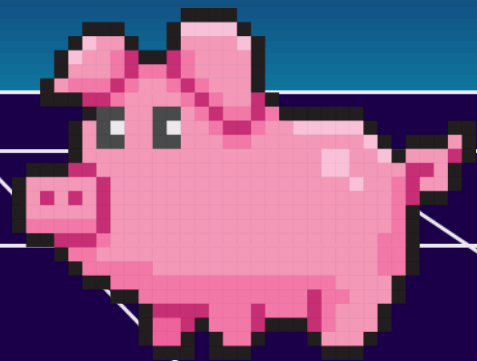


# Putting Lipstick on a Pig

## Improving a Power BI Report Step by Step

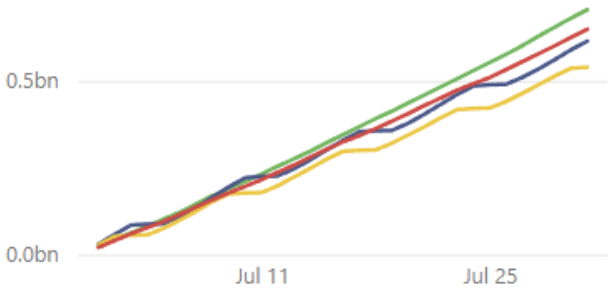
**Alexander Arvidsson** | @arcticdba



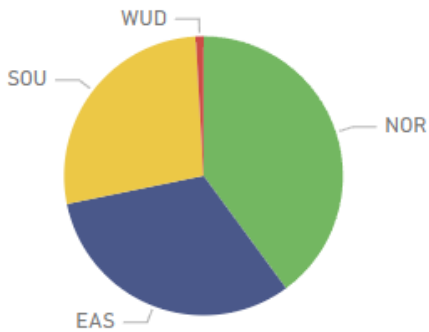
# Executive Sales Dashboard

Orders PY, Revenue PY, Revenue and Orders by Date

● Orders PY ● Revenue PY ● Revenue ● Orders

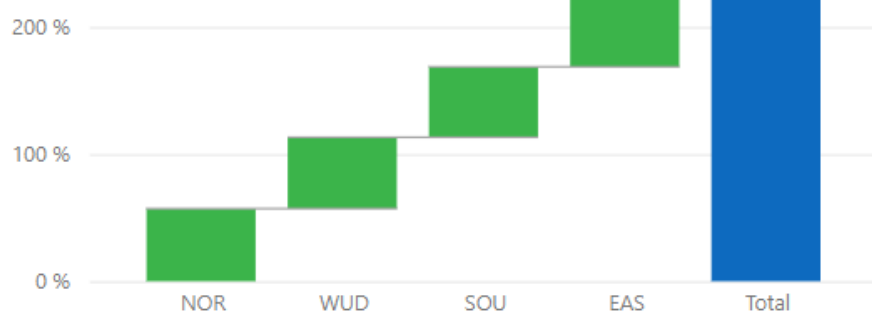


Delivered Revenue (Total GP) by Area (Abbreviated)



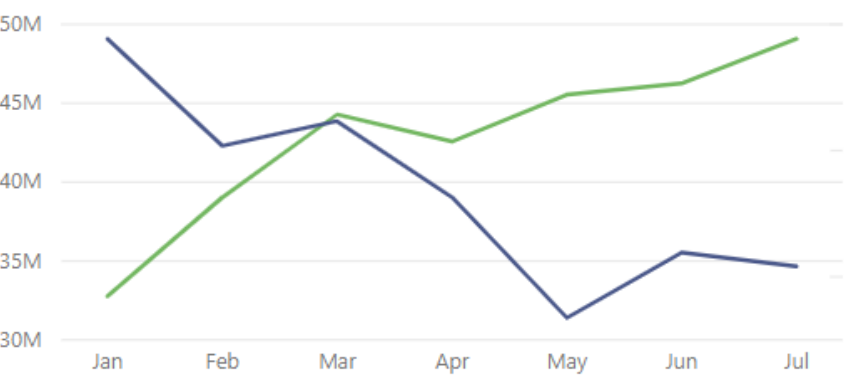
OTD (%) by Area (Abbreviated)

● Increase ● Decrease ● Total

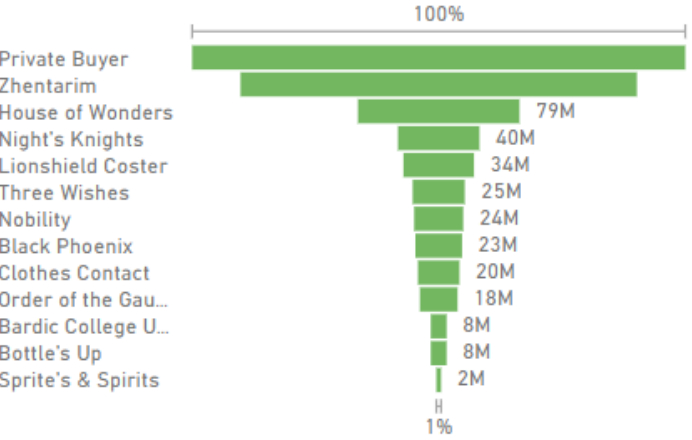


Net Profit Margin(Total GP) PY and Net Profit Margin (Total GP) by Month

● Net Profit Margin(Total GP) PY ● Net Profit Margin (Total GP)



Delivered Revenue (Total GP) by Key Account



4,047,768K  
Revenue

4,827,090K  
Orders

8.1 %  
Margin (%)

104.5 %  
Sales vs. PY (...)

93.2 %  
Orders vs. PY...

109.3 %  
Net Profit vs. ...

Sales Details

Type	Orders	Orders PY	Orders vs. PY (%)	Delivered Revenue (Total GP)	Delivered Revenue PY	Sales vs. PY (%)	Margin (%)
ANIMALS & TRANSPORTATION	27,883,194	46,499,563	60.0 %	26,749,658	39,261,375	68.1 %	0.4 %
POTIONS & SCROLLS	29,214,077	28,757,269	101.6 %	19,399,729	22,756,177	85.3 %	-4.3 %
ARMS & ARMOUR	188,681,297	205,037,602	92.0 %	153,449,979	177,858,287	86.3 %	4.8 %
SUMMONING DEVICE	96,727,465	116,941,205	82.7 %	96,389,565	111,028,821	86.8 %	22.7 %
ADVENTURING EQUIPMENT	208,750,685	215,061,816	97.1 %	167,002,794	187,982,427	88.8 %	7.3 %
MUSICAL INSTRUMENT	32,753,229	30,287,942	108.1 %	26,178,834	27,541,639	95.1 %	-0.8 %
JEWELRY	24,607,506	26,930,144	91.4 %	21,375,105	22,329,654	95.7 %	11.2 %
TOOLS & KITS	40,458,071	35,532,945	113.9 %	28,473,450	25,702,790	110.8 %	-7.7 %
Total	649,075,525	705,048,486	92.1 %	539,019,114	614,461,169	87.7 %	7.6 %

Margin (%) by Key Account









( h e / h i m )

# Alexander Arvidsson

Principal Solutions Architect @  
Data Masterminds

| Data Platform MVP | MCT | Speaker |



**DATA**masterminds



# Step 1

Stop and think





# Step 2

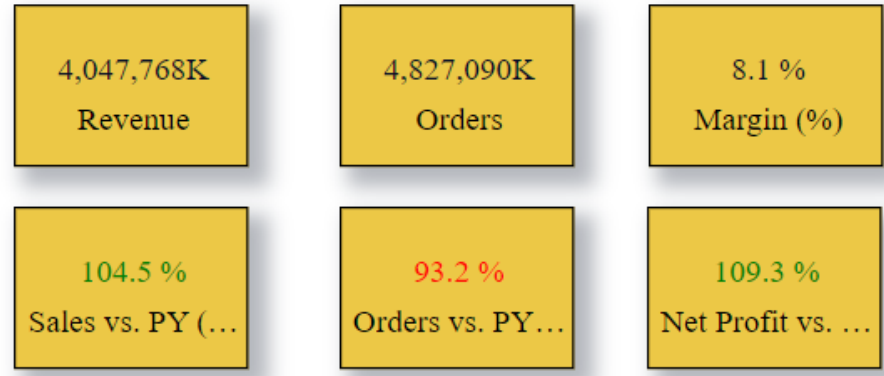
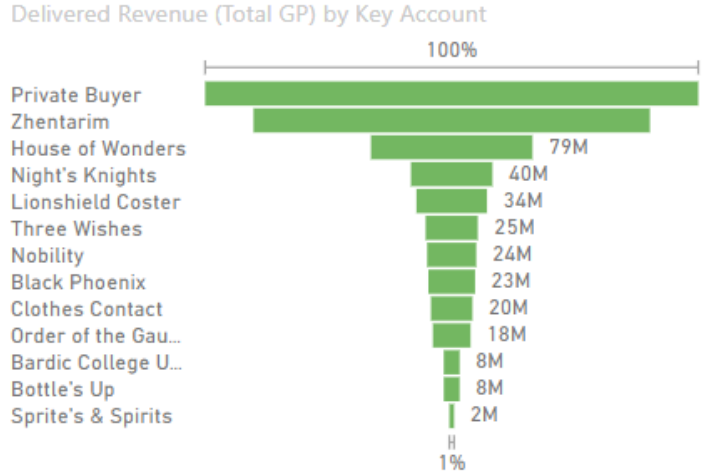
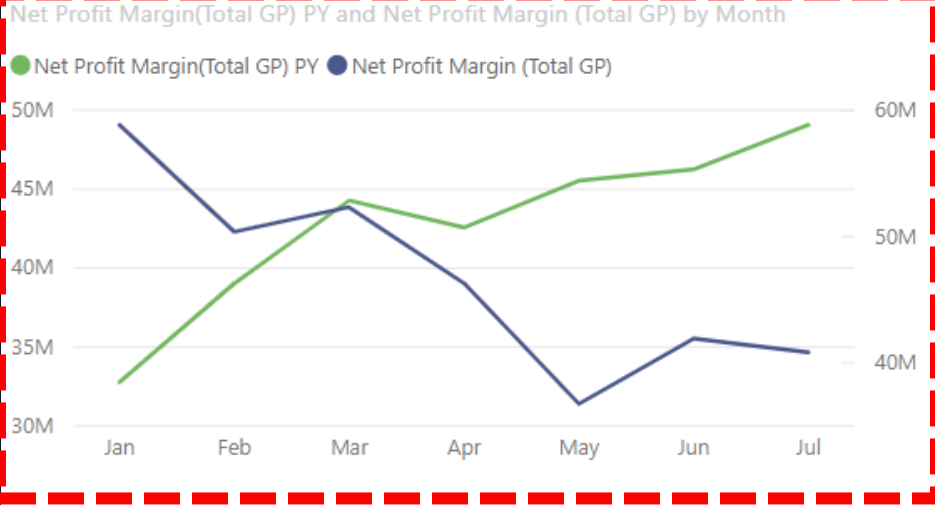
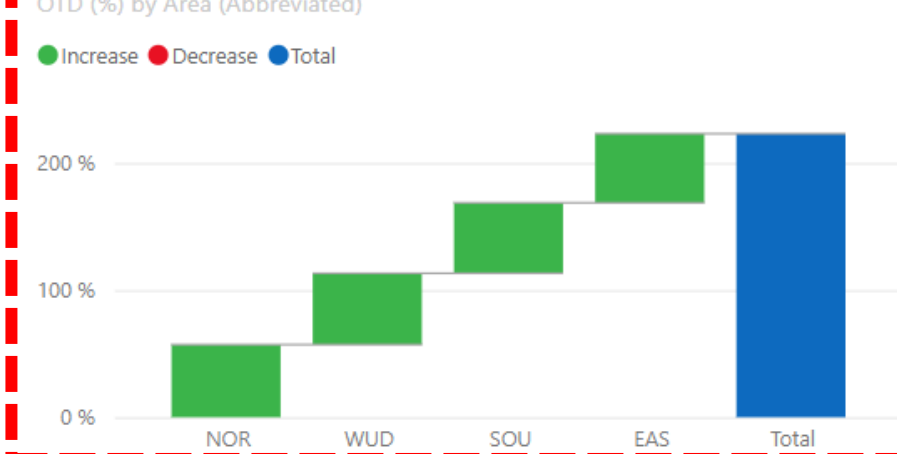
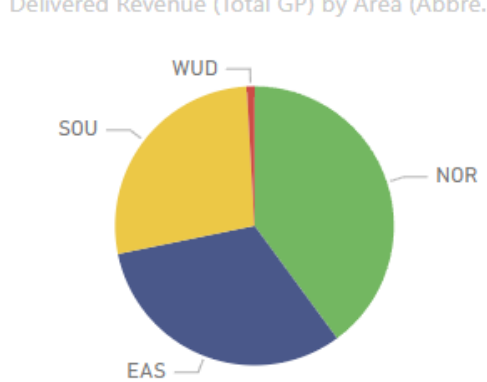
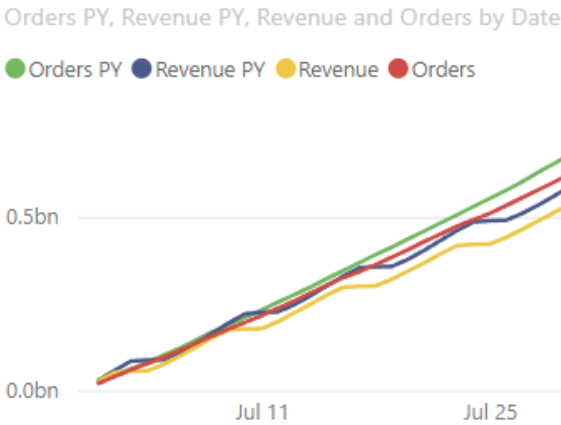
Declutter





