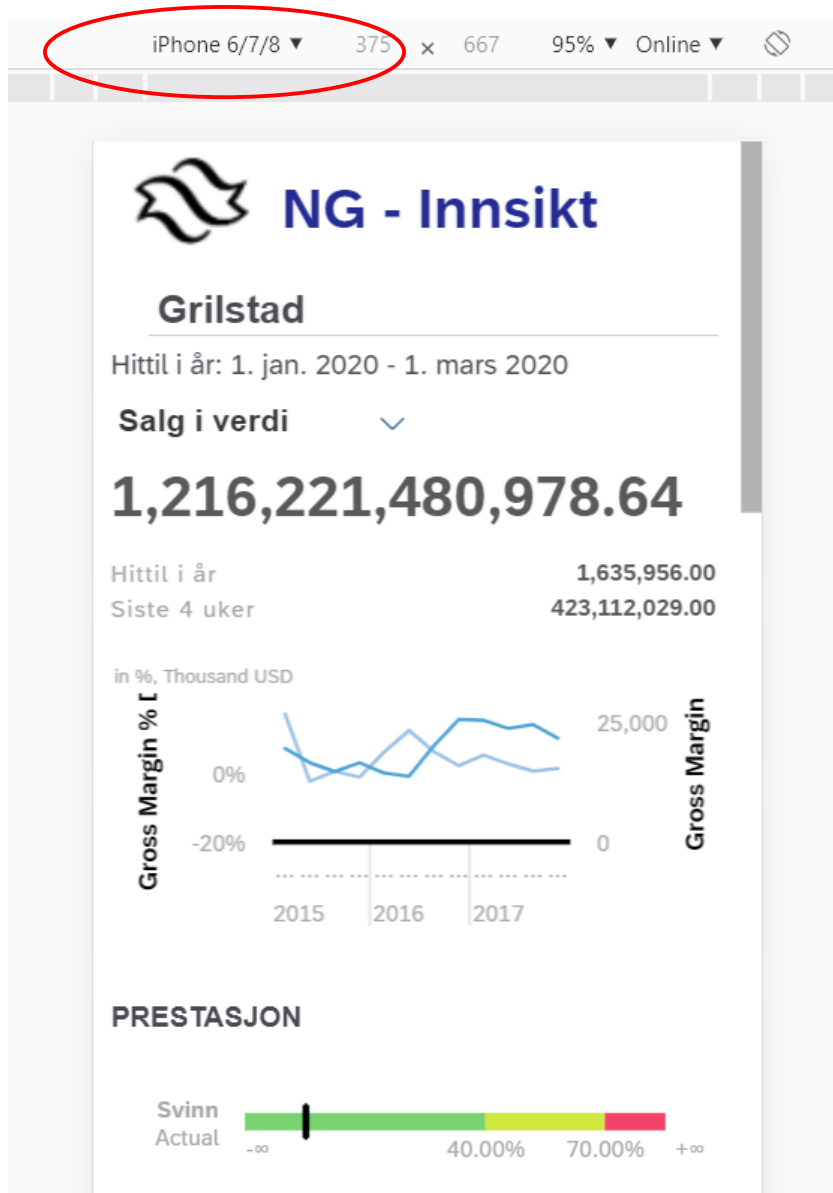
- Galaxy S5
- Pixel 2
- Pixel 2 XL
- iPhone 5/SE
- iPhone 6/7/8
- iPhone 6/7/8 Plus
- iPhone X
- iPad
- iPad Pro

**Innsikt**

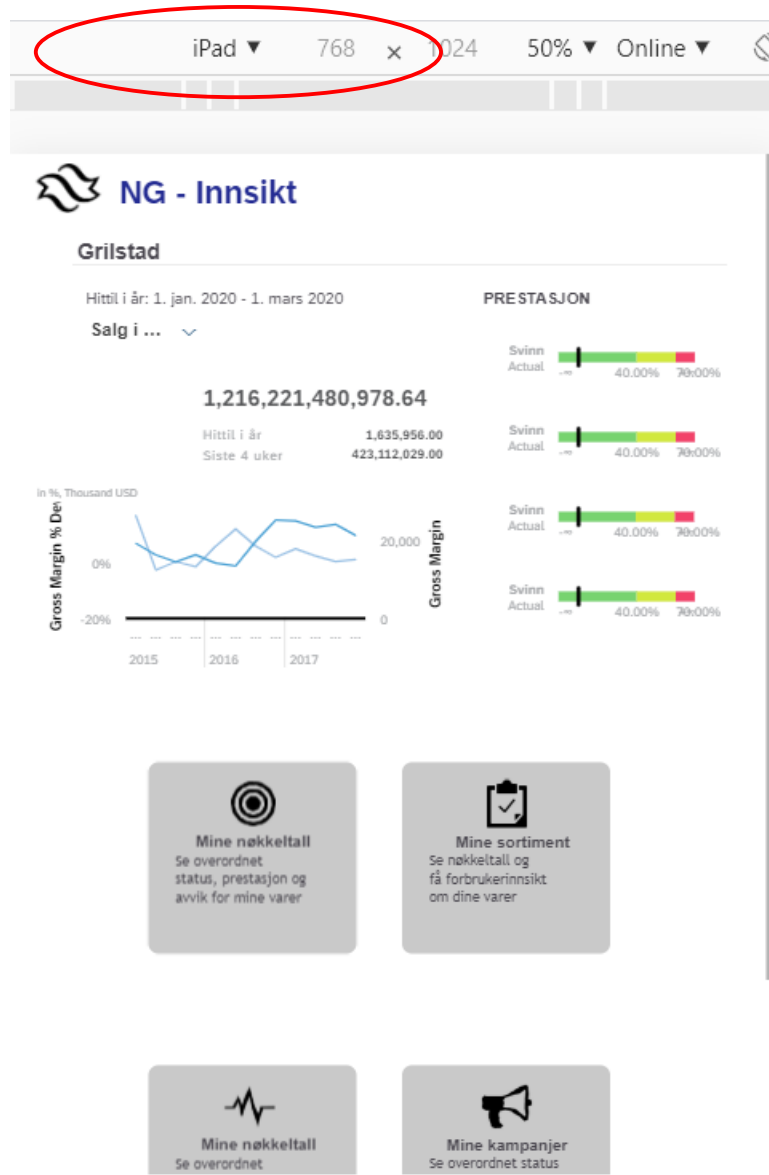
1. mars 2020

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1,635,956.00  
423,112,029.00



Iphone 6/7/8



Ipad



Screenshot from  
iphone 7