



Melamchi Phatkeshwor Indrawati Stone Pvt. Ltd.

Melamchi Municipality-13, Sindhupalchowk

Introduction

Melamchi Phatkeshwor Indrawati Stone is a private company that sells and delivers stones to the major cities in Nepal which are Kathmandu, Pokhara, Birantnagar, Lalitpur and Birgunj. The company sells 5 types of stones which are Slate, Basalt, Bricks, Granite and Sandstone.

The data provided accounts for 3 years of the business running which are 2018, 2019, and beginning of 2020.

Our business is mainly focused on the sales growth and the gross profit looking forward to decreasing costs.

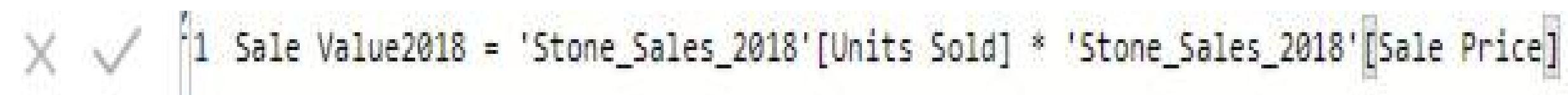
Our Key Performance Indicators(KPIs) are the Sales growth/Sales Value, Gross Profit % margin as well as Cost of goods sold.

Problems faced during Analysis and Design and Solutions

Analysis and of Data and Steps taken to create calculated fields

1. Created calculated formulas and columns for Sale Value , Gross Profit and Gross Profit % Margin by using DAX formulas. Calculations are as follows

a) Sales Value = Units Sold * Sale Price



X ✓ 1 Sales Value2018 = 'Stone_Sales_2018'[Units Sold] * 'Stone_Sales_2018'[Sale Price]

b) Gross Profit = Sale Price - COGS - Discounts



X ✓ 1 Gross Profit = 'Stone_Sales_2018'[Sale Price] - 'Stone_Sales_2018'[COGS]

c) Gross Profit % Margin = Gross Profit / Sale Price * 100



X ✓ 1 Gross Profit %_2018 = 'Stone_Sales_2018'[Gross Profit] / 'Stone_Sales_2018'[Sales Value2018] * 100

1. Normalization of database

Failure to normalize database so there was repetition so 3 Queries for the years were used

The solution was to design custom dashboard for each year so it made the use of the slicer obsolete

2. Adding the customer information

Problems were faced in finding the customer names as to the data we had so we mostly had to rely on city for our understanding of where products sell the most

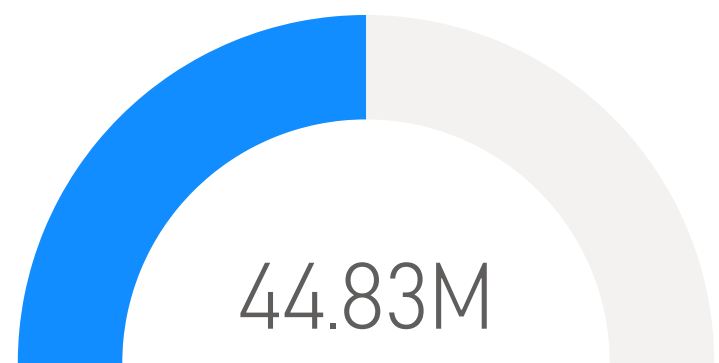
The solution was to understand the cities we sell to

3. Only a few KPIs to show the manager as the business is growing

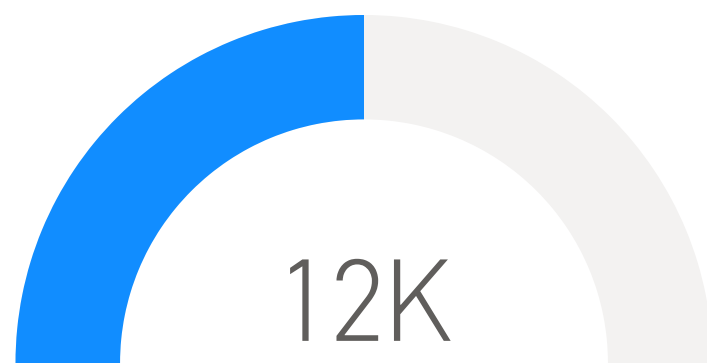
Further Improvements and Future Solutions

1. For future improvements we aim to reduce duplications and database normalization will be applied in order to avoid repetitions
2. Data on names of companies we supply as well as customers will be further investigated in order to have target customers
3. Use of visualisations such as calenders and slicers will be implemented in order to show data for different periods or quarters of years
4. Overall basic understanding of the business will be implemented in order to further improve our business