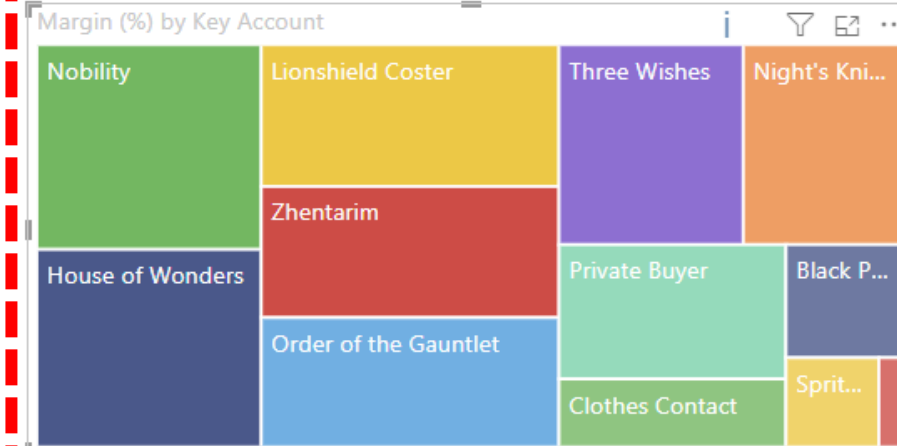
# Prioritize

# Executive Sales Dashboard



Sales Details

Type	Orders	Orders PY	Orders vs. PY (%)	Delivered Revenue (Total GP)	Delivered Revenue PY	Sales vs. PY (%)	Margin (%)
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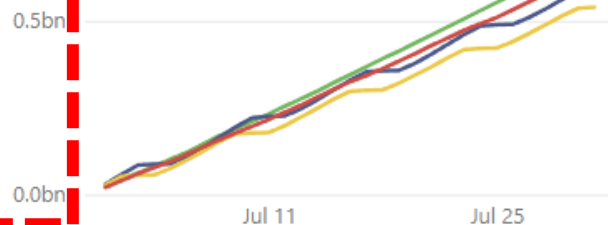
Prioritize

Make it clearer

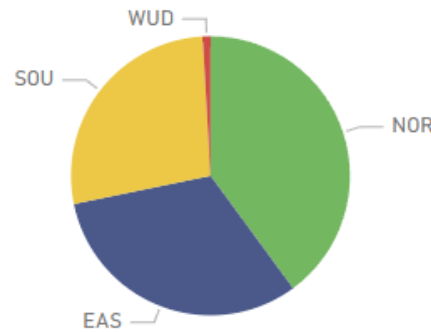
# Executive Sales Dashboard

Orders PY, Revenue PY, Revenue and Orders by Date

● Orders PY ● Revenue PY ● Revenue ● Orders

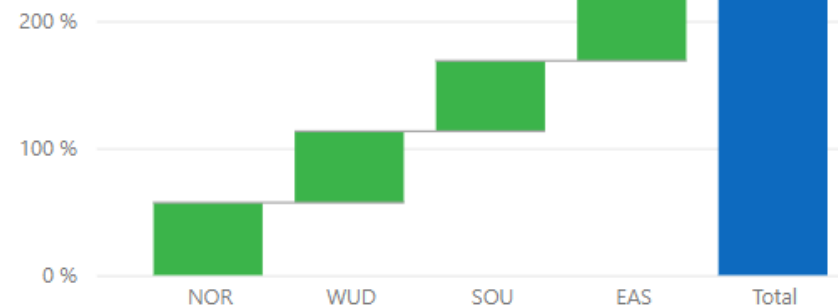


Delivered Revenue (Total GP) by Area (Abbreviated)



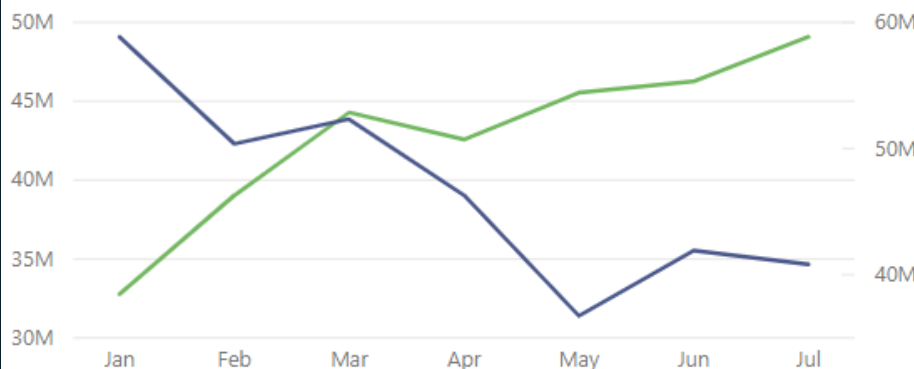
OTD (%) by Area (Abbreviated)

● Increase ● Decrease ● Total

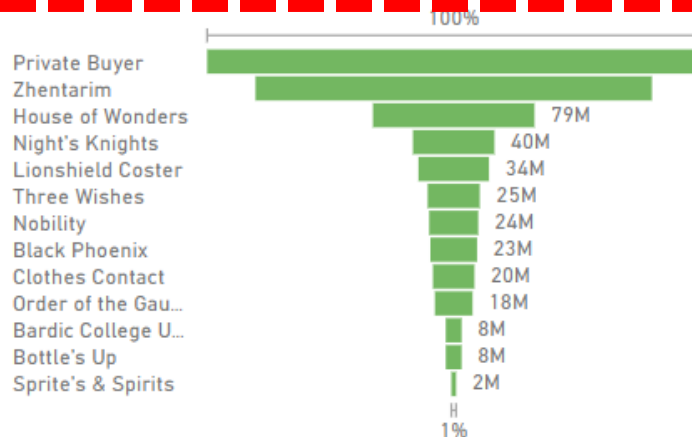


Net Profit Margin(Total GP) PY and Net Profit Margin (Total GP) by Month

● Net Profit Margin(Total GP) PY ● Net Profit Margin (Total GP)



Delivered Revenue (Total GP) by Key Account



4,047,768K  
Revenue

4,827,090K  
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8.1 %  
Margin (%)

104.5 %  
Sales vs. PY (...)

93.2 %  
Orders vs. PY...

109.3 %  
Net Profit vs. ...

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JEWELRY	24,607,506	26,930,144	91.4 %	21,375,105	22,329,654	95.7 %	11.2 %
TOOLS & KITS	40,458,071	35,532,945	113.9 %	28,473,450	25,702,790	110.8 %	-7.7 %
Total	649,075,525	705,048,486	92.1 %	539,019,114	614,461,169	87.7 %	7.6 %

Margin (%) by Key Account



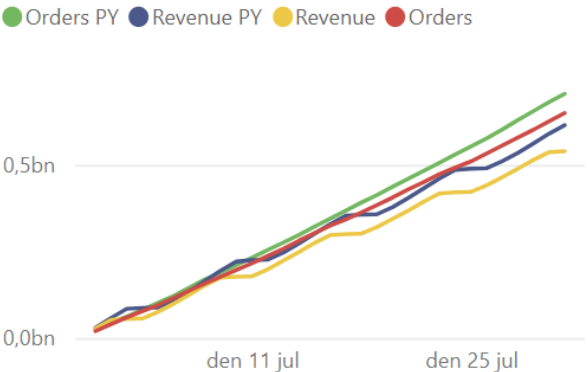
Prioritize

Make it clearer

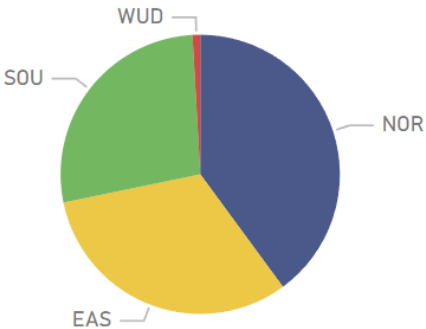
Use available space

# Executive Sales Dashboard

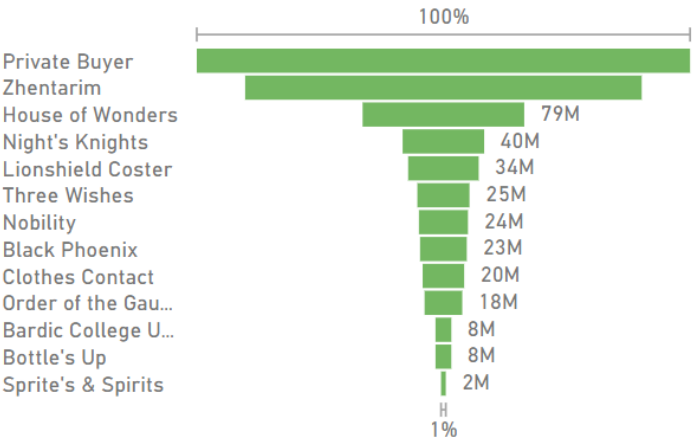
Orders PY, Revenue PY, Revenue and Orders by Date



Delivered Revenue (Total GP) by Area (Abbreviation)



Delivered Revenue (Total GP) by Key Account



4 047 768K  
Revenue

4 827 090K  
Orders

8,1 %  
Margin (%)

104,5 %  
Sales vs. PY (...)

