



# Sales Data Analysis

Applied Consumer Behaviour Framework

Analysed and Reported by,  
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*India*

# Overview

## Data

Sales Data of two years - 2003 and 2004

## Framework

Consumer Behaviour (Profitable Vs Repeatable) - 2 x 2 Matrix

## Statistics

Average/Mean

## Inferences

- Filtered data into different quadrants.
- Insights over the study and analysis of each quadrants yearly as well as quarterly.
- Different marketing strategies are developed according to the insights.

## Analysis Tools

Python | Pandas | Numpy | Matplotlib

## Analysis Platform

Jupyter Notebook

## Infographs

Bar Graphs | Line Graphs | Pie Chart

# Totals

## Total 2003

Sales	Customers	Transactions
3516979.54	69	1000
Sales per Customer	Transactions per Customer	
3516.98	14.5	

## Total 2004

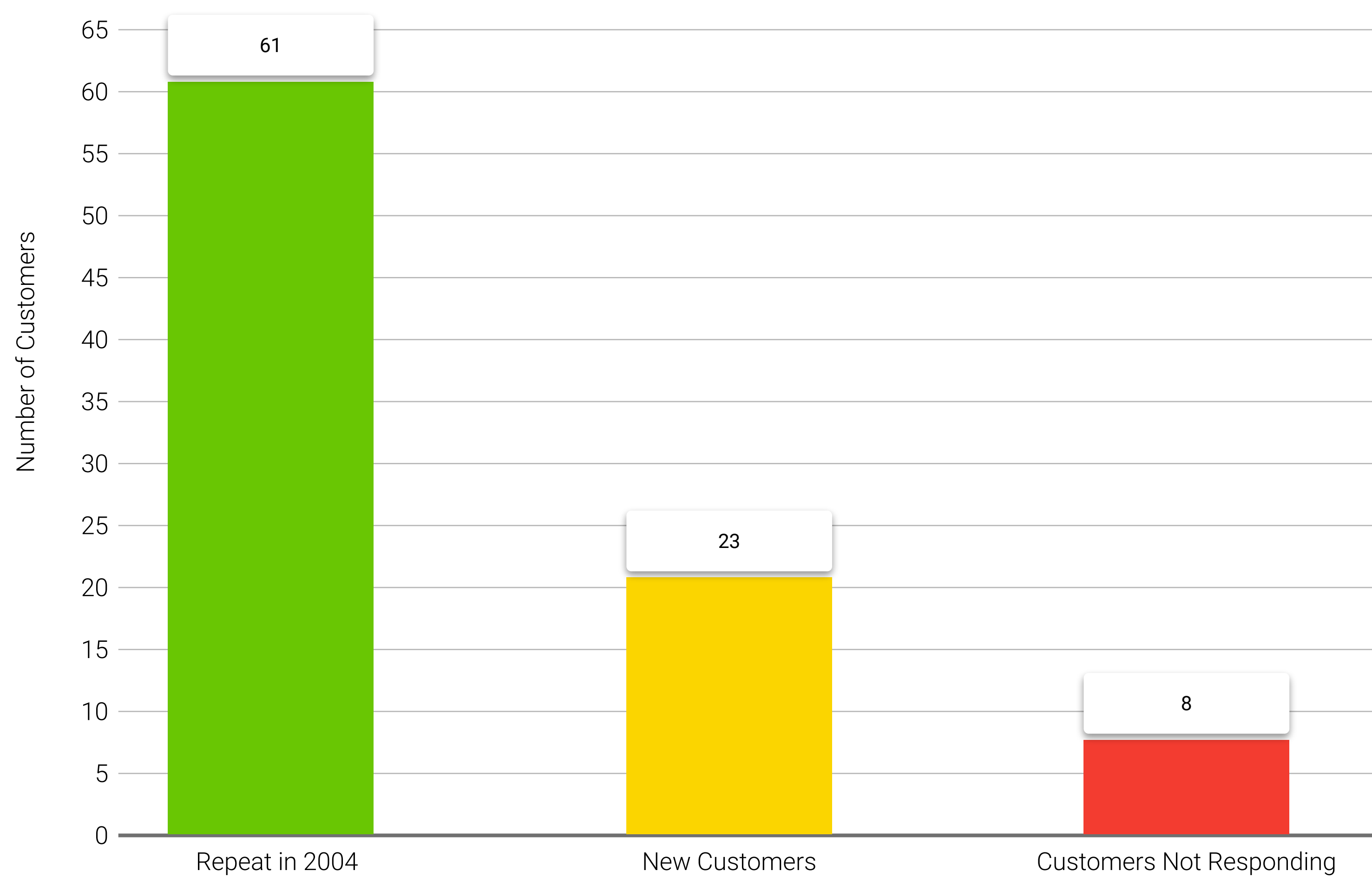
Sales	Customers	Transactions
4724162.60	84	1345
Sales per Customer	Transactions per Customer	
3512.38	16.0	