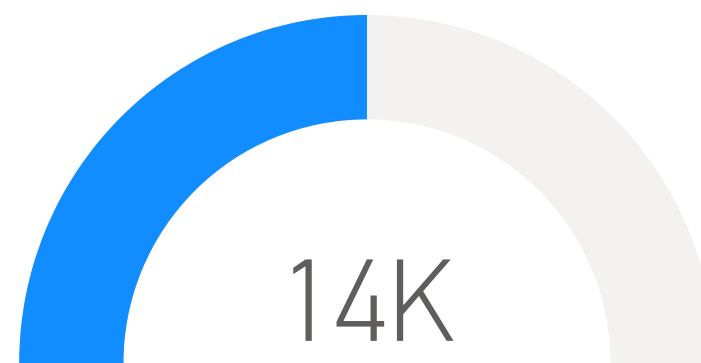
Sale Value2018



COGS

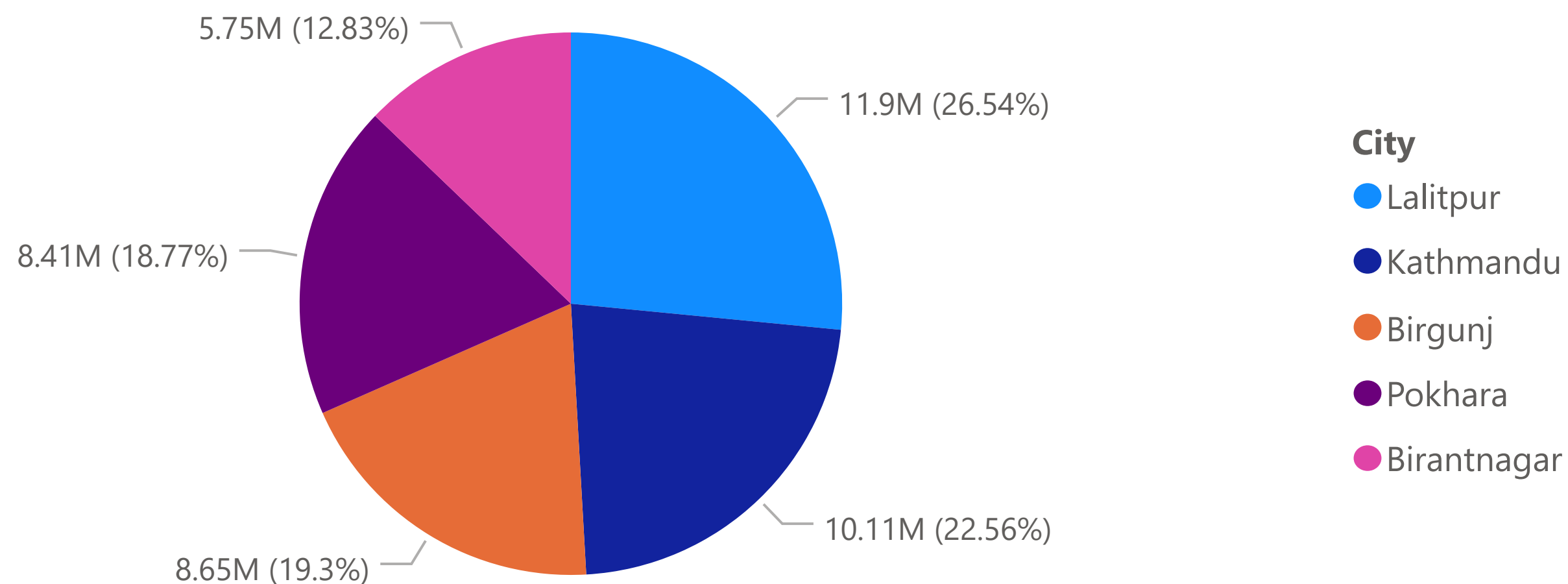


Gross Profit

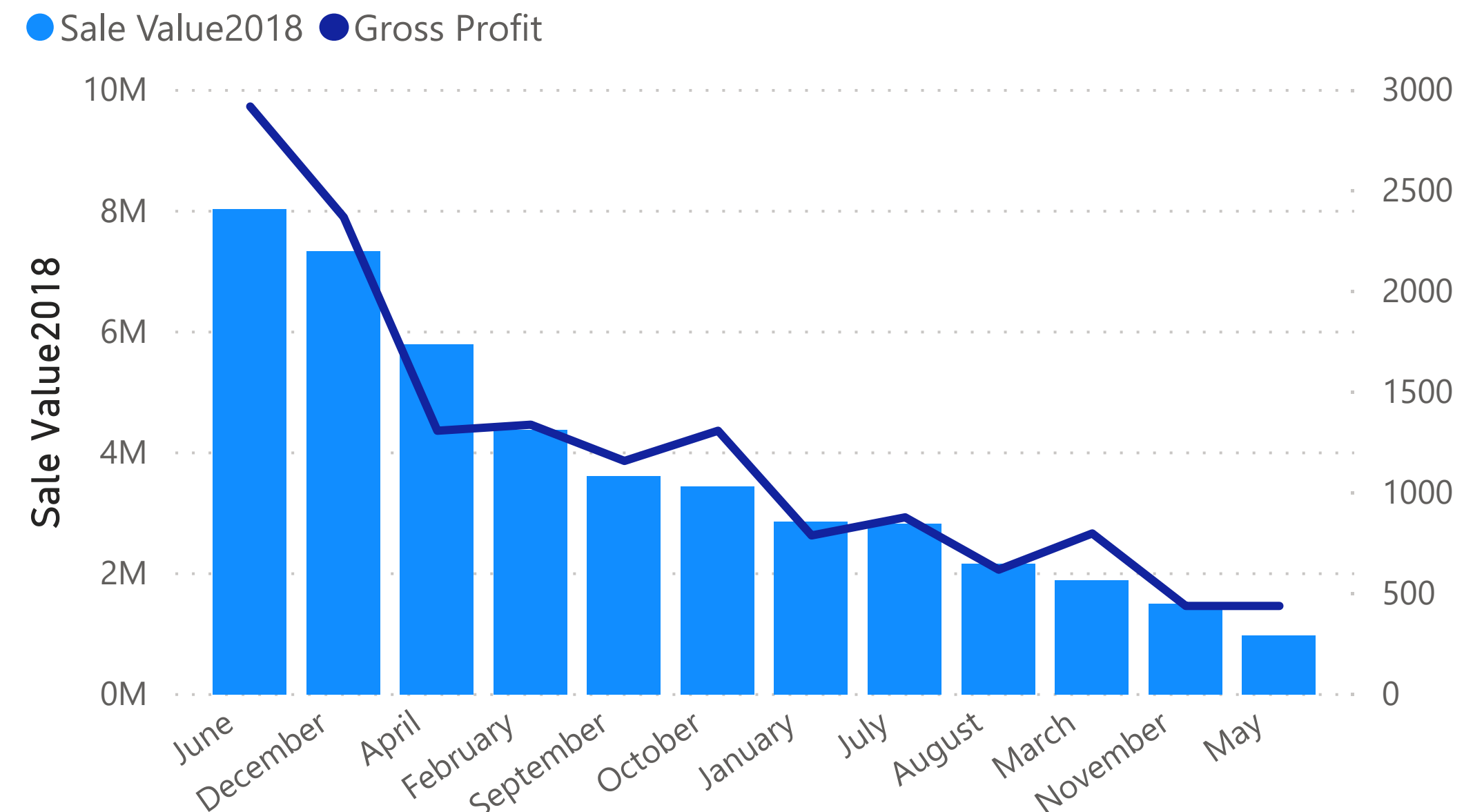


2018 SALES

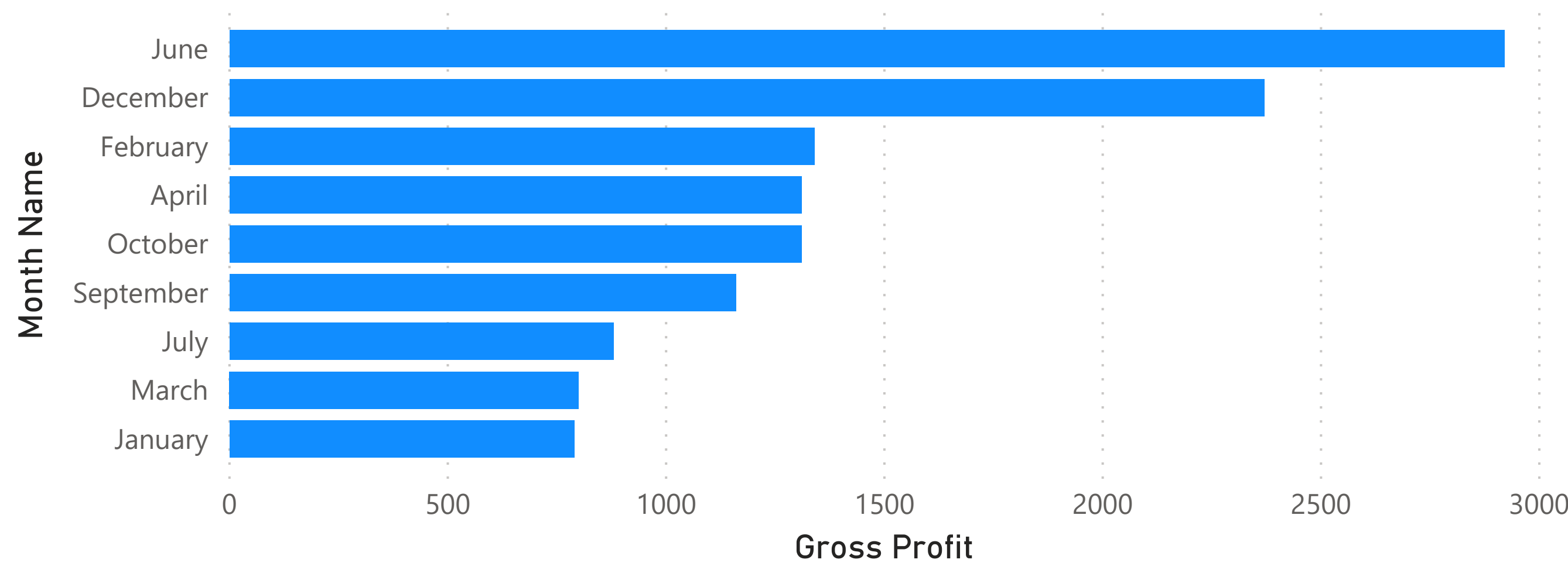
Sale Value2018 by City



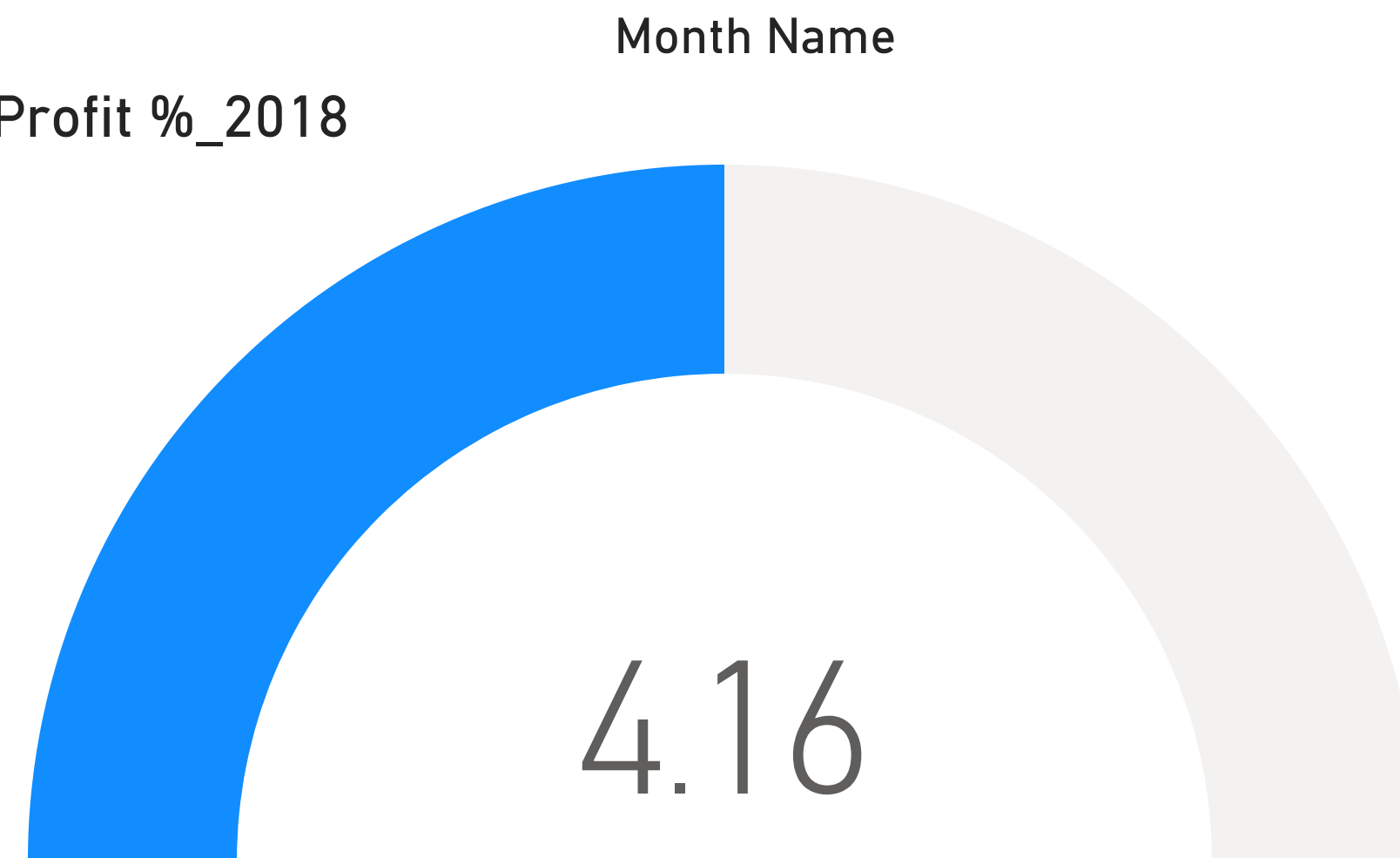
Sale Value2018 and Gross Profit by Month Name