93,2 %  
Orders vs. PY...

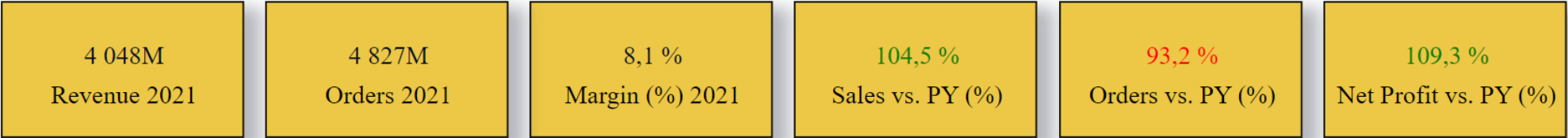
109,3 %  
Net Profit vs. ...

## Sales Details

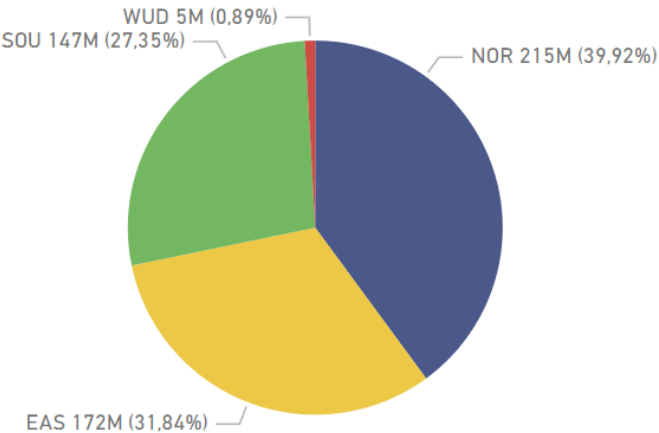
Type	Orders	Orders PY	Orders vs. PY (%)	Delivered Revenue (Total GP)	Delivered Revenue PY	Sales vs. PY (%)	Margin (%)
ANIMALS & TRANSPORTATION	27 883 194	46 499 563	60,0 %	26 749 658	39 261 375	68,1 %	0,4 %
POTIONS & SCROLLS	29 214 077	28 757 269	101,6 %	19 399 729	22 756 177	85,3 %	-4,3 %
ARMS & ARMOUR	188 681 297	205 037 602	92,0 %	153 449 979	177 858 287	86,3 %	4,8 %
SUMMONING DEVICE	96 727 465	116 941 205	82,7 %	96 389 565	111 028 821	86,8 %	22,7 %
ADVENTURING EQUIPMENT	208 750 685	215 061 816	97,1 %	167 002 794	187 982 427	88,8 %	7,3 %
MUSICAL INSTRUMENT	32 753 229	30 287 942	108,1 %	26 178 834	27 541 639	95,1 %	-0,8 %
JEWELRY	24 607 506	26 930 144	91,4 %	21 375 105	22 329 654	95,7 %	11,2 %
TOOLS & KITS	40 458 071	35 532 945	113,9 %	28 473 450	25 702 790	110,8 %	-7,7 %
Total	649 075 525	705 048 486	92,1 %	539 019 114	614 461 169	87,7 %	7,6 %



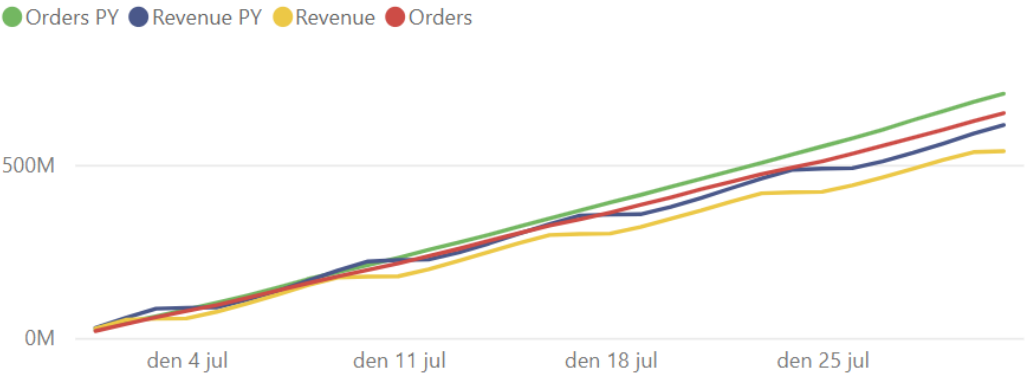
# Executive Quarterly Sales Dashboard



Delivered Revenue (Total GP) by Area (Abbreviated)



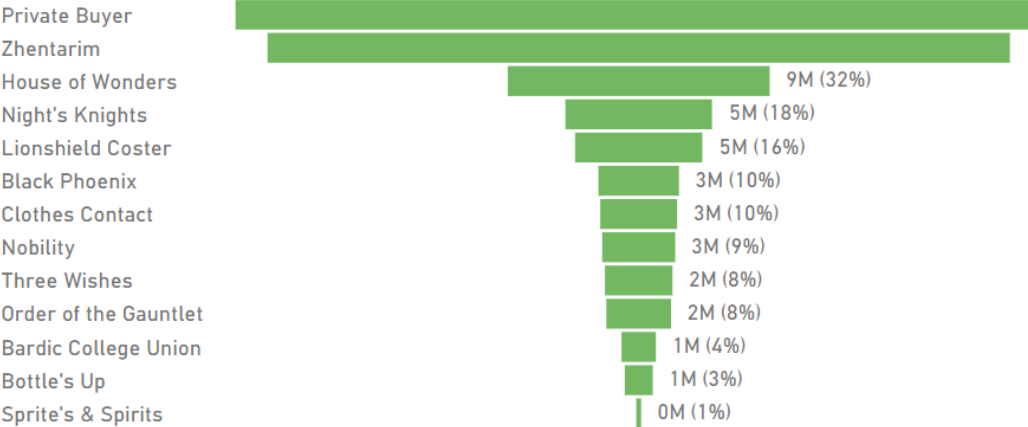
Q3 Delivered Revenue & Orders



QTD Sales Stats by Product Group

Product Type	Orders	Orders PY	%	Delivered Revenue (Total GP)	Delivered Revenue PY	%	Margin (%)
ADVENTURING EQUIPMENT	209M	215M	97,1 %	167M	188M	88,8 %	7,3 %
ARMS & ARMOUR	189M	205M	92,0 %	153M	178M	86,3 %	4,8 %
SUMMONING DEVICE	97M	117M	82,7 %	96M	111M	86,8 %	22,7 %
ANIMALS & TRANSPORTATION	28M	46M	60,0 %	27M	39M	68,1 %	0,4 %
TOOLS & KITS	40M	36M	113,9 %	28M	26M	110,8 %	-7,7 %
MUSICAL INSTRUMENT	33M	30M	108,1 %	26M	28M	95,1 %	-0,8 %
POTIONS & SCROLLS	29M	29M	101,6 %	19M	23M	85,3 %	-4,3 %
JEWELRY	25M	27M	91,4 %	21M	22M	95,7 %	11,2 %
Total QTD	649M	705M	92,1 %	539M	614M	87,7 %	7,6 %

Delivered Revenue by Key Account

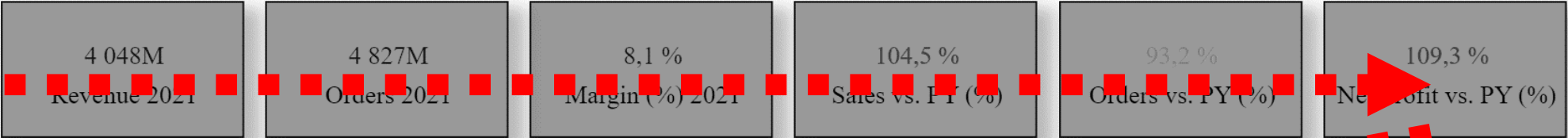


# Step 3

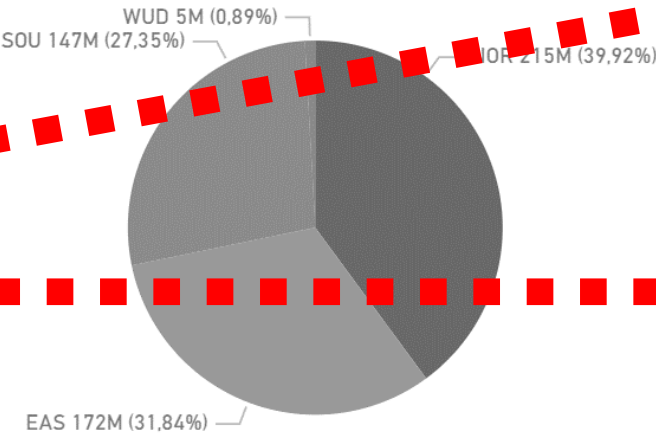
Streamline

Follow the eyes

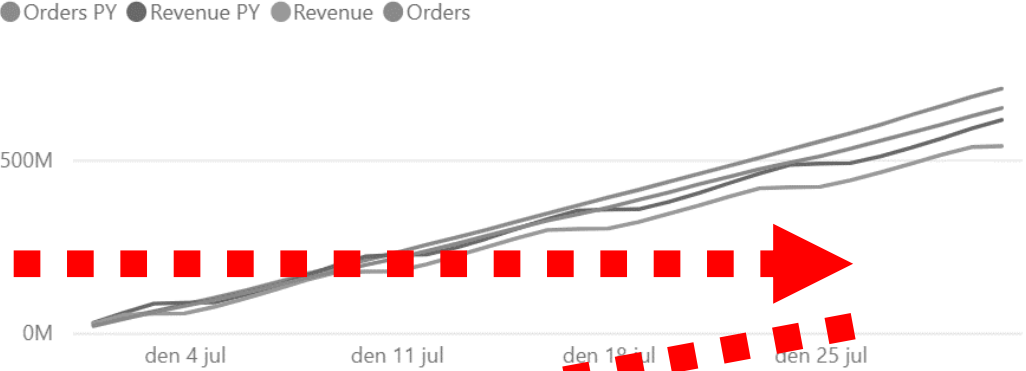
# Executive Quarterly Sales Dashboard



Delivered Revenue (Total GP) by Area (Abbreviated)