## Growth

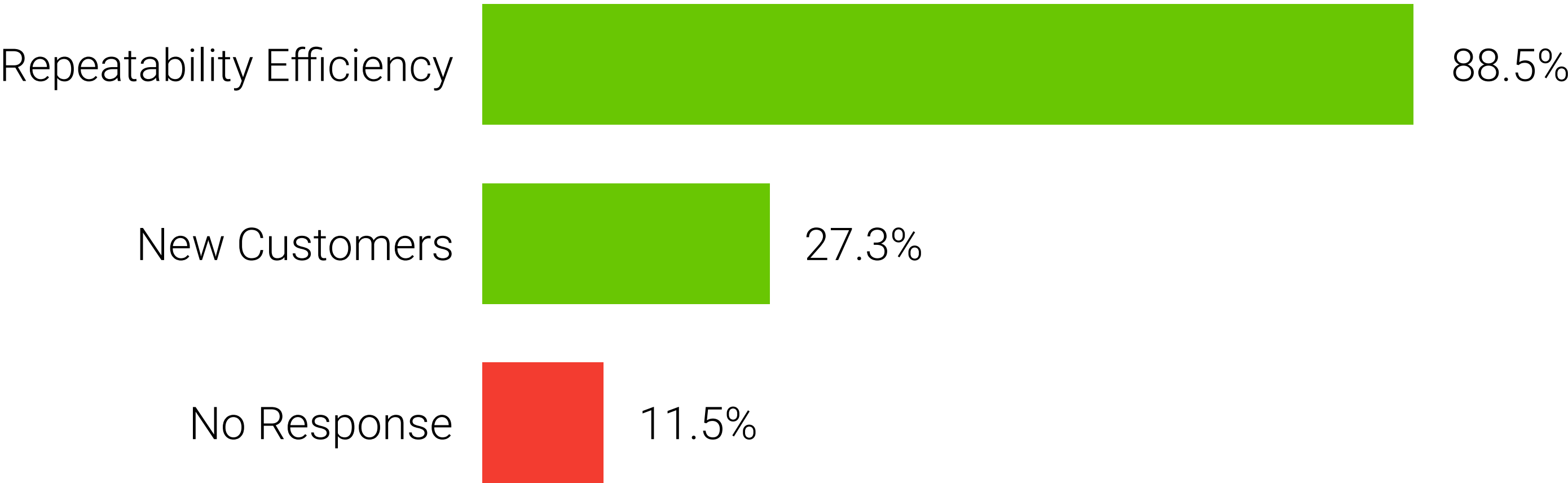
34.3%		Sales	
21.7%		Customers	
34.5%		Transactions	
		Sales per Customer	- 0.1%
17.2%		Transactions per Customer	