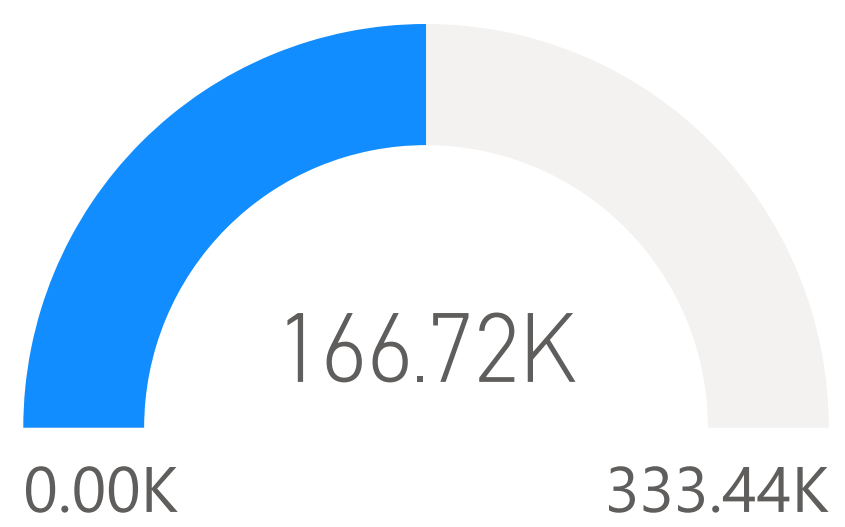
Gross Profit by Month Name



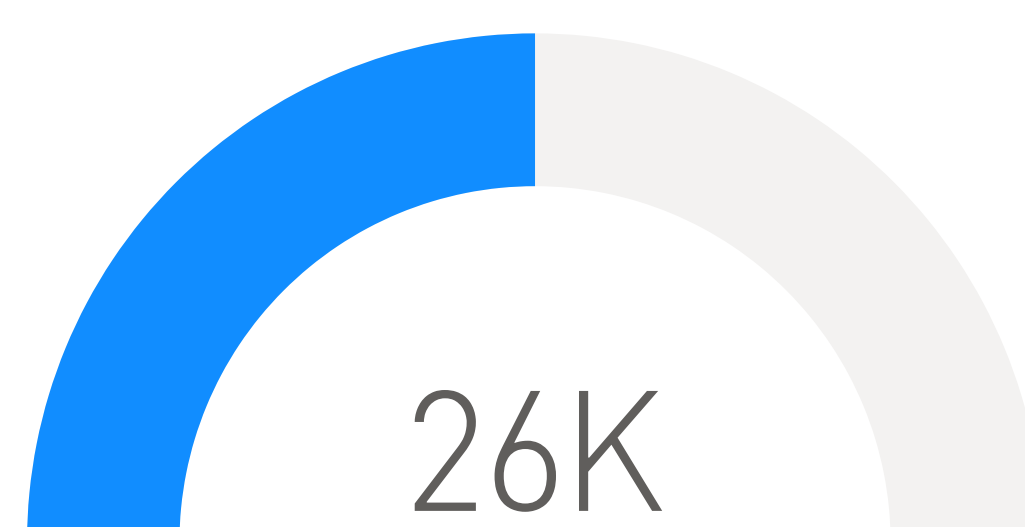
Gross Profit %_2018



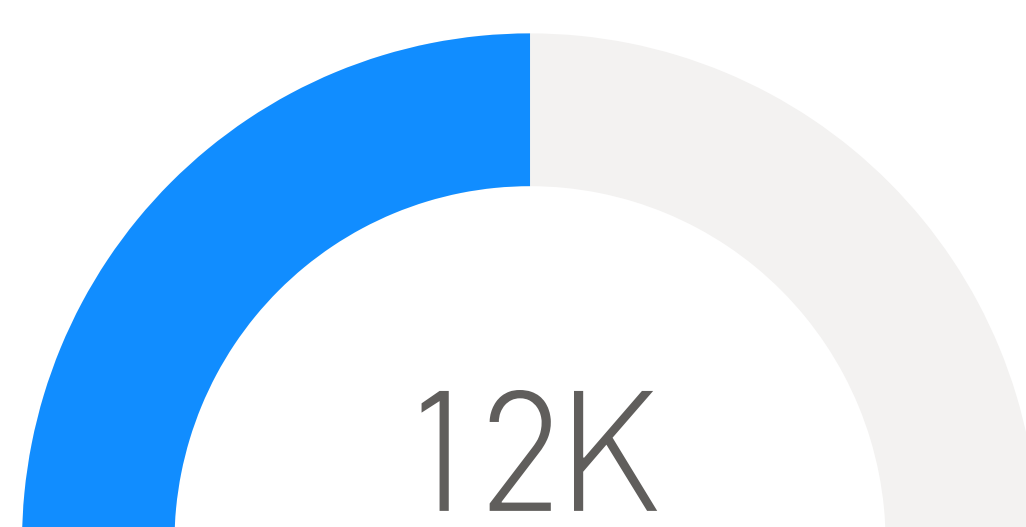
Units Sold



Sale Price

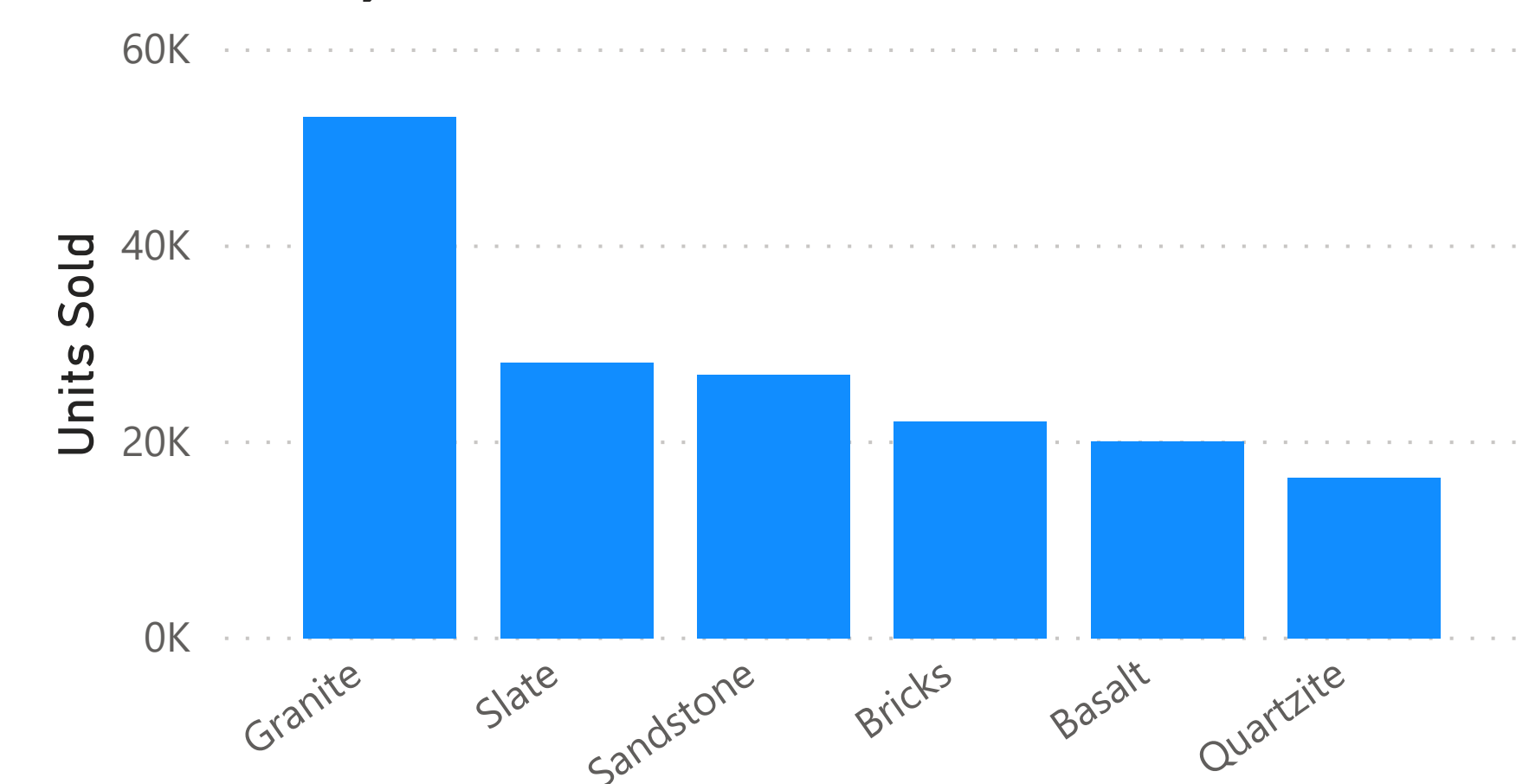


COGS

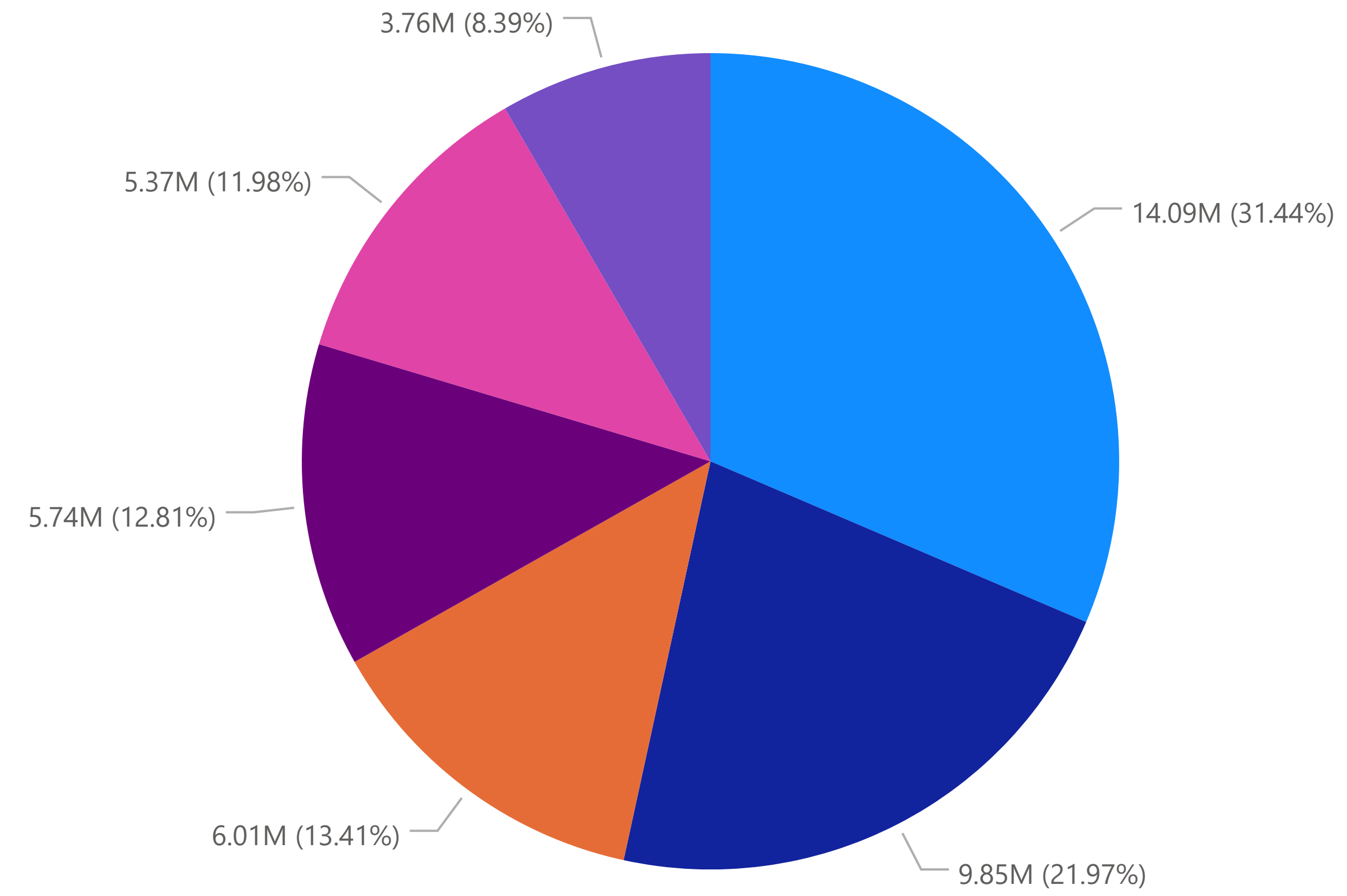


2018 Product Info

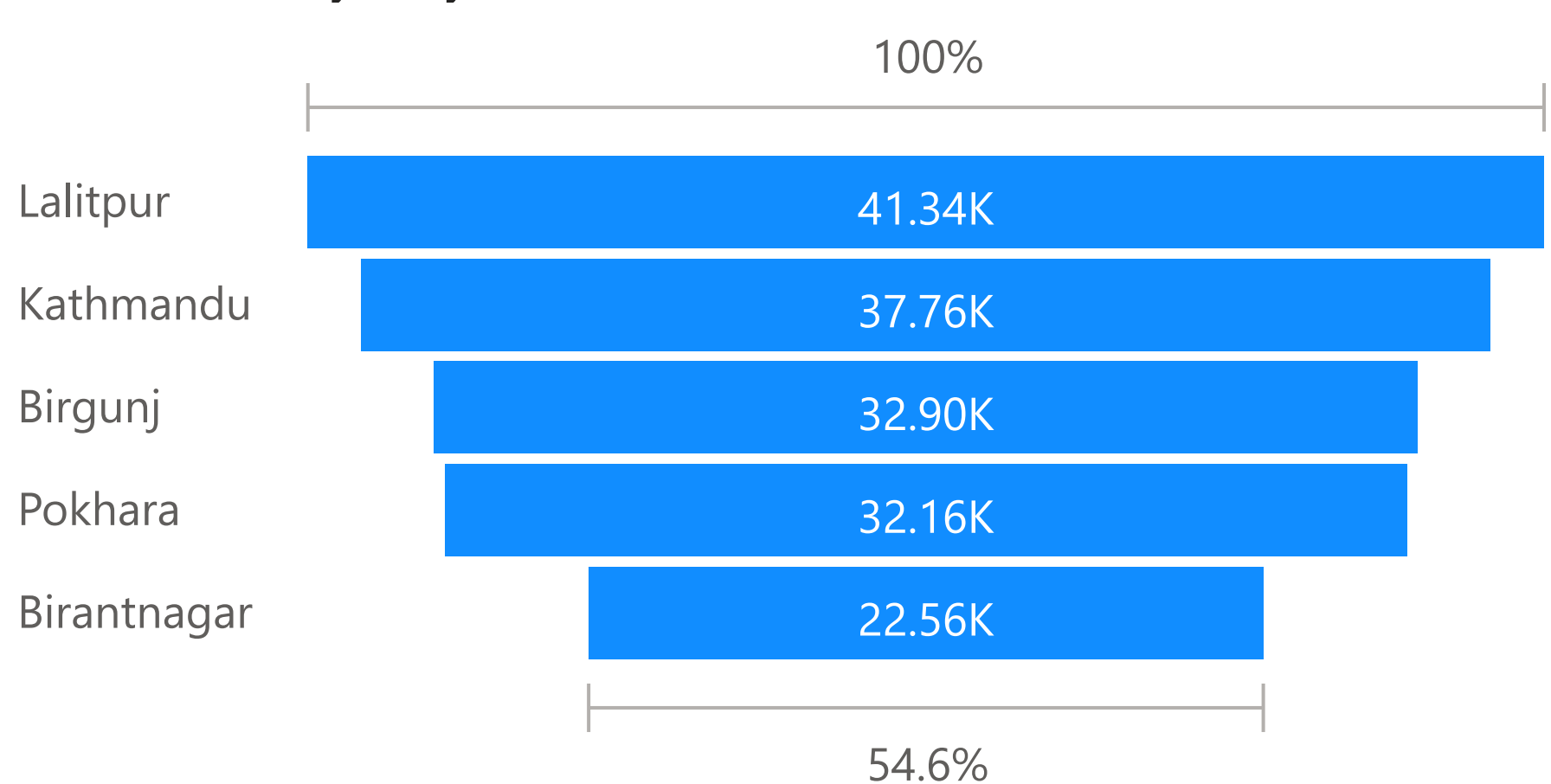
Units Sold by Product



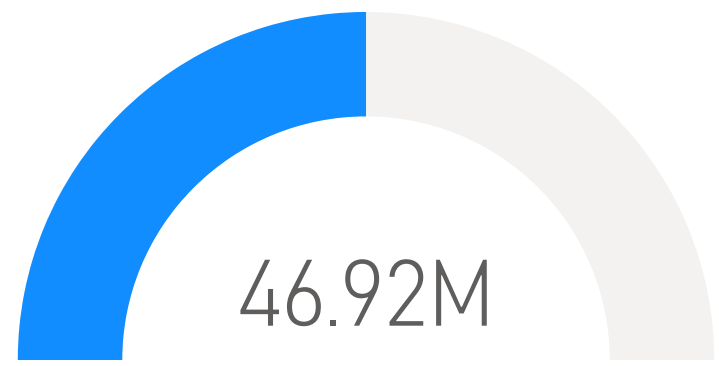