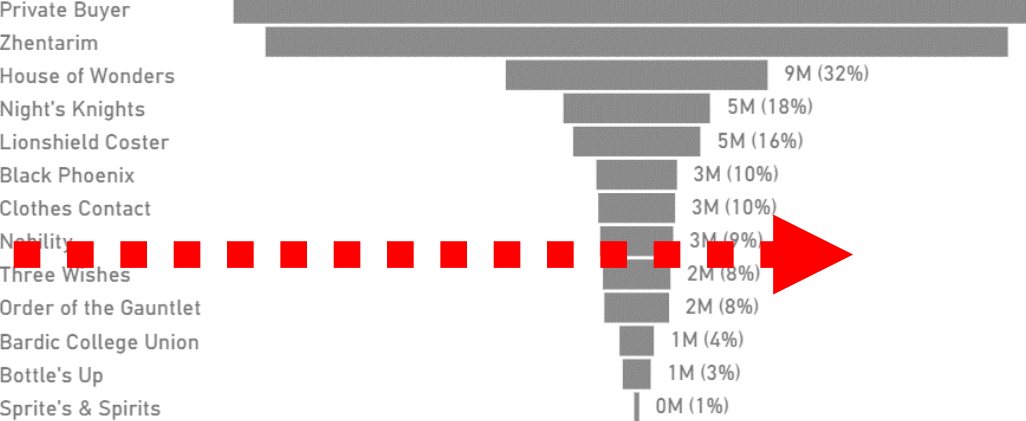
3 Delivered Revenue & Orders

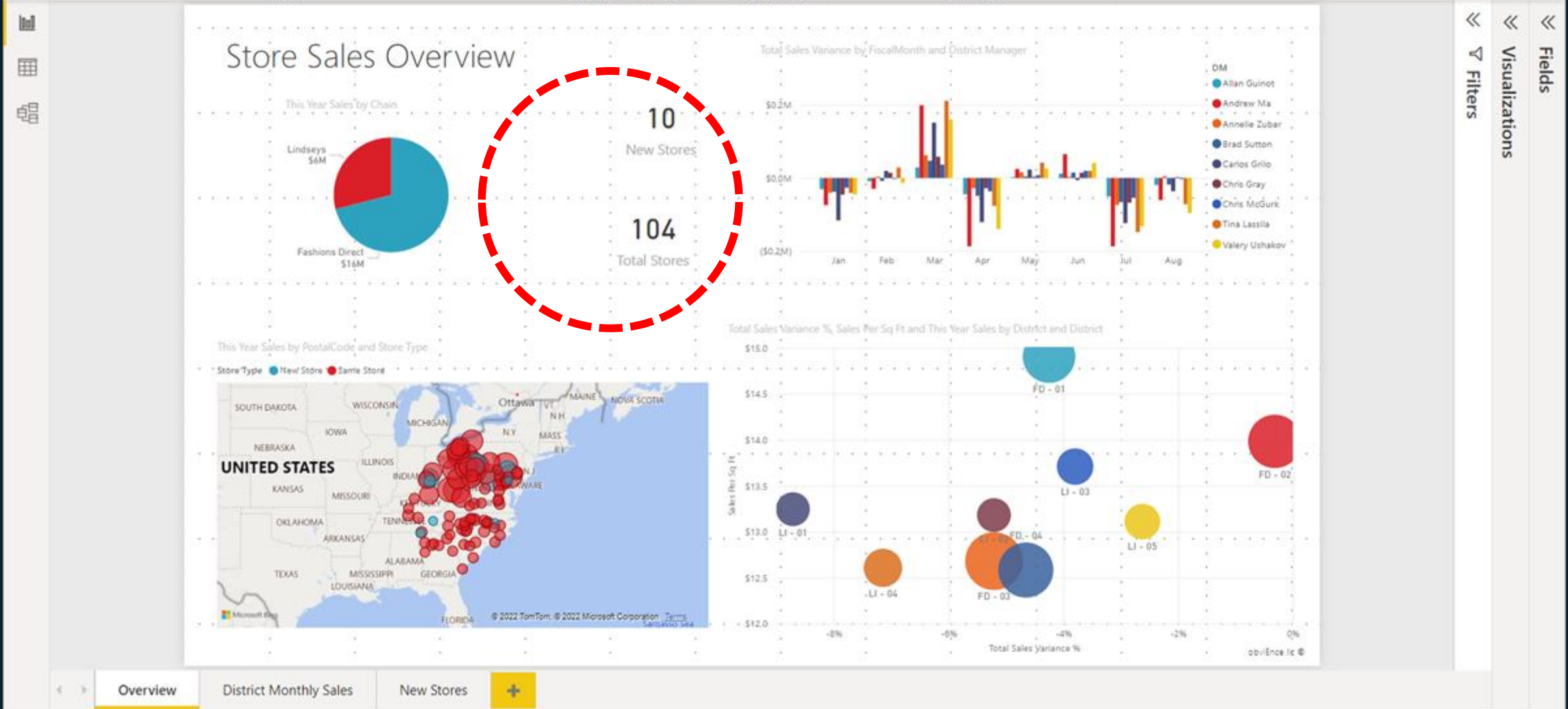


QTD Sales Stats by Product Group

Product Type	Orders	Orders PY	%	Delivered Revenue (Total GP)	Delivered Revenue PY	%	Margin (%)
ADVENTURING EQUIPMENT	200M	210M	97,1 %	167M	188M	88,8 %	7,3 %
ARMS & ARMOR	189M	205M	92,0 %	153M	178M	86,3 %	4,8 %
SUMMONING RITUALS	97M	117M	82,7 %	96M	111M	86,8 %	22,7 %
ANIMALS & TRANSPORTATION	28M	46M	60,0 %	27M	39M	68,1 %	0,4 %
TOOLS & WEAPONS	40M	30M	133,3 %	40M	26M	153,8 %	1,7 %
MUSICAL INSTRUMENT	33M	30M	108,1 %	26M	28M	95,1 %	-0,8 %
POTIONS & SCROLLS	29M	29M	101,6 %	19M	23M	85,3 %	-4,3 %
JEWELRY	25M	27M	91,4 %	21M	22M	95,7 %	11,2 %
Total QTD	649M	705M	92,1 %	539M	614M	87,7 %	7,6 %











































































Delivered Revenue by Key Account





Follow the eyes

Use simpler visuals

<p><b>Deviation</b></p> <p>Emphasise variation (+/-) from a fixed reference point. Typically the reference point is zero but it can also be a target or a long-term average. Can also be used to show sentiment (positive/neutral/negative).</p> <p><b>Example FT uses</b> Trade surplus/deficit, climate change</p>	<p><b>Correlation</b></p> <p>Show the relationship between two or more variables. Be mindful that, unless you tell them otherwise, many readers will assume the relationships you show them to be causal (i.e. one causes the other).</p> <p><b>Example FT uses</b> Economic distribution, income and life expectancy</p>	<p><b>Ranking</b></p> <p>Use where an item's position in an ordered list is more important than its absolute or relative value. Don't be afraid to highlight the points of interest.</p> <p><b>Example FT uses</b> Health deprivation, league tables, constituency election results</p>	<p><b>Distribution</b></p> <p>Show values in a dataset and how often they occur. The shape (or 'view') of a distribution can be a memorable way of highlighting the lack of uniformity or equality in the data.</p> <p><b>Example FT uses</b> Income distribution, population (age)-based distribution, revealing inequality</p>	<p><b>Change over Time</b></p> <p>Give emphasis to changing trends. These can be short (intra-day) movements or extended periods (spanning decades or centuries); showing the correct time period is important to provide suitable context for the reader.</p> <p><b>Example FT uses</b> Share price movements, economic time series, sector of changes in a market</p>	<p><b>Magnitude</b></p> <p>Show size comparisons. These can be relative (just being able to see larger/smaller) or absolute (need to see fine differences). Usually these show a 'counted' number (for example, barrels, dollars or people) rather than a calculated rate or per cent.</p> <p><b>Example FT uses</b> Commodity production, market capitalisation, volumes in general</p>	<p><b>Part-to-whole</b></p> <p>Show how a single entity can be broken down into its component elements. If the reader's interest is solely in the size of the components, consider a magnitude-type chart instead.</p> <p><b>Example FT uses</b> Fiscal budgets, company structures, national election results</p>	<p><b>Spatial</b></p> <p>Aside from locator maps only used when precise locations or geographical patterns in data are more important to the reader than anything else.</p> <p><b>Example FT uses</b> Population density, natural resource locations, natural disaster risk/impact, catchment areas, variation in election results</p>	<p><b>Flow</b></p> <p>Show the reader volumes or intensity of movement between two or more states or conditions. These might be logical sequences or geographical locations.</p> <p><b>Example FT uses</b> Movement of funds, trade, migrants, benefits, information, relationship graphs.</p>
<p><b>Diverging bar</b></p>  <p>A simple standard bar chart that can handle both negative and positive magnitude values.</p>	<p><b>Scatterplot</b></p>  <p>The standard way to show the relationship between two continuous variables, each of which has its own axis.</p>	<p><b>Ordered bar</b></p>  <p>Standard bar charts display the ranks of values much more easily when sorted into order.</p>	<p><b>Histogram</b></p>  <p>The standard way to show a statistical distribution - keeps the gaps between columns smaller to highlight the 'shape' of the data.</p>	<p><b>Line</b></p>  <p>The standard way to show a changing time series. If data are irregular, consider markers to represent data points.</p>	<p><b>Column</b></p>  <p>The standard way to compare the size of things. Must always start at 0 on the axis.</p>	<p><b>Stacked column/bar</b></p>  <p>A simple way of showing part-to-whole relationships but can be difficult to read with more than a few components.</p>	<p><b>Basic choropleth (rate/ratio)</b></p>  <p>The standard approach for putting data on a map - should always be used rather than icons and use a sensible base geography.</p>	<p><b>Sankey</b></p>  <p>Shows changes in flows from one condition to at least one other: good for tracing the eventual outcome of a complex process.</p>
<p><b>Diverging stacked bar</b></p>  <p>Perfect for presenting survey results which involve sentiment (eg. disagree/neutral/agree).</p>	<p><b>Column + line timeline</b></p>  <p>A good way of showing the relationship between an amount (columns) and a rate (line).</p>	<p><b>Ordered column</b></p>  <p>See above.</p>	<p><b>Dot plot</b></p>  <p>A simple way of showing the change over time - but usually best with only one series of data at a time.</p>	<p><b>Column</b></p>  <p>Columns work well for showing change over time - but usually best with only one series of data at a time.</p>	<p><b>Column + line timeline</b></p>  <p>A good way of showing the relationship over time between an amount (columns) and a rate (line).</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol (count/magnitude)</b></p>  <p>Use for totals rather than rates - be wary that small differences in data will be hard to see.</p>	<p><b>Waterfall</b></p>  <p>Designed to show the sequencing of data through a flow process, typically budgets. Can include +/- components.</p>
<p><b>Spine</b></p>  <p>Splits a single value into two contrasting components (eg. male/female).</p>	<p><b>Connected scatterplot</b></p>  <p>Usually used to show how the relationship between 2 variables has changed over time.</p>	<p><b>Ordered proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Dot strip plot</b></p>  <p>Good for showing individual values in a distribution, can be a problem when too many dots have the same value.</p>	<p><b>Column</b></p>  <p>Columns work well for showing change over time - but usually best with only one series of data at a time.</p>	<p><b>Column + line timeline</b></p>  <p>A good way of showing the relationship over time between an amount (columns) and a rate (line).</p>	<p><b>Paired column</b></p>  <p>As per standard column but allows for multiple series. Can become tricky to read with more than 2 series.</p>	<p><b>Flow map</b></p>  <p>For showing unambiguous movement across a map.</p>	<p><b>Chord</b></p>  <p>A complex but powerful diagram which can illustrate 2-way flows (and not just one) in a matrix.</p>
<p><b>Burrows/Wheeler filled line</b></p>  <p>The shaded area of these charts allows a balance to be shown - either against a baseline or between two series.</p>	<p><b>Bubble</b></p>  <p>Like a scatterplot, but adds additional detail by sizing the bubbles according to a third variable.</p>	<p><b>Dot strip plot</b></p>  <p>Dots placed in order on a strip are a space-efficient method of laying out ranks across multiple categories.</p>	<p><b>Bonnet plot</b></p>  <p>Like dot strip plots, good for displaying all the data in a table, they work best when highlighting individual values.</p>	<p><b>Slope</b></p>  <p>Good for showing changing data as long as the data can be simplified into 2 or 3 points without missing a key part of story.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Donut</b></p>  <p>Similar to a pie chart - but the centre can be a good way of making space to include more information about the data (eg. totals).</p>	<p><b>Contour map</b></p>  <p>For showing areas of equal value on a map. Can use elevation colour schemes for showing +/- values.</p>
<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Slope</b></p>  <p>Perfect for showing how ranks have changed over time or vary between categories.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Bump</b></p>  <p>Effective for showing changing rankings across multiple dates. For large datasets, consider grouping lines using colour.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Population pyramid</b></p>  <p>A standard way for showing the age and sex breakdown of a population distribution effectively, back to back histograms.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Cumulative curve</b></p>  <p>A good way of showing how unequal a distribution is - axis is always cumulative frequency x axis is always a measure.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Frequency polygons</b></p>  <p>For displaying multiple distributions of data. Like regular line charts, best limited to a maximum of 3 or 4 datasets.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>
<p><b>Beehive</b></p>  <p>Use to emphasize individual points in a distribution. Points can be sized to an additional variable. Best with medium-sized datasets.</p>	<p><b>XY heatmap</b></p>  <p>A good way of showing the patterns between 2 categories of data, less effective at showing fine differences in amounts.</p>	<p><b>Lollipop</b></p>  <p>Lollipops draw more attention to the data value than standard bar/columns and can also show rank and value effectively.</p>	<p><b>Boxplot</b></p>  <p>Summarise multiple distributions by showing the median (centre) and range of the data.</p>	<p><b>Area chart</b></p>  <p>Use with care - these are good at showing changes to total, but seeing change in long as there are many small segments can be very difficult.</p>	<p><b>Marimekko</b></p>  <p>A good way of showing the size and proportion of data at the same time - as long as the data are not too complicated.</p>	<p><b>Proportional symbol</b></p>  <p>Use when there are big variations between values and/or seeing fine differences between data is not so important.</p>	<p><b>Equalised cartogram</b></p>  <p>Converting each unit on a map to a regular and equally-sized shape - good for representing voting regions with equal value.</p>	<p><b>Scalogram (value)</b></p>  <p>Stretching and shrinking a map so that each area is sized according to a particular value.</p>