# Totals - Number of Customers

## Deep Analysis of Total Customer

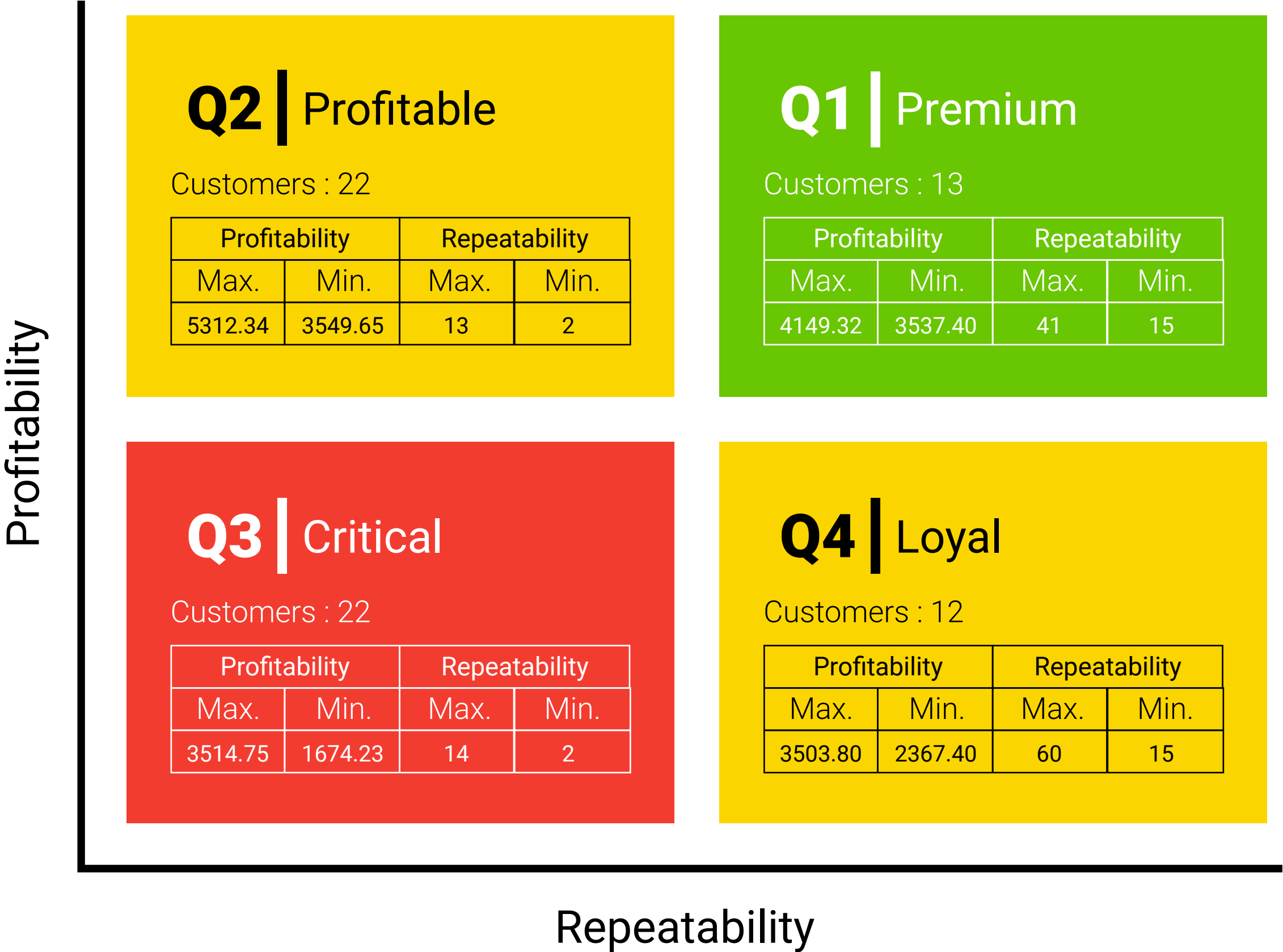