Sale Value2018 by Product



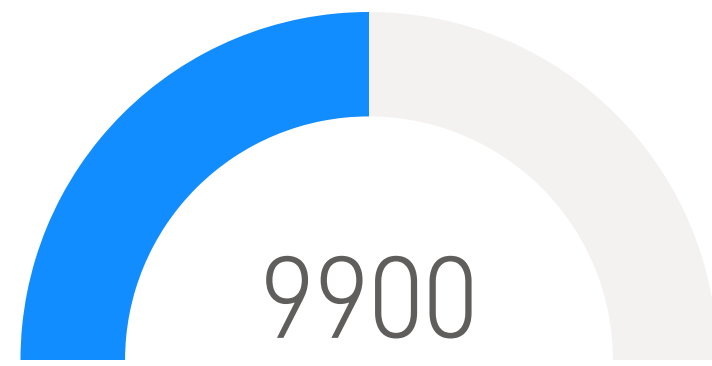
Units Sold by City



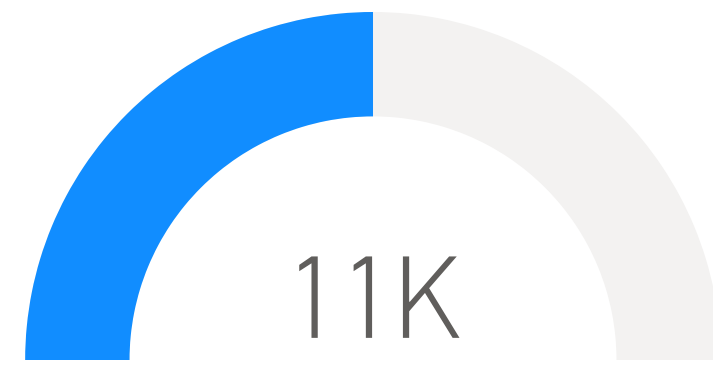
Sale Value2019



COGS

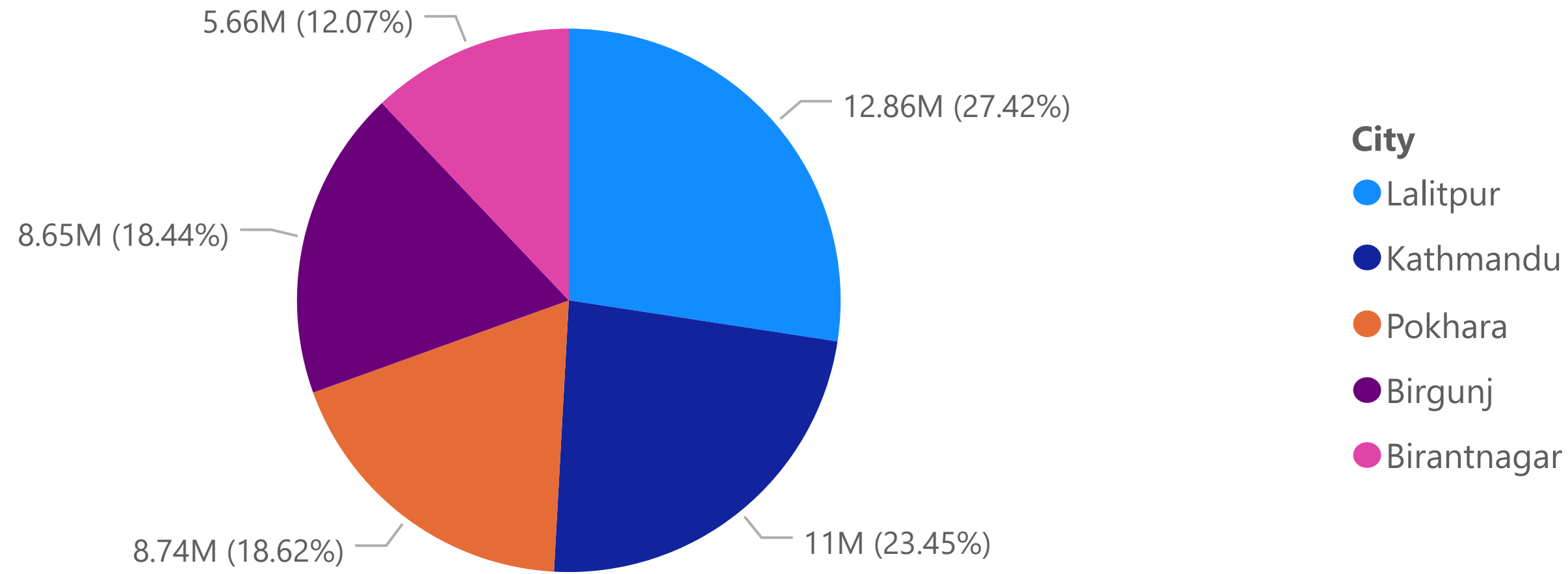


Gross Profit

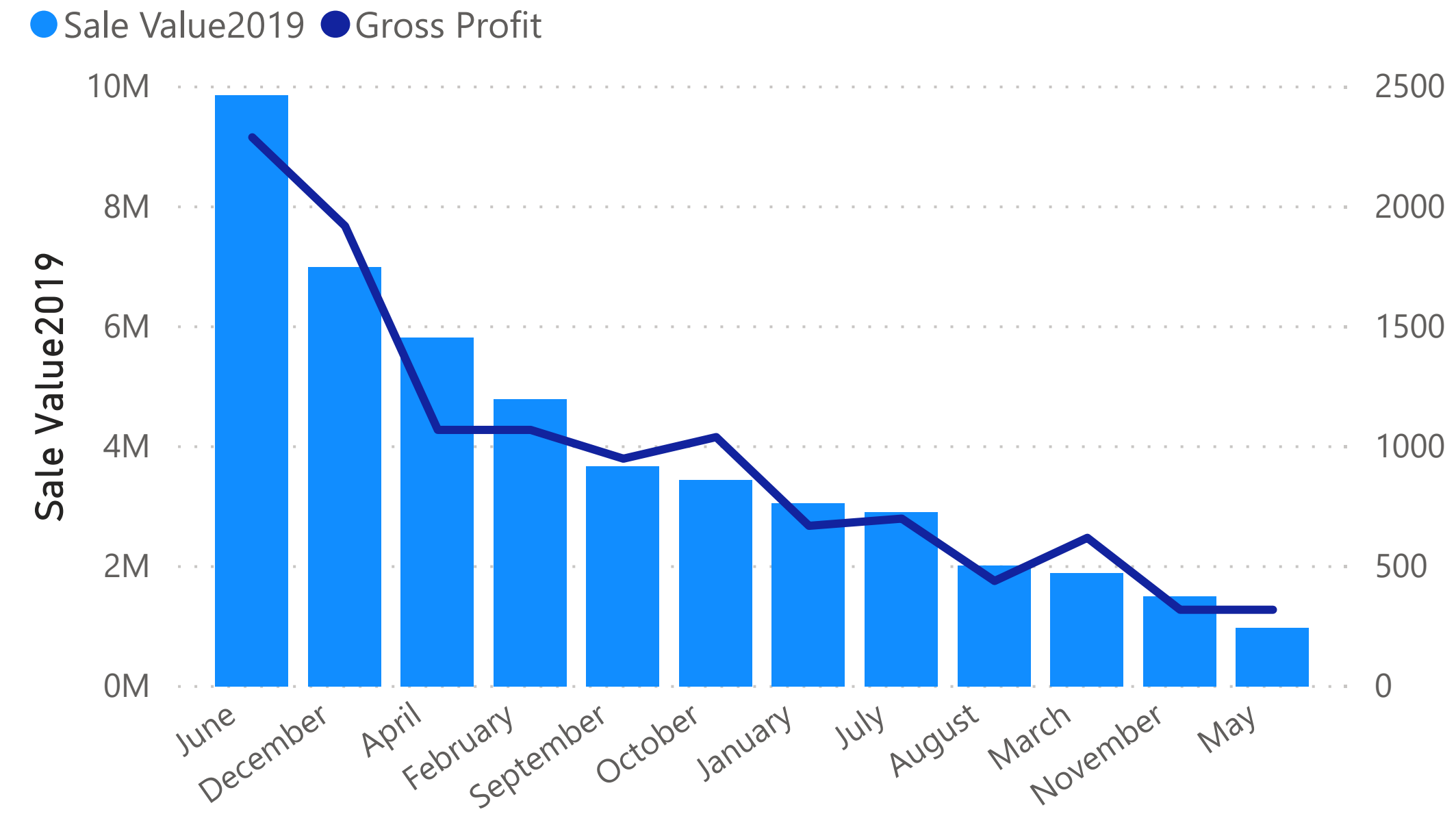


2019 SALES

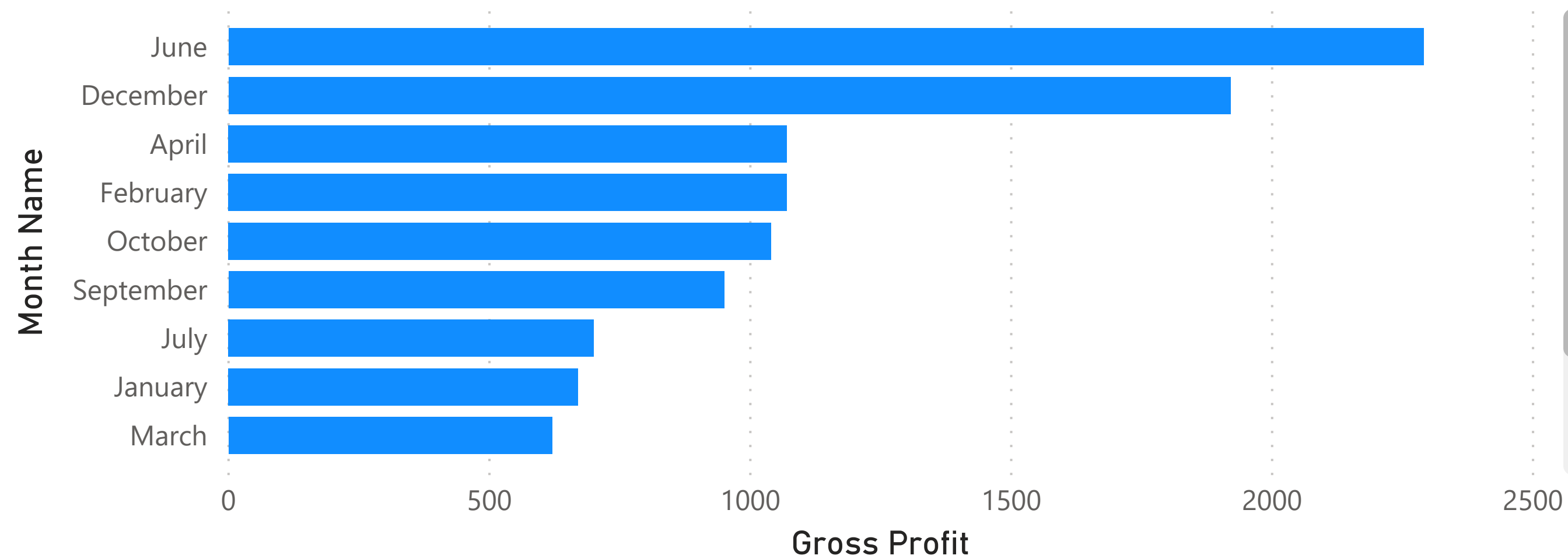
Sale Value2019 by City



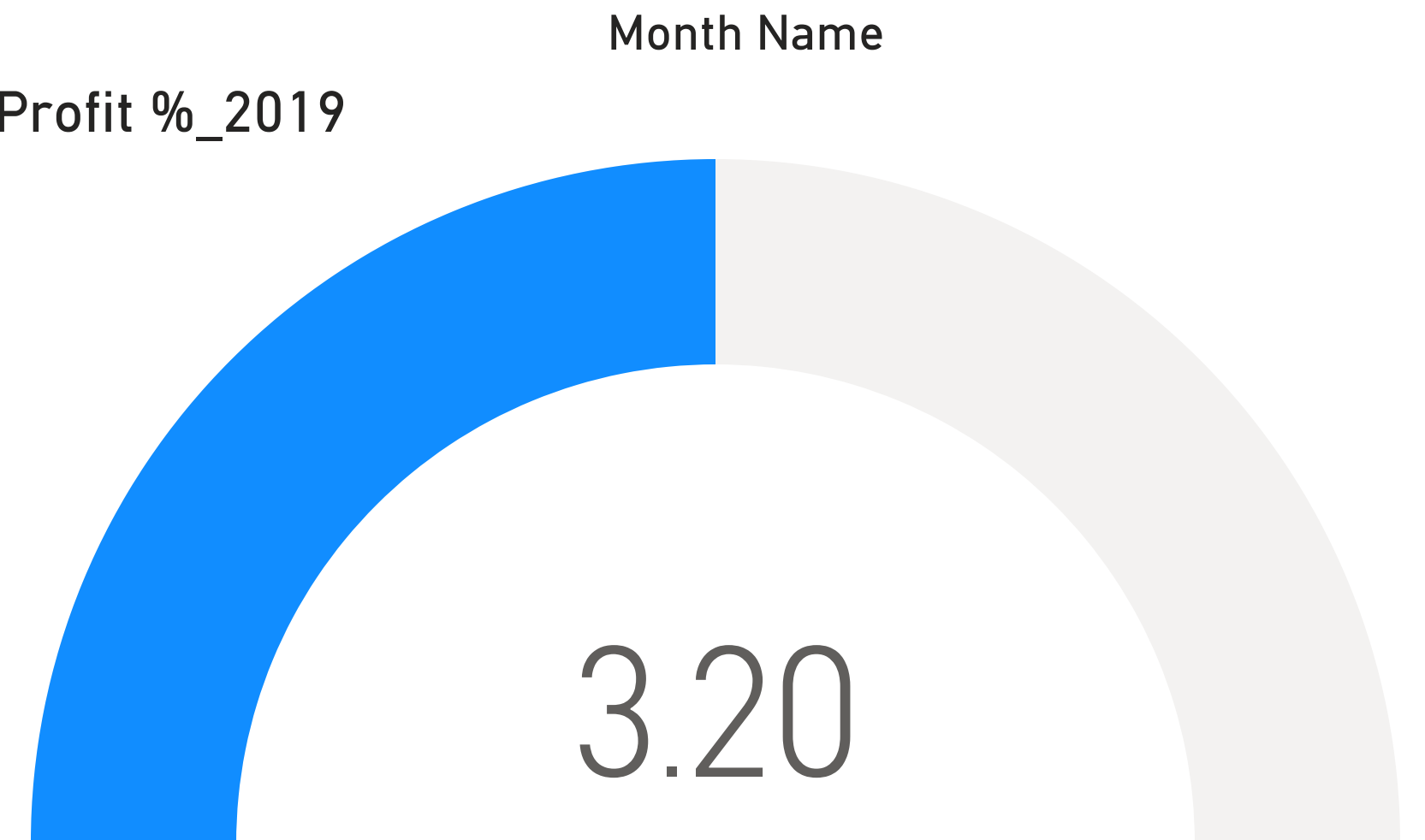
Sale Value2019 and Gross Profit by Month Name