# Visual vocabulary

*Designing with data*

There are so many ways to visualise data - how do we know which one to pick? Use the categories across the top to decide which data relationship is most important in your story, then look at the different types of chart within the category to form some initial ideas about what might work best. This list is not meant to be exhaustive, nor a wizard, but is a useful starting point for making informative and meaningful data visualisations.


FT graphics: Alan Smith, Chris Campbell, Ian Bell, Leo Francis, Graham Phillips, Billy O'Donoghue, Charlotte, Paul McGowan, Martin Dudgeon. Inspired by the Graphic Continuum by Jon Schwabedissen and Severino Rinaldi.



# Visual Vocabulary

There are so many ways to visualise data - how do we know which one to pick? Click on a category below to decide which data relationship is most important in your story, then look at the different types of charts within the category to form some initial ideas about what might work best. This list is not meant to be exhaustive, nor a wizard, but is a useful starting point for making informative and meaningful data visualisations.

Click any section below to view the charts



## Deviation

Emphasise variations (+/-) from a fixed reference point. Typically the reference point is zero but it can also be a target or a long-term average. Can also be used to show sentiment (positive/neutral/negative).



## Correlation

Show the relationship between two or more variables. Be mindful that, unless you tell them otherwise, many readers will assume the relationships you show them to be causal (i.e., one causes the other).



## Ranking

Use where an item's position in an ordered list is more important than its absolute or relative value. Don't be afraid to highlight the points of interest.



## Distribution

Show values in a dataset and how often they occur. The shape (or 'skew') of a distribution can be a memorable way of highlighting the lack of uniformity or equality in the data.



## Change over Time

Give emphasis to changing trends. These can be short (intra-day) movements or extended series traversing decades or centuries: Choosing the correct time period is important to provide suitable context for the reader.



## Part-to-Whole

Show how a single entity can be broken down into its component elements. If the reader's interest is solely in the size of the components, consider a magnitude-type chart instead.



## Magnitude

Show size comparisons. These can be relative (just being able to see larger/bigger) or absolute (need to see fine differences). Usually these show a 'counted' number (for example, barrels, dollars or people) rather than a calculated rate or per cent.



## Spatial

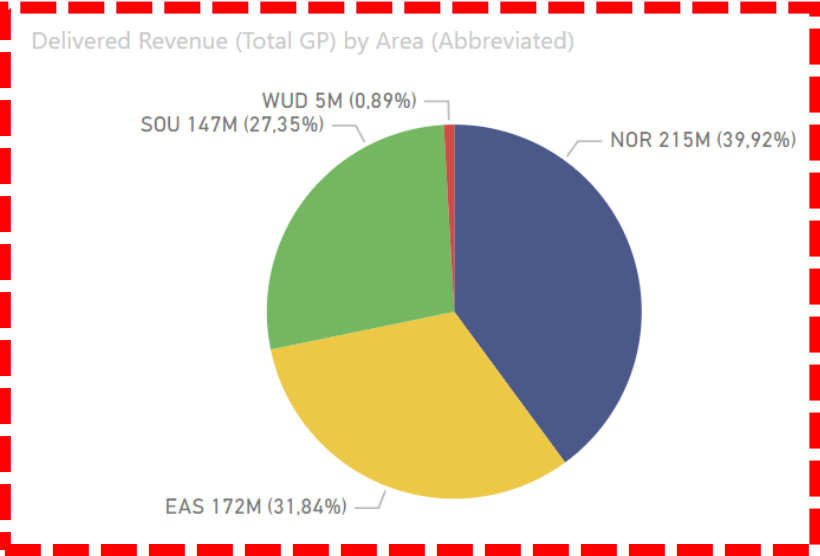
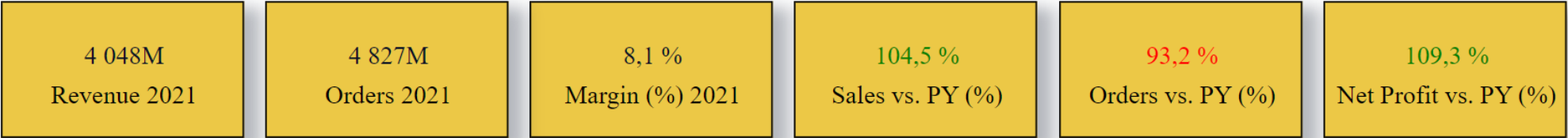
Used only when precise locations or geographical patterns in data are more important to the reader than anything else.



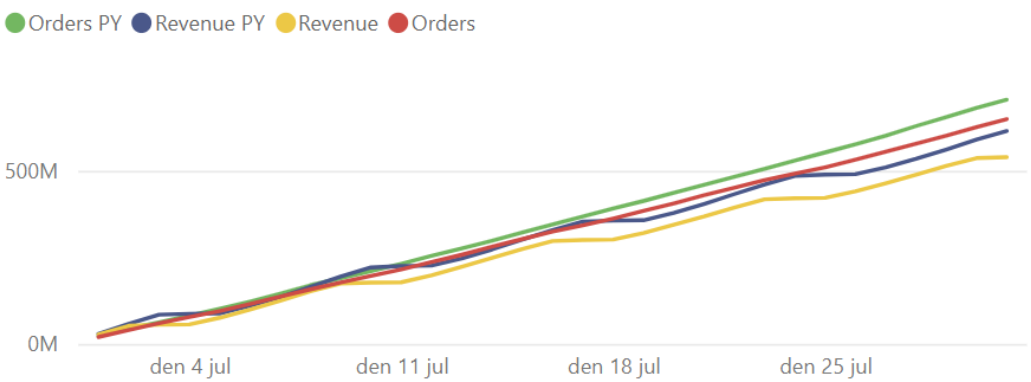
## Flow

Show the reader volumes or intensity of movement between two or more states or conditions. These might be logical sequences or geographical locations.

# Executive Quarterly Sales Dashboard



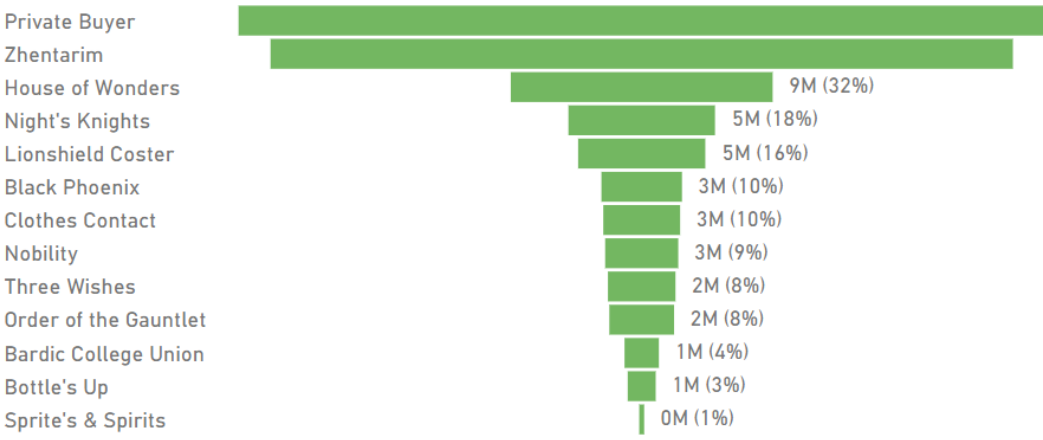
Q3 Delivered Revenue & Orders



QTD Sales Stats by Product Group

Product Type	Orders	Orders PY	%	Delivered Revenue (Total GP)	Delivered Revenue PY	%	Margin (%)
ADVENTURING EQUIPMENT	209M	215M	97,1 %	167M	188M	88,8 %	7,3 %
ARMS & ARMOUR	189M	205M	92,0 %	153M	178M	86,3 %	4,8 %
SUMMONING DEVICE	97M	117M	82,7 %	96M	111M	86,8 %	22,7 %
ANIMALS & TRANSPORTATION	28M	46M	60,0 %	27M	39M	68,1 %	0,4 %
TOOLS & KITS	40M	36M	113,9 %	28M	26M	110,8 %	-7,7 %
MUSICAL INSTRUMENT	33M	30M	108,1 %	26M	28M	95,1 %	-0,8 %
POTIONS & SCROLLS	29M	29M	101,6 %	19M	23M	85,3 %	-4,3 %
JEWELRY	25M	27M	91,4 %	21M	22M	95,7 %	11,2 %
Total QTD	649M	705M	92,1 %	539M	614M	87,7 %	7,6 %

Delivered Revenue by Key Account



Follow the eyes

Use simpler visuals

Make better use of text

# Executive Quarterly Sales Dashboard

4 048M  
Revenue 2021

4 827M  
Orders 2021

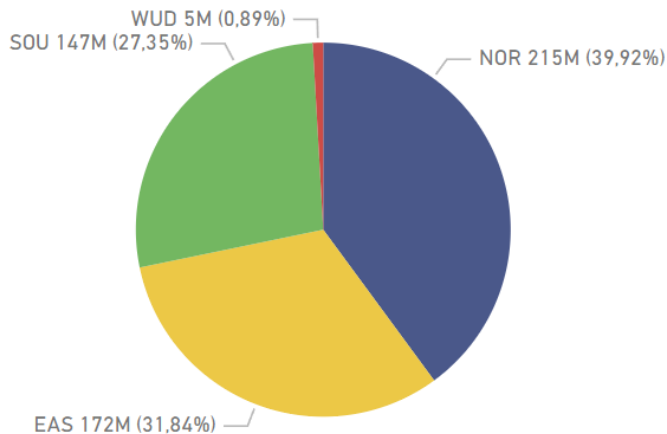
8,1 %  
Margin (%) 2021

104,5 %  
Sales vs. PY (%)

93,2 %  
Orders vs. PY (%)

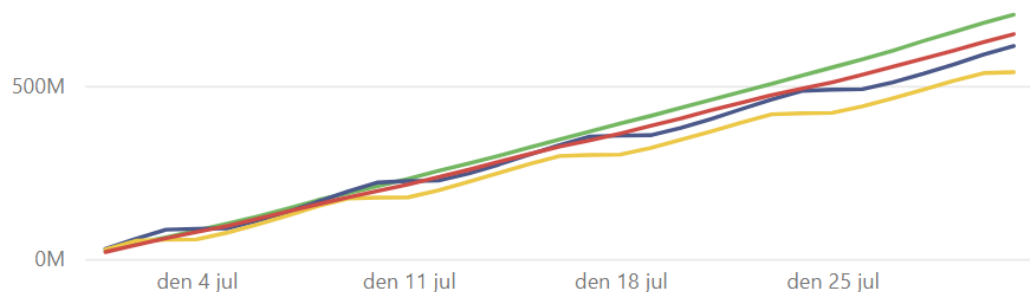
109,3 %  
Net Profit vs. PY (%)

Delivered Revenue (Total GP) by Area (Abbreviated)



Q3 Delivered Revenue & Orders

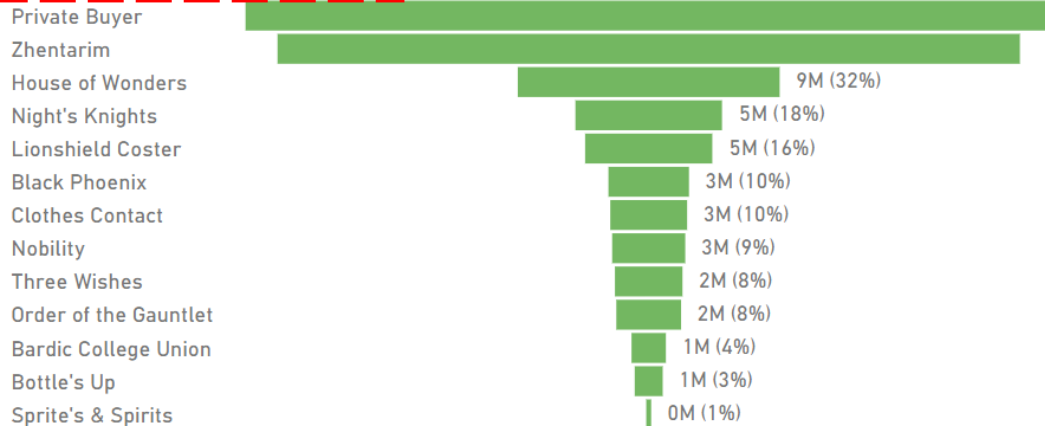
● Orders PY ● Revenue PY ● Revenue ● Orders



QTD Sales Stats by Product Group

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Total QTD	649M	705M	92,1 %	539M	614M	87,7 %	7,6 %

Delivered Revenue by Key Account



Text Text

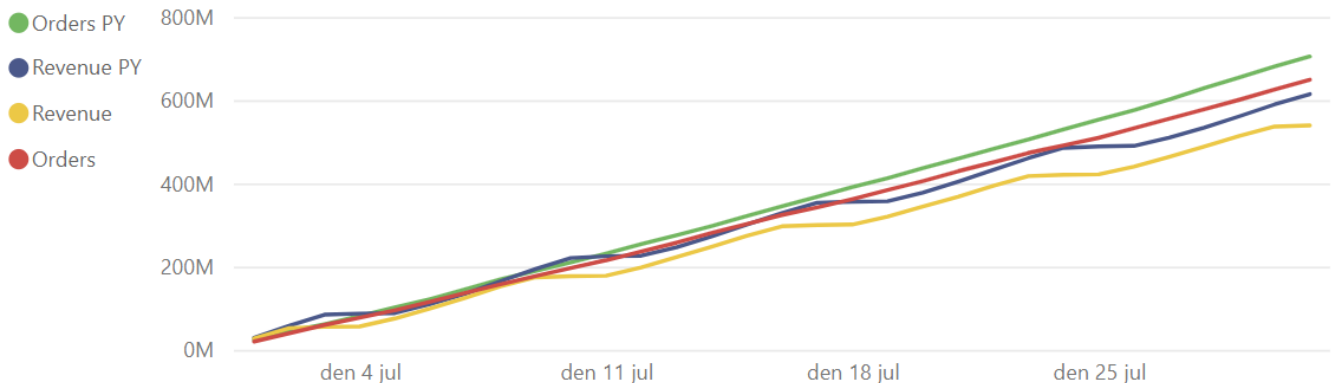
Dyslexia  
friendly...?





# Executive Quarterly Sales Dashboard

## Q3 Delivered Revenue & Orders



4 048M

Revenue 2021

4 827M

Orders 2021

8,1 %

Margin (%) 2021

104,5 %

Sales vs. PY (%)

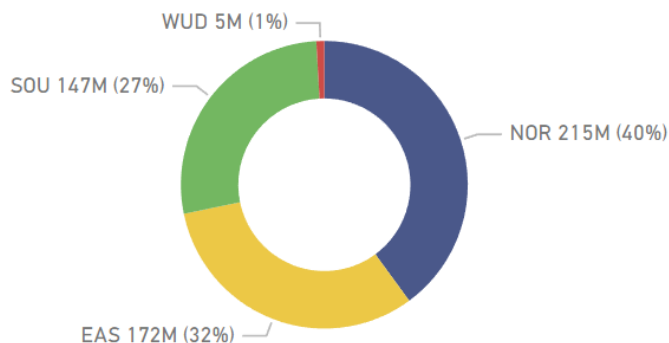
93,2 %

Orders vs. PY (%)

109,3 %

Net Profit vs. PY (%)

## Delivered Revenue by Area



## QTD Sales Stats by Product Group

Product Type	Orders	Orders PY	%	Delivered Revenue (Total GP)	Delivered Revenue PY	%	Margin (%)
TOOLS & KITS	40M	36M	113,9 %	28 473 450	26M	110,8 %	-7,7 %
MUSICAL INSTRUMENT	33M	30M	108,1 %	26 178 834	28M	95,1 %	-0,8 %
POTIONS & SCROLLS	29M	29M	101,6 %	19 399 729	23M	85,3 %	-4,3 %
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ARMS & ARMOUR	189M	205M	92,0 %	153 449 979	178M	86,3 %	4,8 %
JEWELRY	25M	27M	91,4 %	21 375 105	22M	95,7 %	11,2 %
SUMMONING DEVICE	97M	117M	82,7 %	96 389 565	111M	86,8 %	22,7 %
ANIMALS & TRANSPORTATION	28M	46M	60,0 %	26 749 658	39M	68,1 %	0,4 %
<b>Total QTD</b>	<b>649M</b>	<b>705M</b>	<b>92,1 %</b>	<b>539 019 114</b>	<b>614M</b>	<b>87,7 %</b>	<b>7,6 %</b>

## Delivered Revenue by Key Account



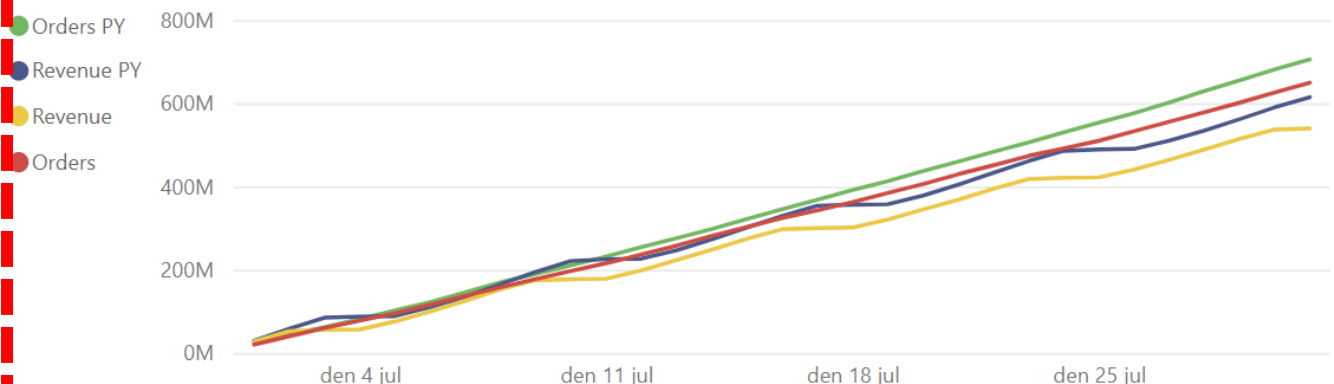
# Step 4

Accessibility(?)