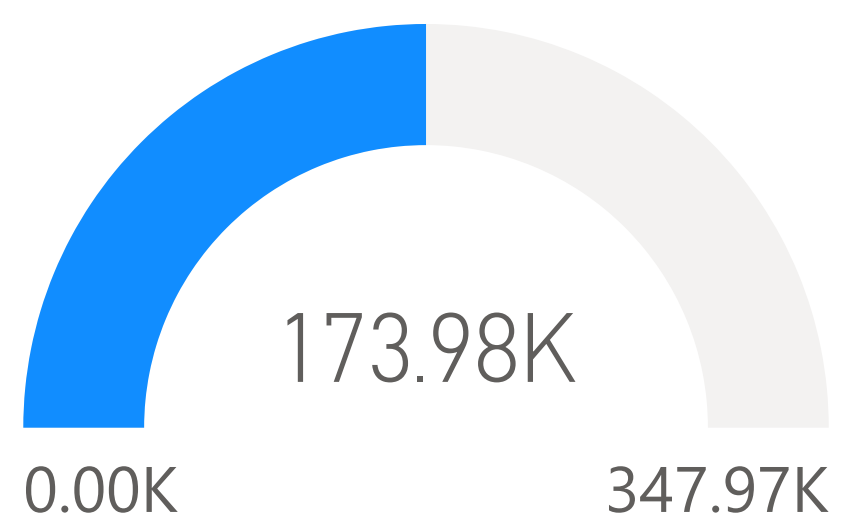
Gross Profit by Month Name



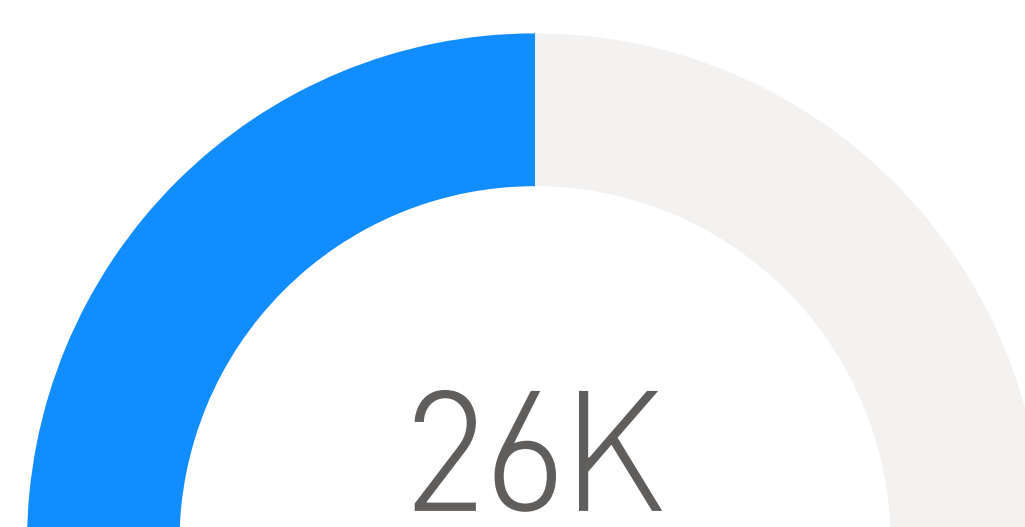
Gross Profit %_2019



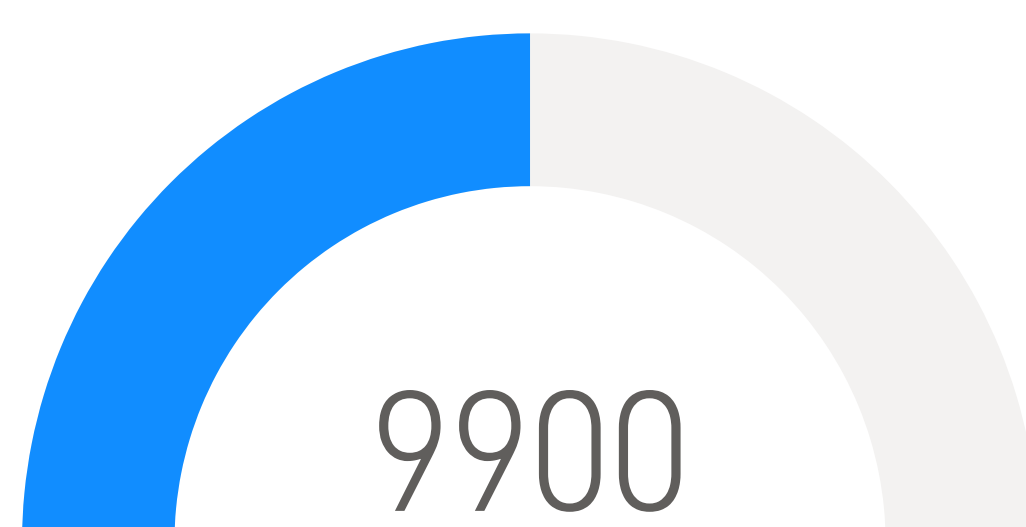
Units Sold



Sum of Sale Price

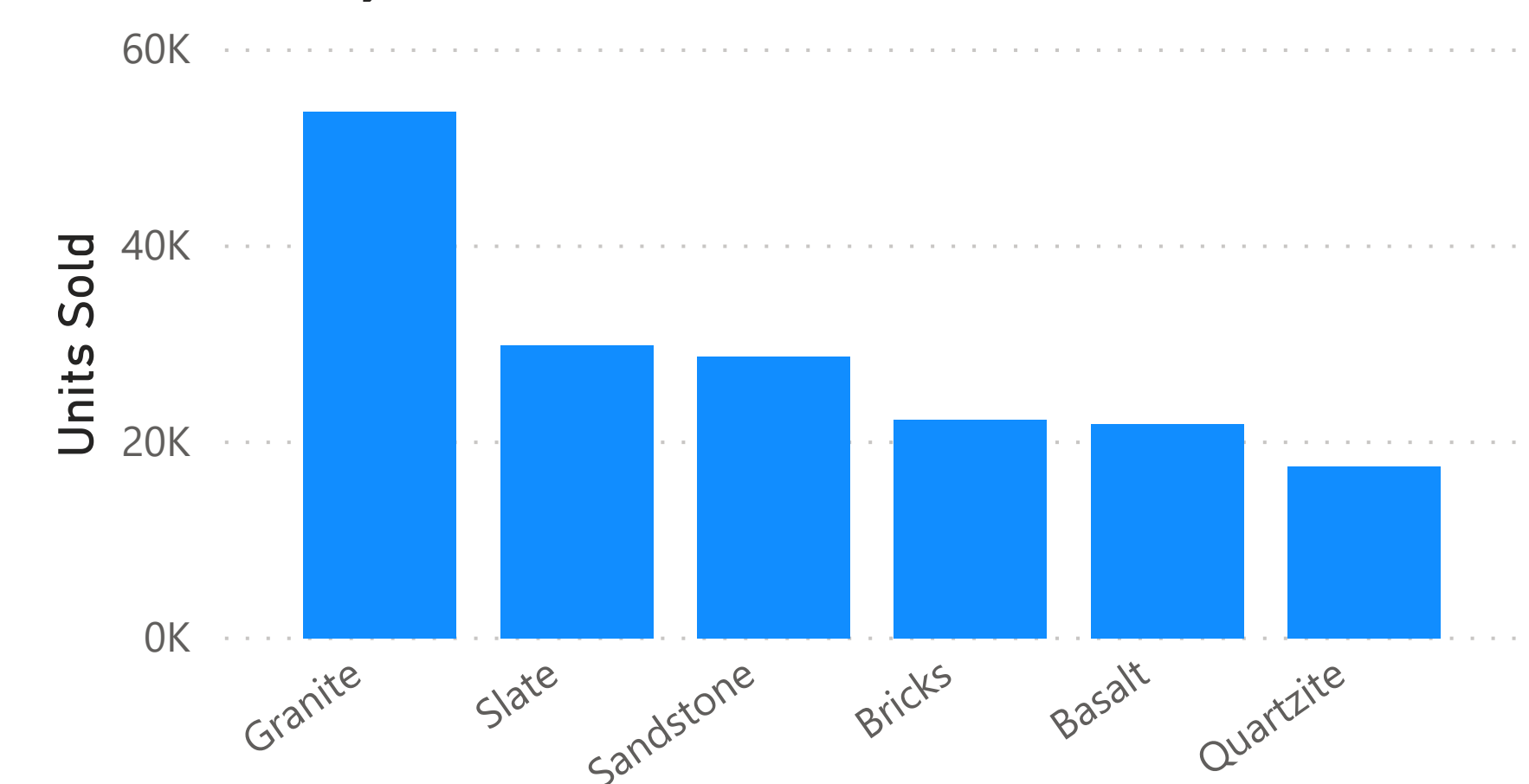


COGS

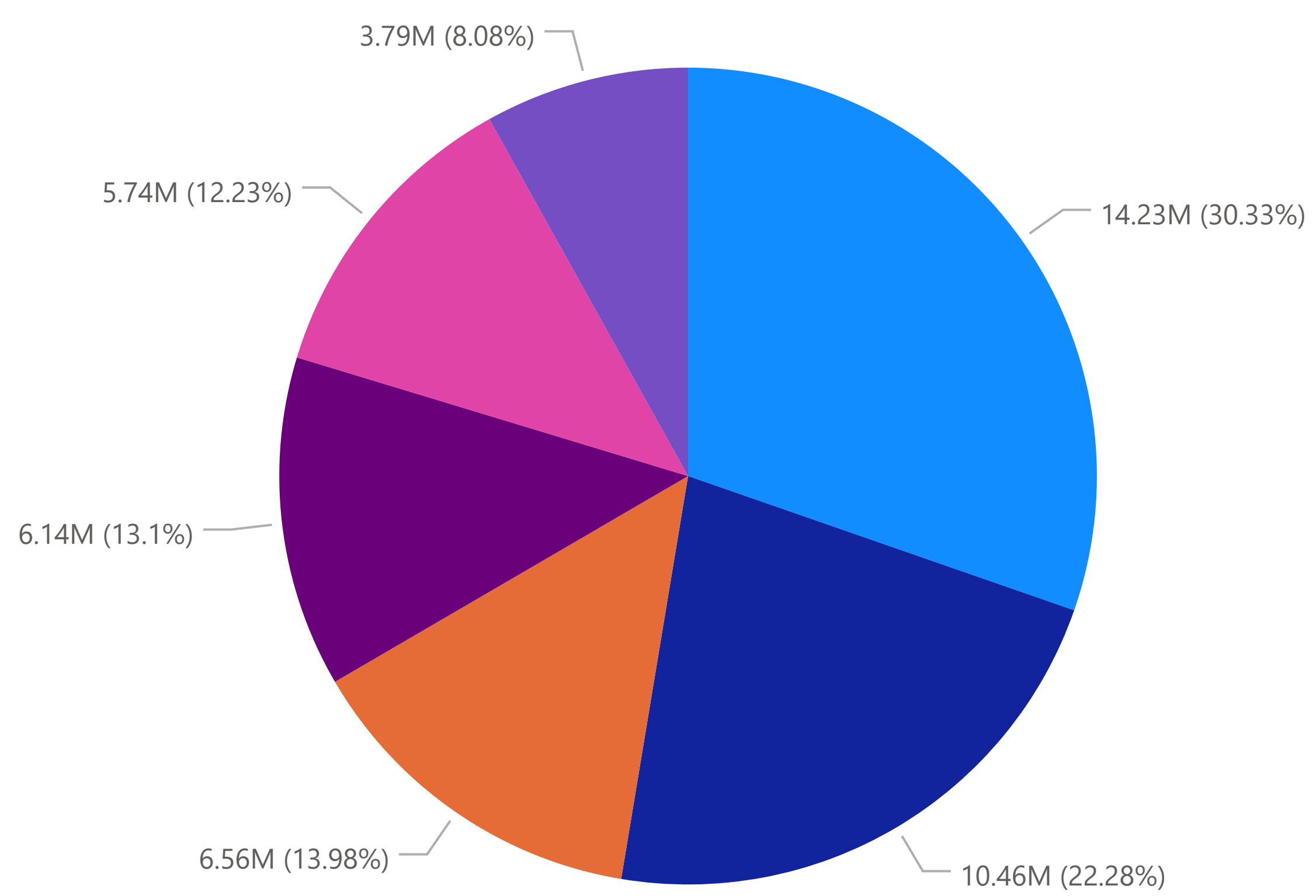


2019 Product Info

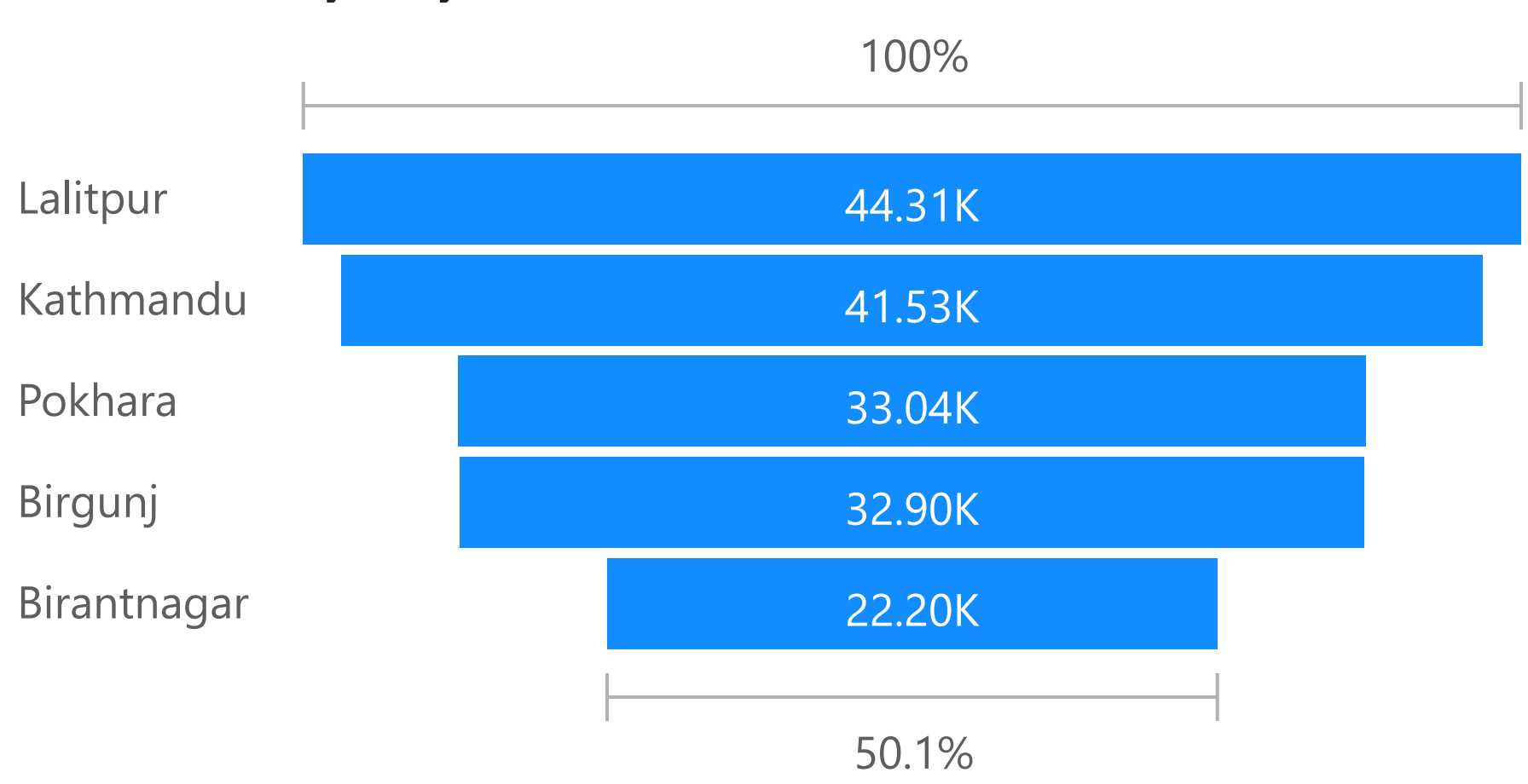
Units Sold by Product



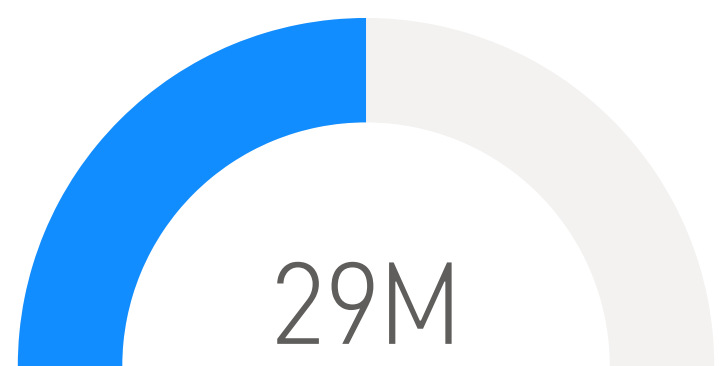
Sale Value2019 by Product



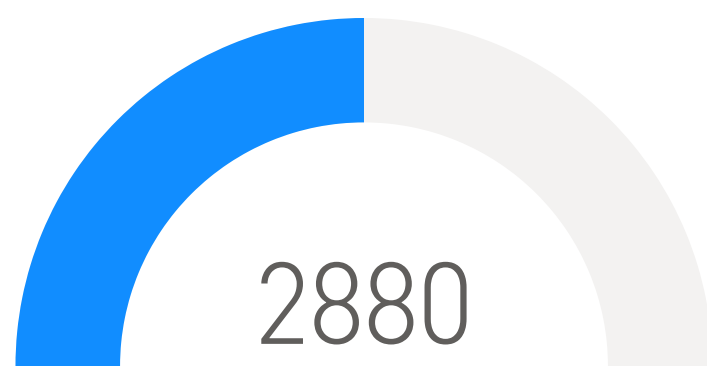
Units Sold by City



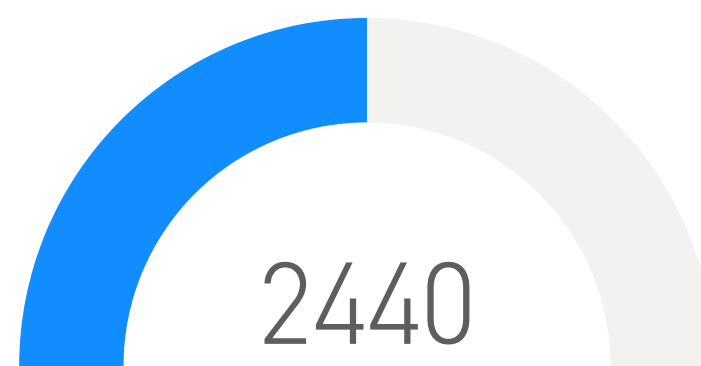
Sale Value2020



COGS



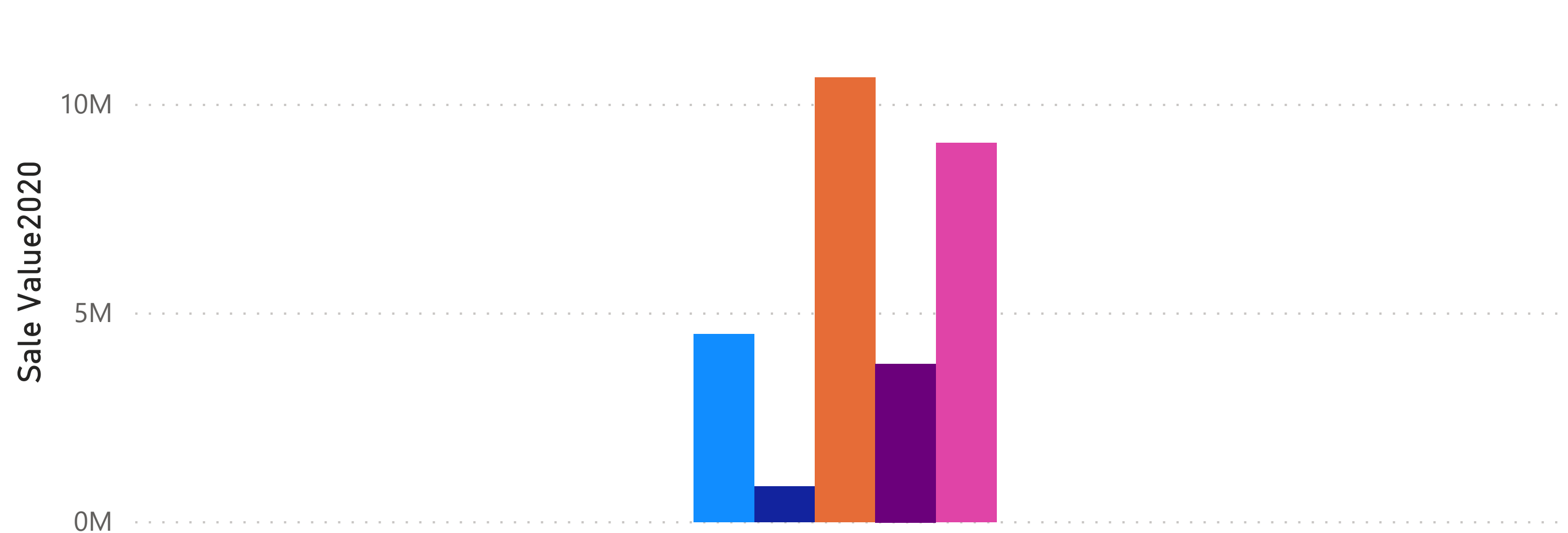
Gross Profit



2020 SALES

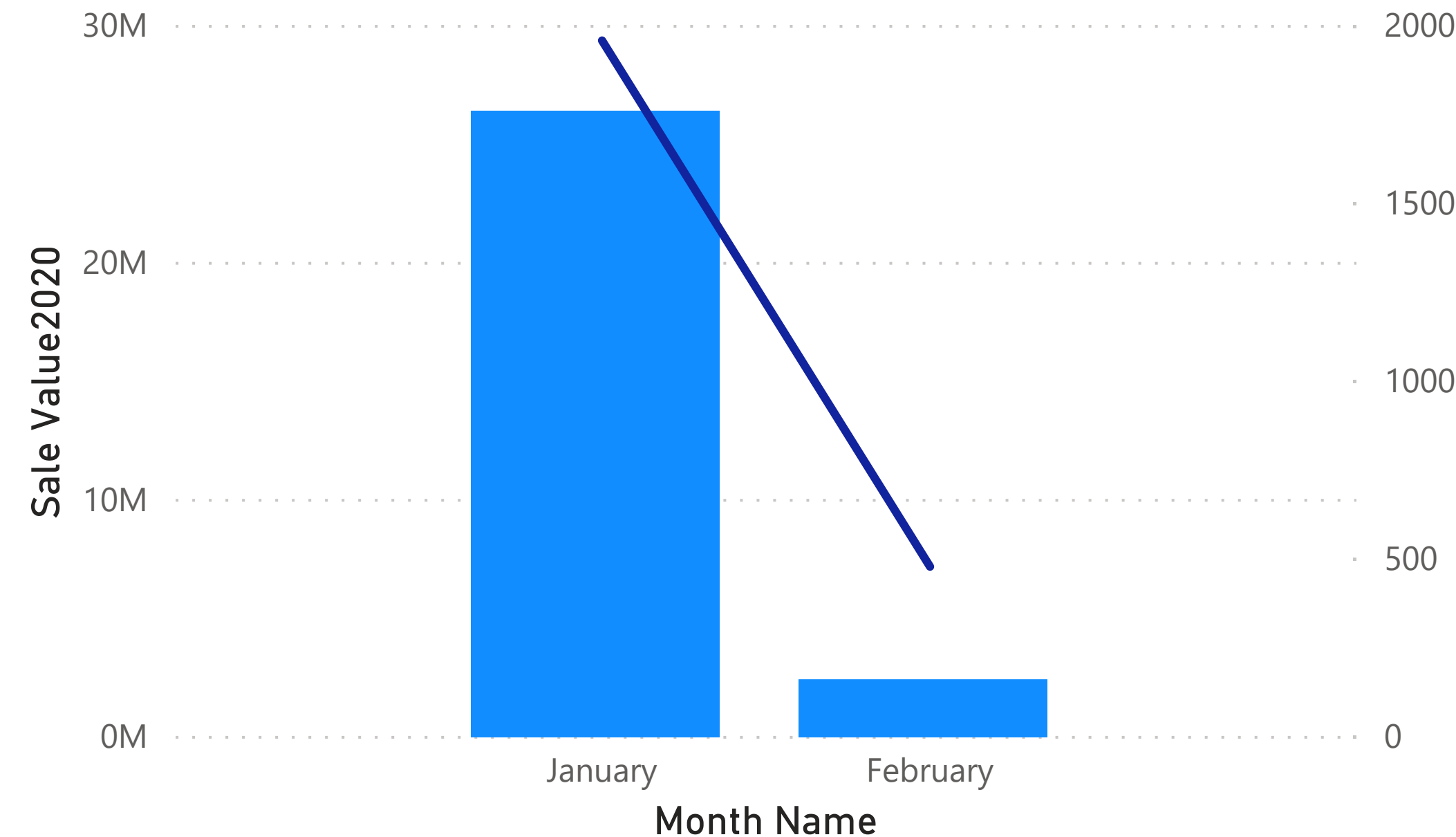
Sale Value2020 by City

City ● Birantnagar ● Birgunj ● Kathmandu ● Lalitpur ● Pokhara

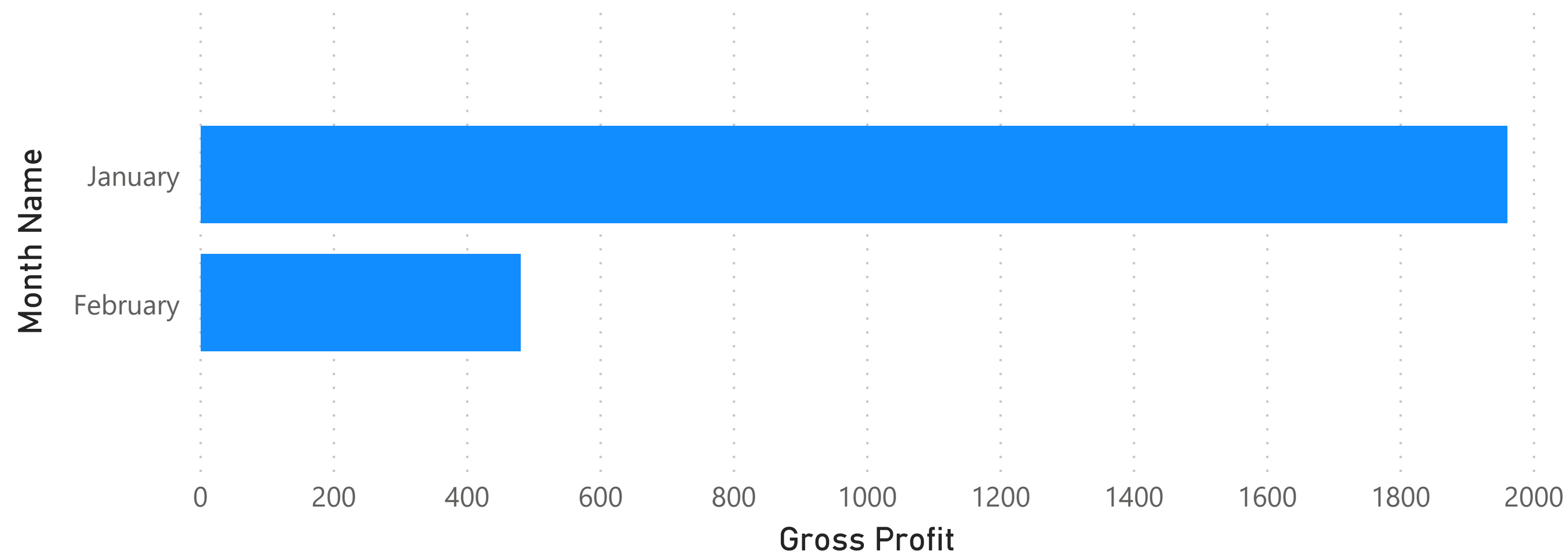


Sale Value2020 and Gross Profit by Month Name

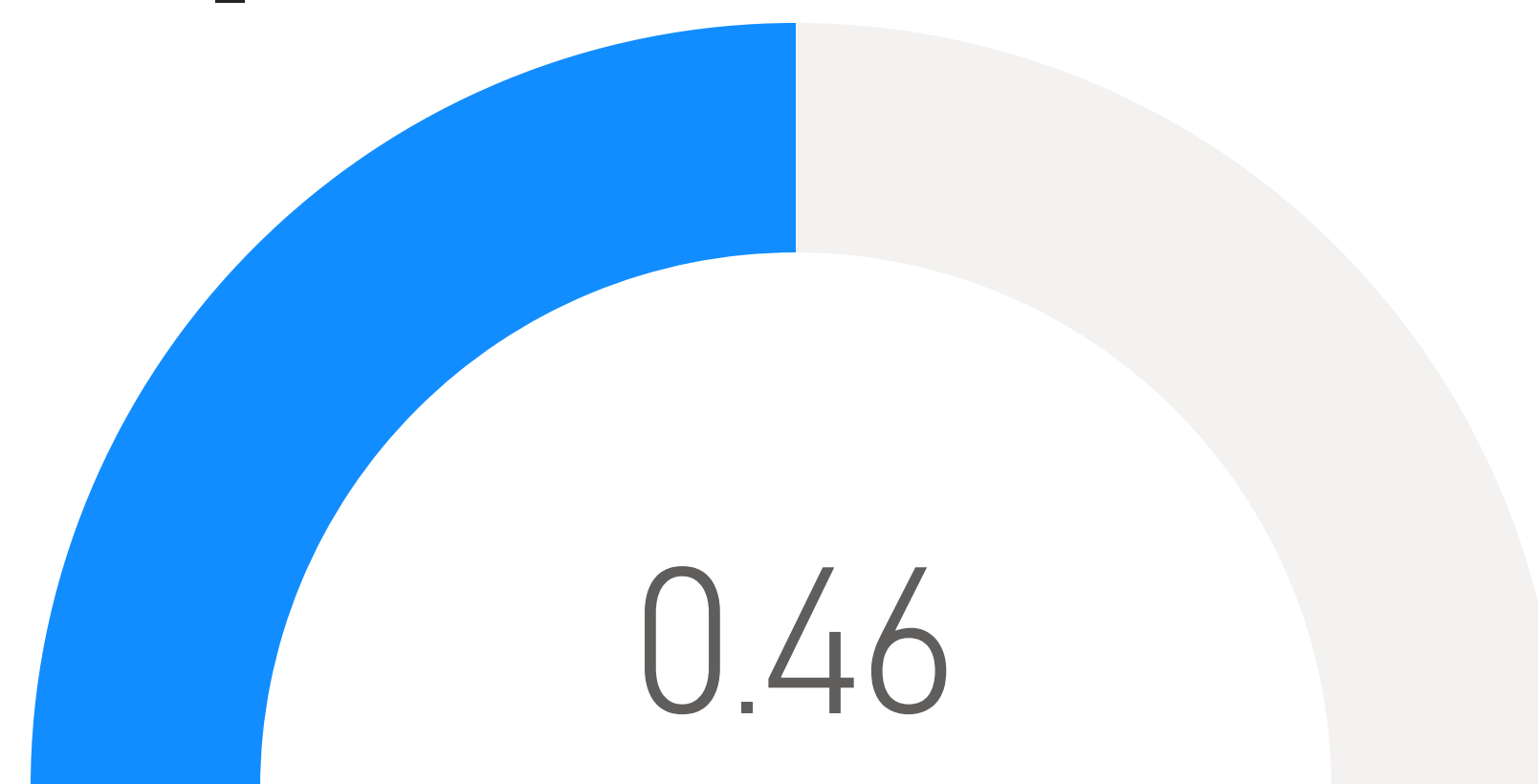
● Sale Value2020 ● Gross Profit



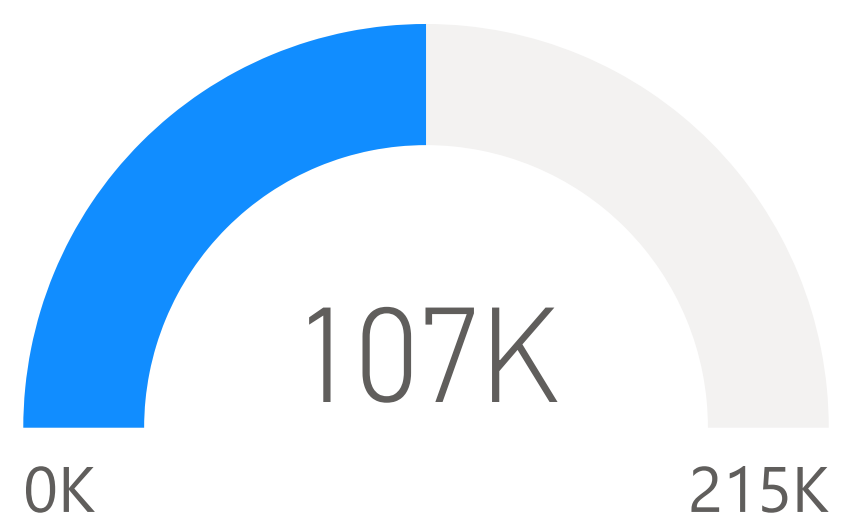
Gross Profit by Month Name



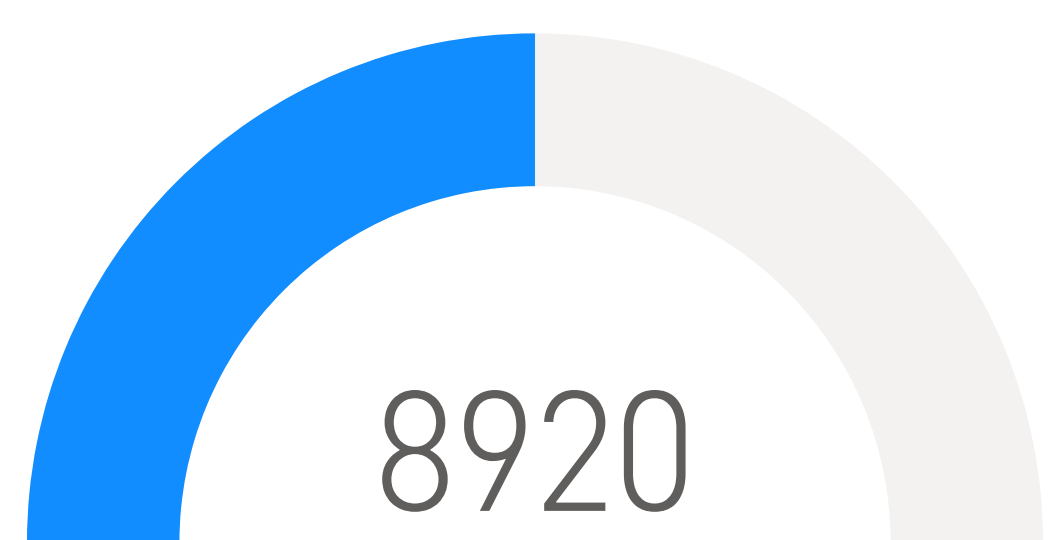
Gross Profit %_2020



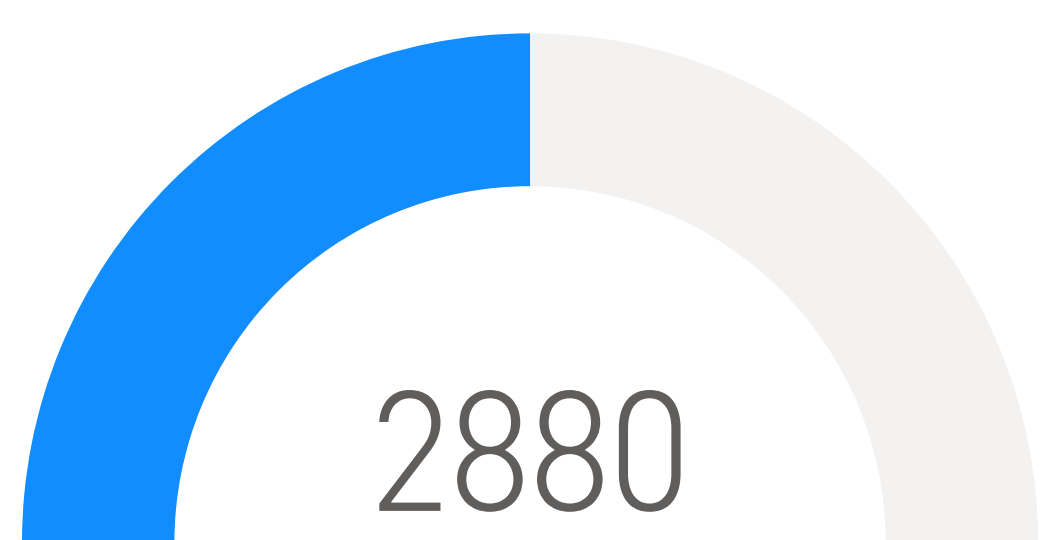
Units Sold



Sum of Sale Price

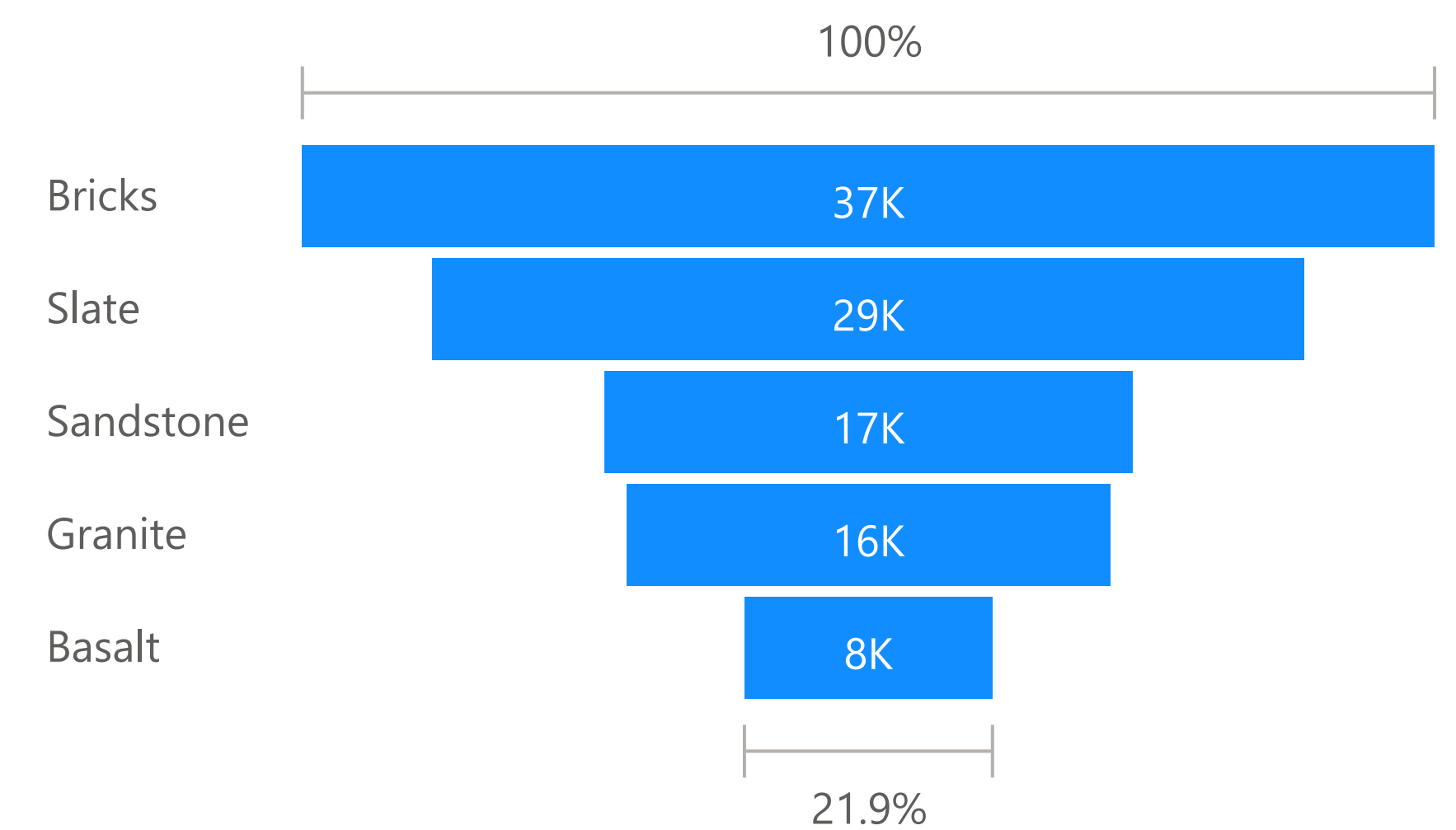