# Color and contrast

# Executive Quarterly Sales Dashboard

## Q3 Delivered Revenue & Orders



4 048M

Revenue 2021

4 827M

Orders 2021

8,1 %

Margin (%) 2021

104,5 %

Sales vs. PY (%)

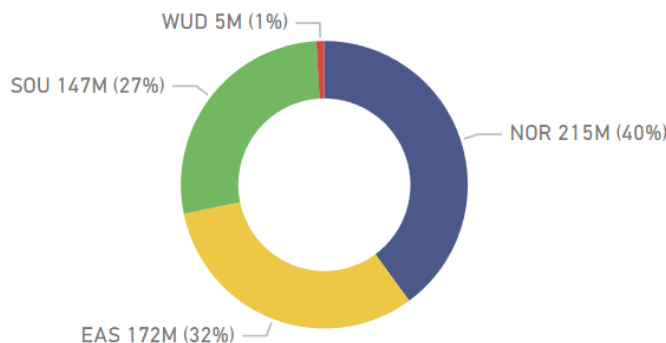
93,2 %

Orders vs. PY (%)

109,3 %

Net Profit vs. PY (%)

## Delivered Revenue by Area



## Delivered Revenue by Key Account



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Color Wheel

Extract Theme

Extract Gradient

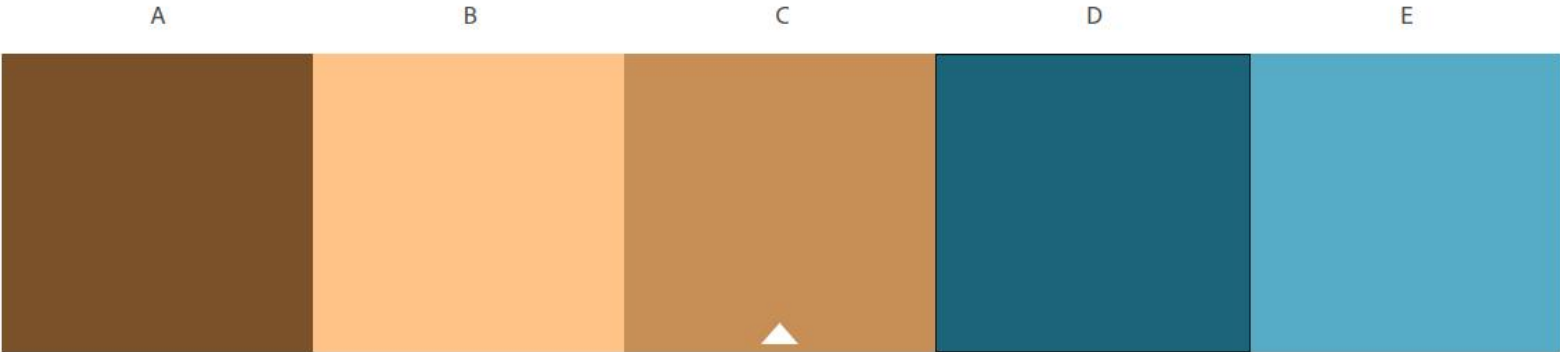
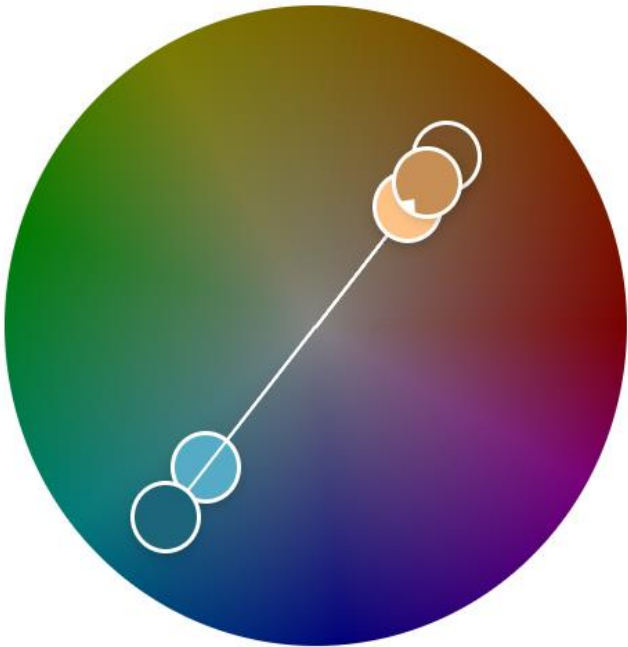
Accessibility Tools

New

Apply Color Harmony

Rule

- ☐ Analogous
- ☐ Monochromatic
- ☐ Triad
- ☒ Complementary
- ☐ Split Complementary
- ☐ Double Split Complementary
- ☐ Square
- ☐ Compound
- ☐ Shades
- ☐ Custom



Color wheel (or image in Extract Theme tab) can be used to generate color palette, which can be saved into Creative Cloud, after signing in.

You can then use your saved color themes, in Adobe products (Photoshop, Illustrator, Fresco etc.), via Adobe Color theme panel or CC Libraries.

Save

Color Wheel Extract Theme Extract Gradient Accessibility Tools **New** ↶ ↷

Tools  
Contrast Checker ▼ ? WCAG 2.1 Level  
AA ▼ ? 📁 Import Colors

Text Color

#56ACC7 ■

Background Color

#14181E ■



Contrast Ratio ?

6.89 : 1



Preview

Regular Text  
A high color  
contrast makes

Large Text  
A high color

Graphic Components

Recommendations Save

Contrast Suggestions ▼



Apply Contrast Ratio 8.0:1



Apply Contrast Ratio 8.0:1



Apply Contrast Ratio 9.0:1

Set a Contrast Ratio >

Save to Libraries



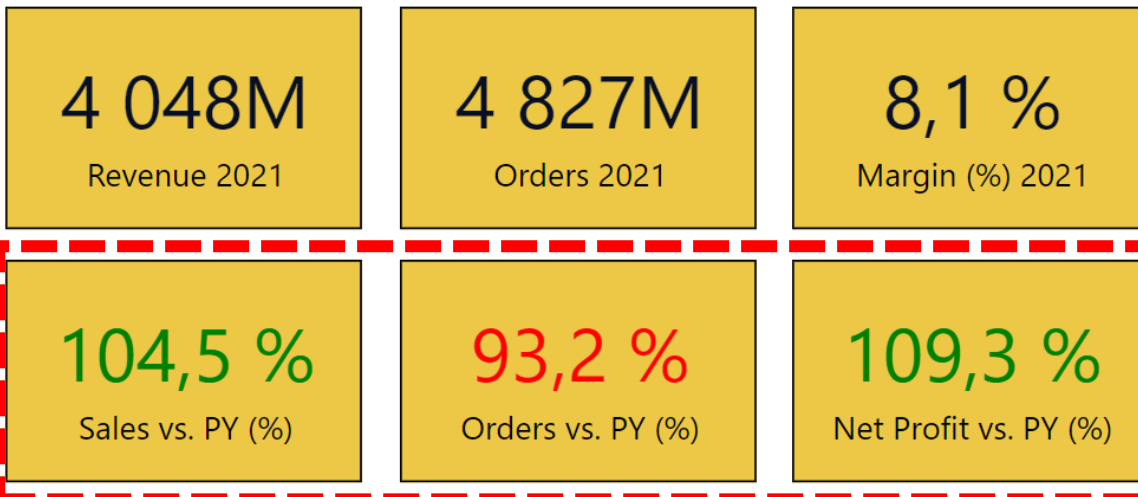
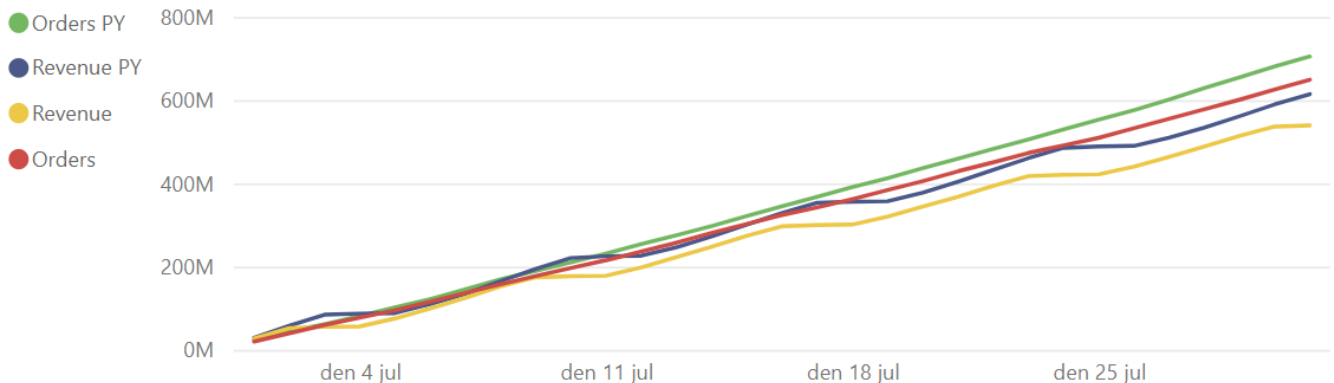


Color and contrast

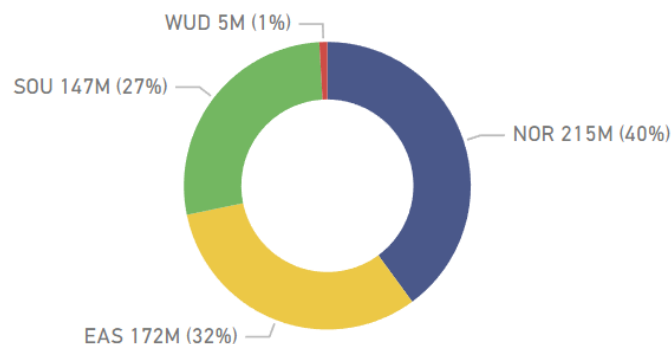
Convey information without  
using color