COGS

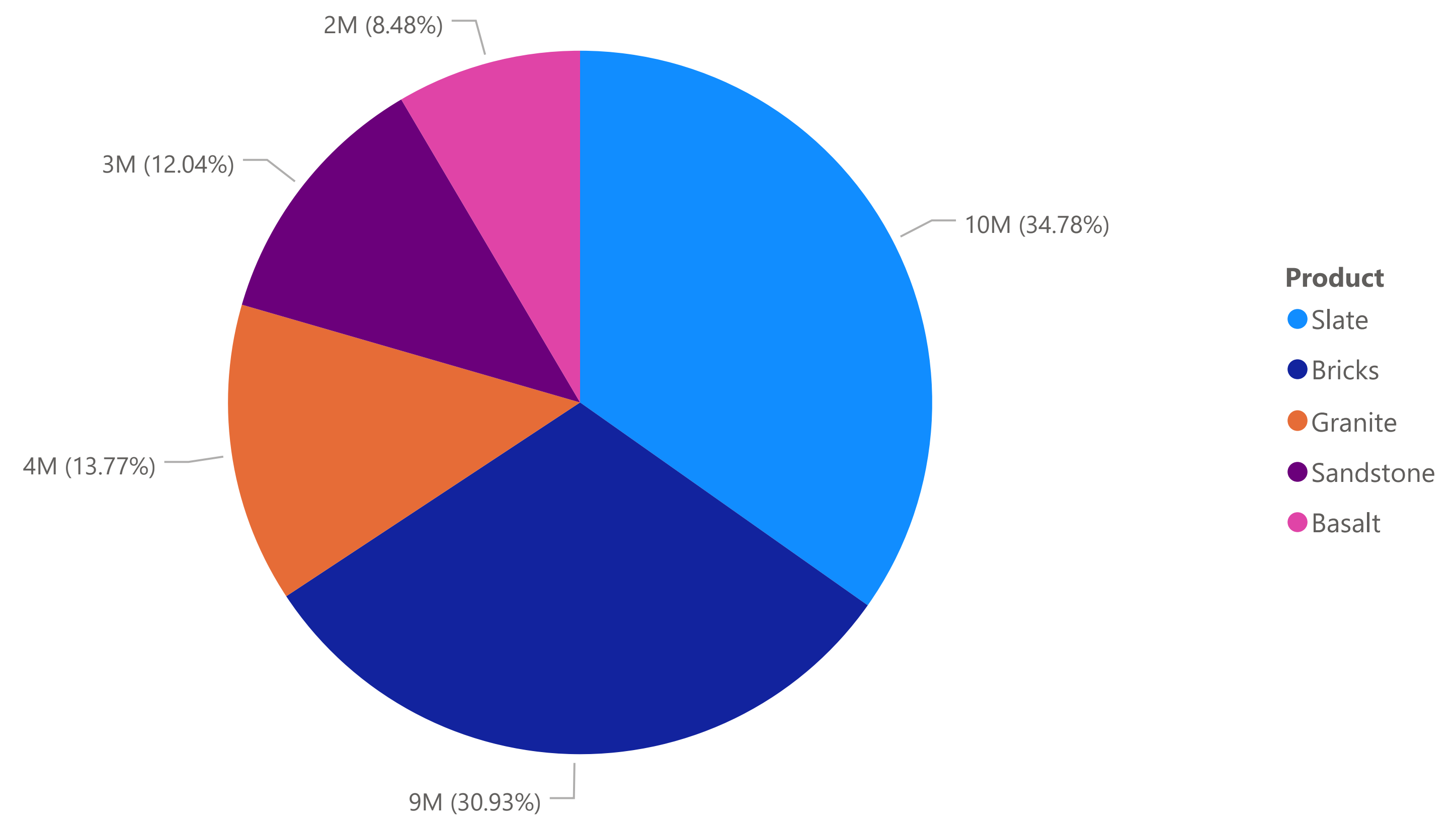


2020 Product Info

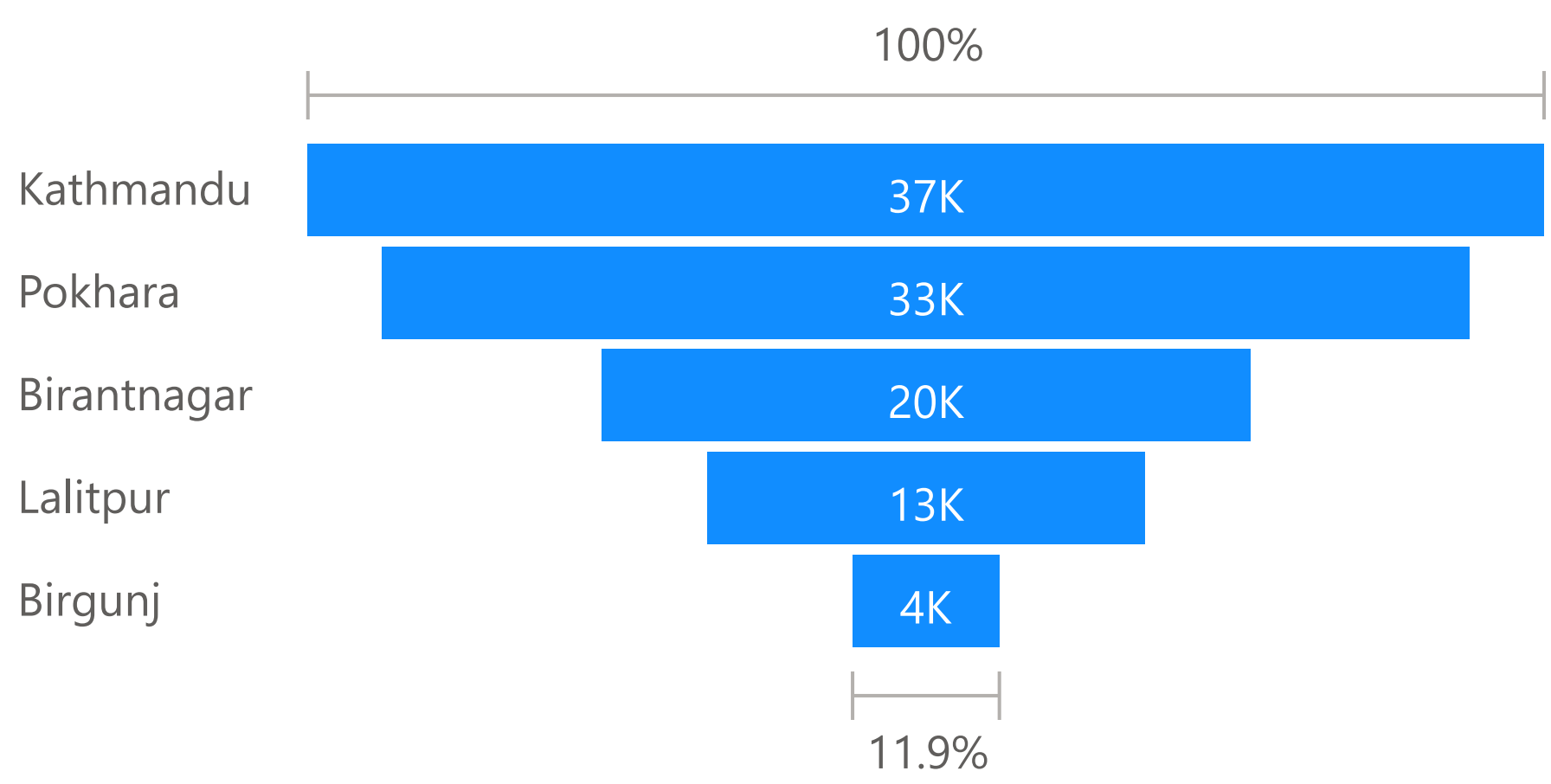
Units Sold by Product



Sale Value2020 by Product

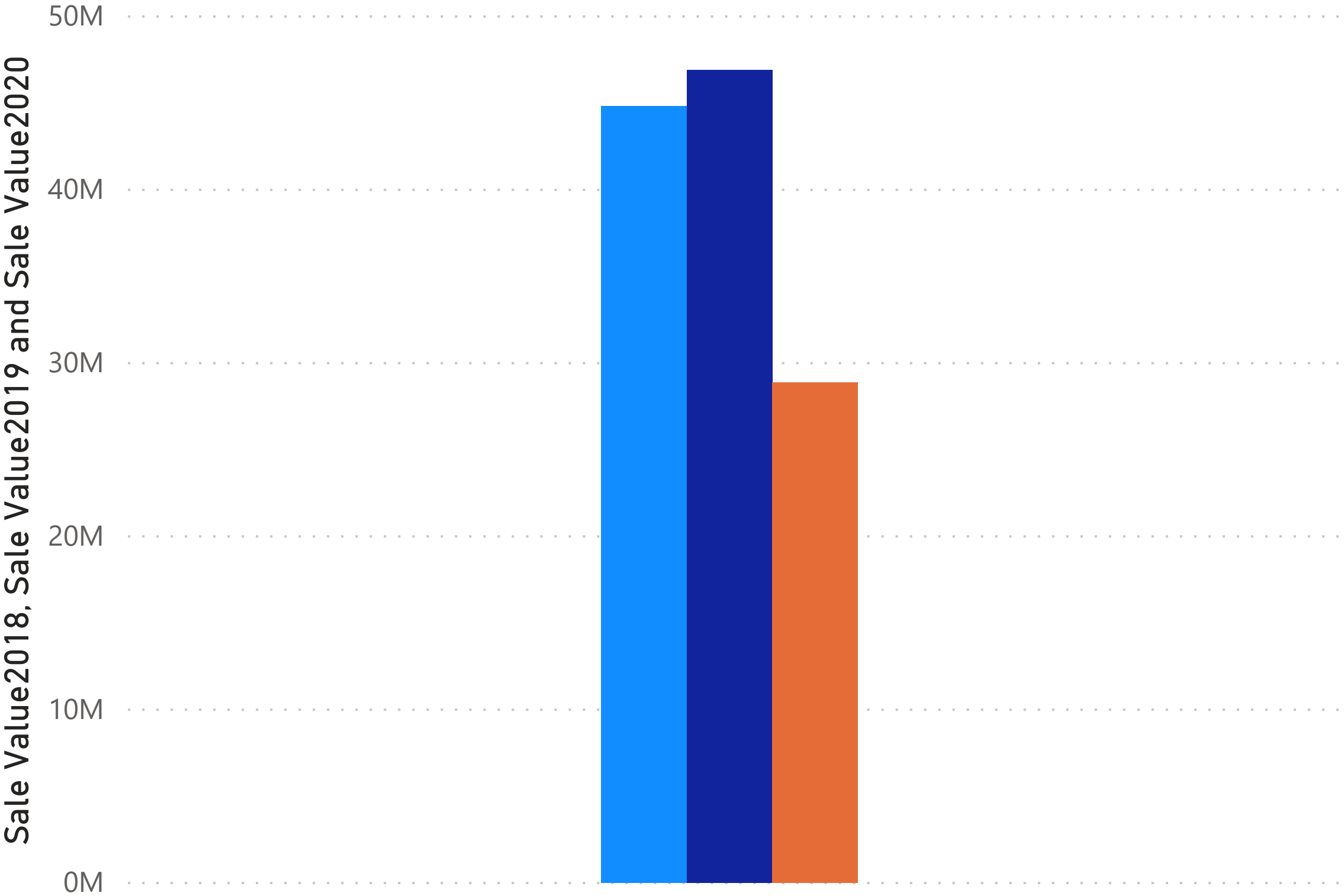


Units Sold by City

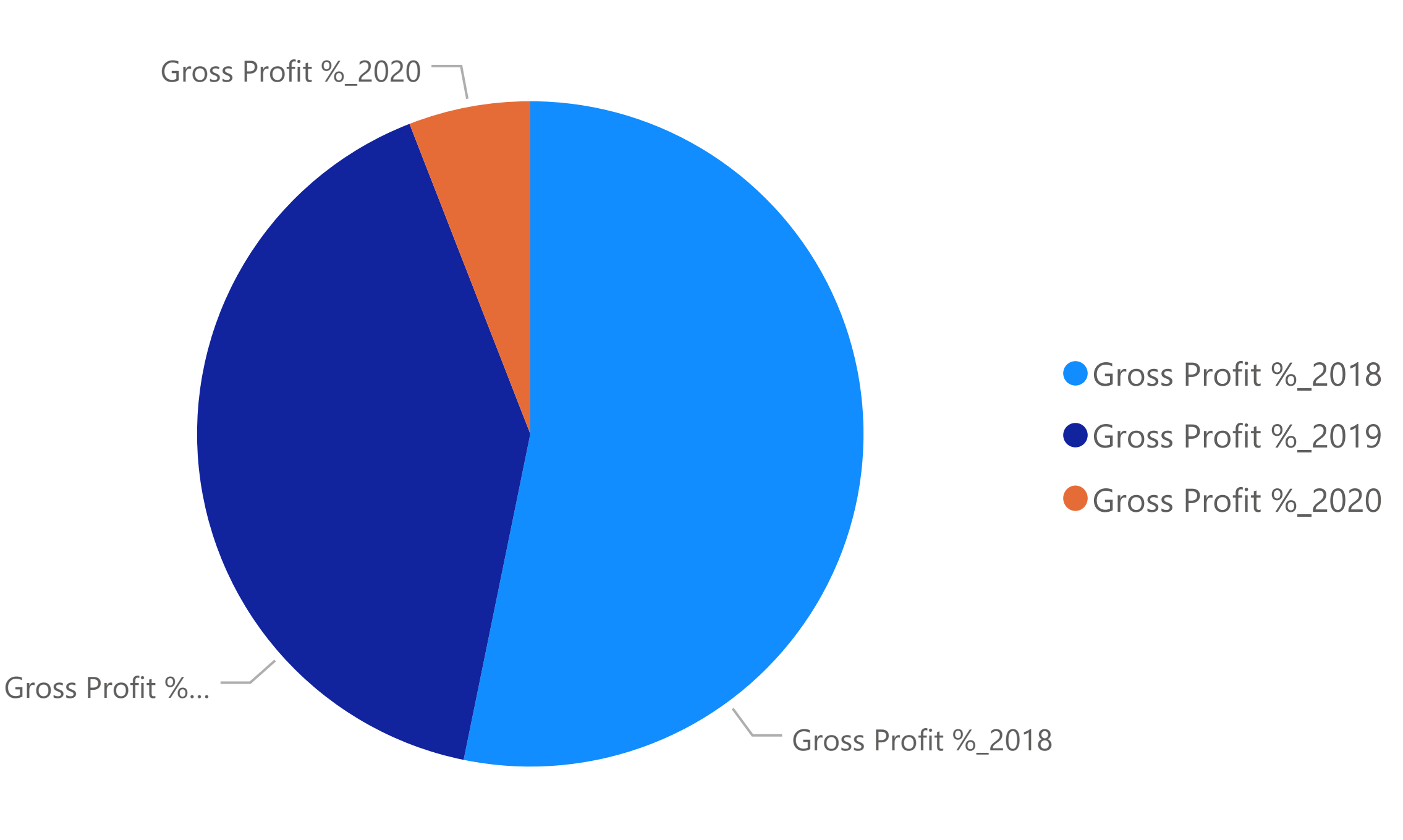


Sale Value KPI

● Sale Value2018 ● Sale Value2019 ● Sale Value2020



Gross Profit % KPI



Conclusion

Our business shows steadily growth from the year 2018 to 2020 although the year 2020 has less Sales Value or growth compared to the other years because 2020 only took into account the months of January and February but we can predict that the sales and gross profit margin will increase.

Cities such as Kathmandu which is where most sales are from should be investigated well in order to find out why the sales are high in that city, but we assume most sales are from Kathmandu because it is the capital city so there is a lot of growth and development. and why Birgunj is the lowest selling city.

Through analysing we found out that Granite and Bricks are our highest selling products and we assume that they are the most used products for construction and decoration and sandstone and slate are average selling products.