# Executive Quarterly Sales Dashboard

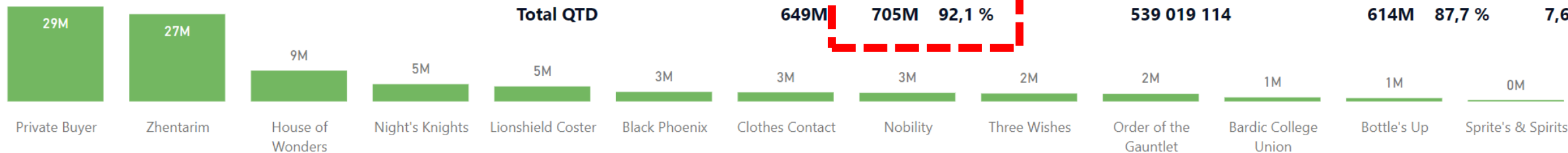
## Q3 Delivered Revenue & Orders



## Delivered Revenue by Area

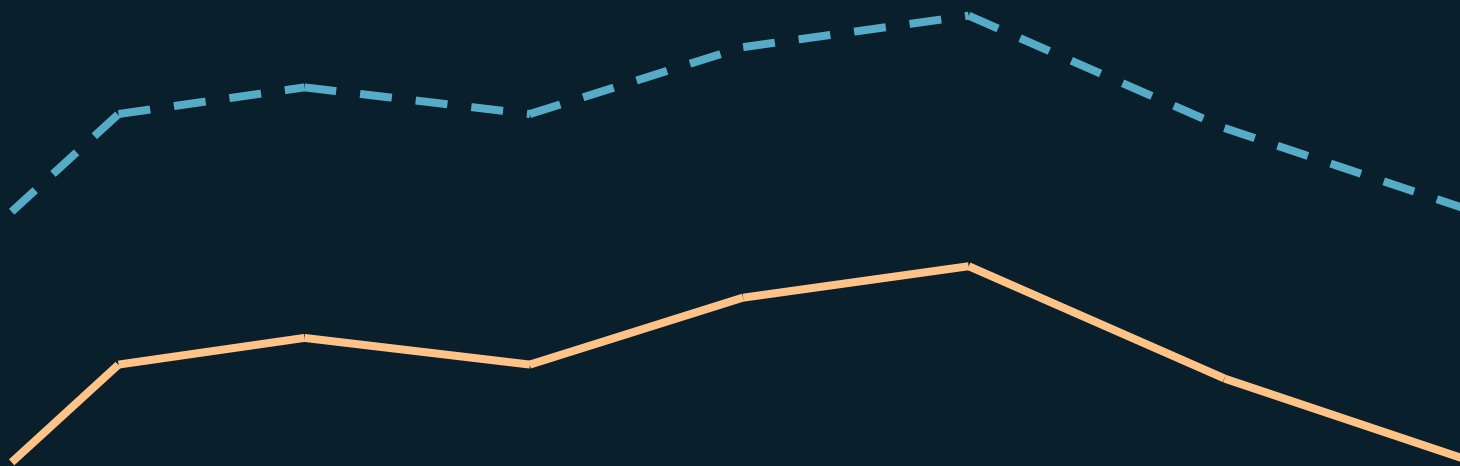
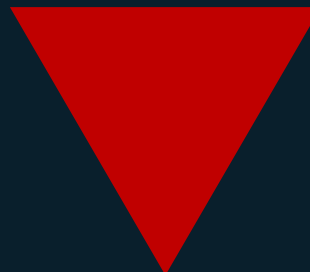


## Delivered Revenue by Key Account



## QTD Sales Stats by Product Group

Product Type	Orders	Orders PY	%	Delivered Revenue (Total GP)	Delivered Revenue PY	%	Margin (%)
TOOLS & KITS	40M	36M	113,9 %	28 473 450	26M	110,8 %	-7,7 %
MUSICAL INSTRUMENT	33M	30M	108,1 %	26 178 834	28M	95,1 %	-0,8 %
POTIONS & SCROLLS	29M	29M	101,6 %	19 399 729	23M	85,3 %	-4,3 %
ADVENTURING EQUIPMENT	209M	215M	97,1 %	167 002 794	188M	88,8 %	7,3 %
ARMS & ARMOUR	189M	205M	92,0 %	153 449 979	178M	86,3 %	4,8 %
JEWELRY	25M	27M	91,4 %	21 375 105	22M	95,7 %	11,2 %
SUMMONING DEVICE	97M	117M	82,7 %	96 389 565	111M	86,8 %	22,7 %
ANIMALS & TRANSPORTATION	28M	46M	60,0 %	26 749 658	39M	68,1 %	0,4 %
Total QTD	649M	705M	92,1 %	539 019 114	614M	87,7 %	7,6 %



Color and contrast

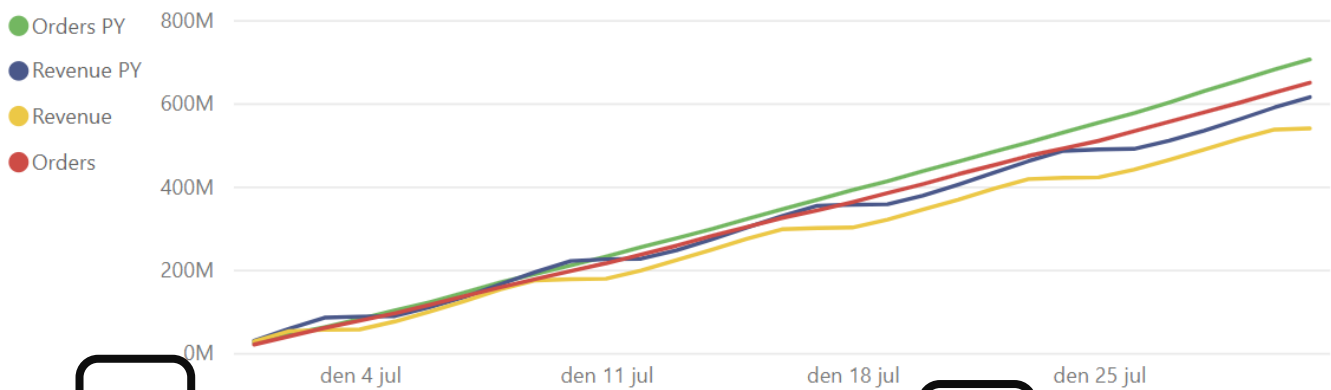
Convey information without  
using color

Tab order

1

# Executive Quarterly Sales Dashboard

Q3 Delivered Revenue & Orders



2

4 048M  
Revenue 2021

3

4 827M  
Orders 2021

4

8,1 %  
Margin (%) 2021

5

104,5 %  
Sales vs. PY (%)

6

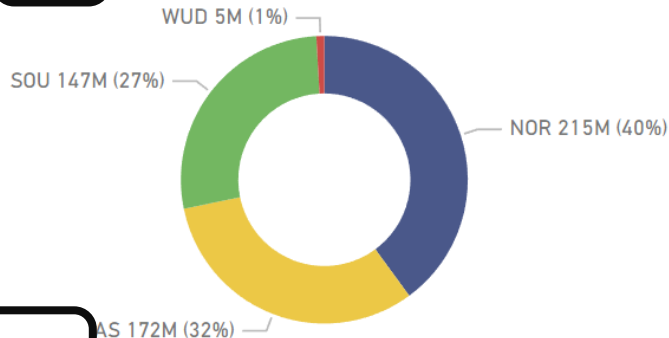
93,2 %  
Orders vs. PY (%)

7

109,3 %  
Net Profit vs. PY (%)

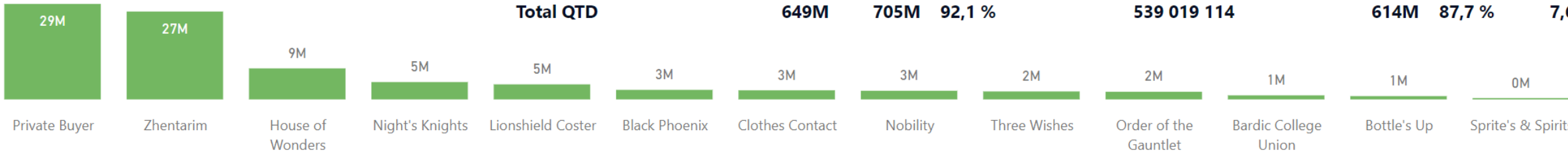
8

Delivered Revenue by Area



10

Delivered Revenue by Key Account



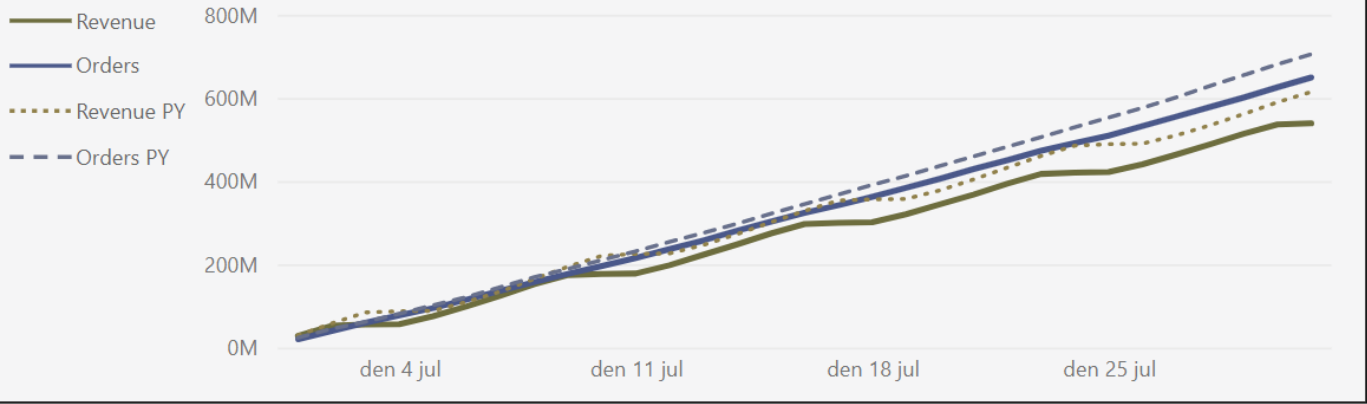
9

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# Executive Quarterly Sales Dashboard

## Q3 Delivered Revenue & Orders



4 048M

Revenue 2021

4 827M

Orders 2021

8,1 %

Margin (%) 2021



104,5 %

Sales vs. PY (%)



93,2 %

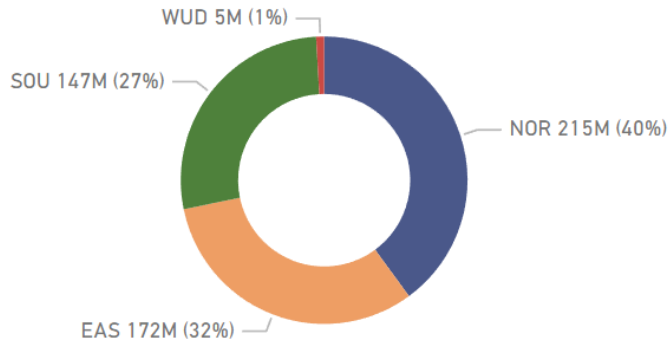
Orders vs. PY (%)



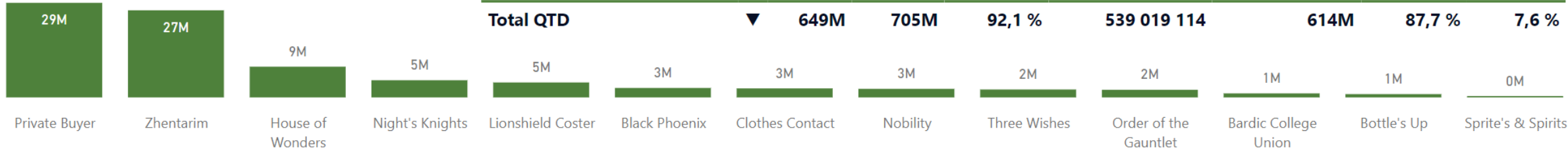
109,3 %

Net Profit vs. PY (%)

## Delivered Revenue by Area



## Delivered Revenue by Key Account



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**THINK** before you act

Keep it **CONCISE**

Accessible = **USABLE**









**DATA**masterminds

# Thank you!



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