## Efficiency

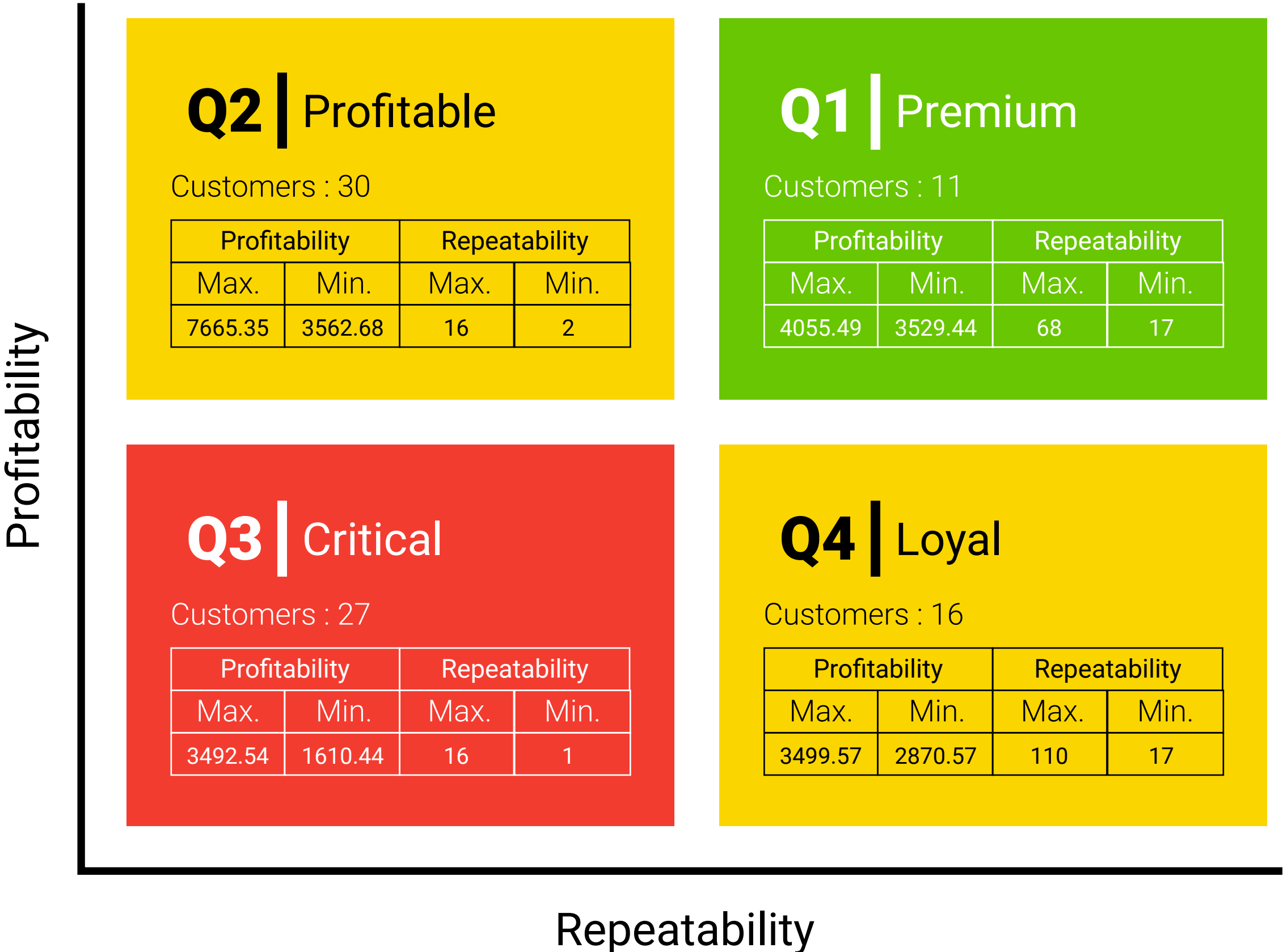


# Quadrants

## Quadrants 2003

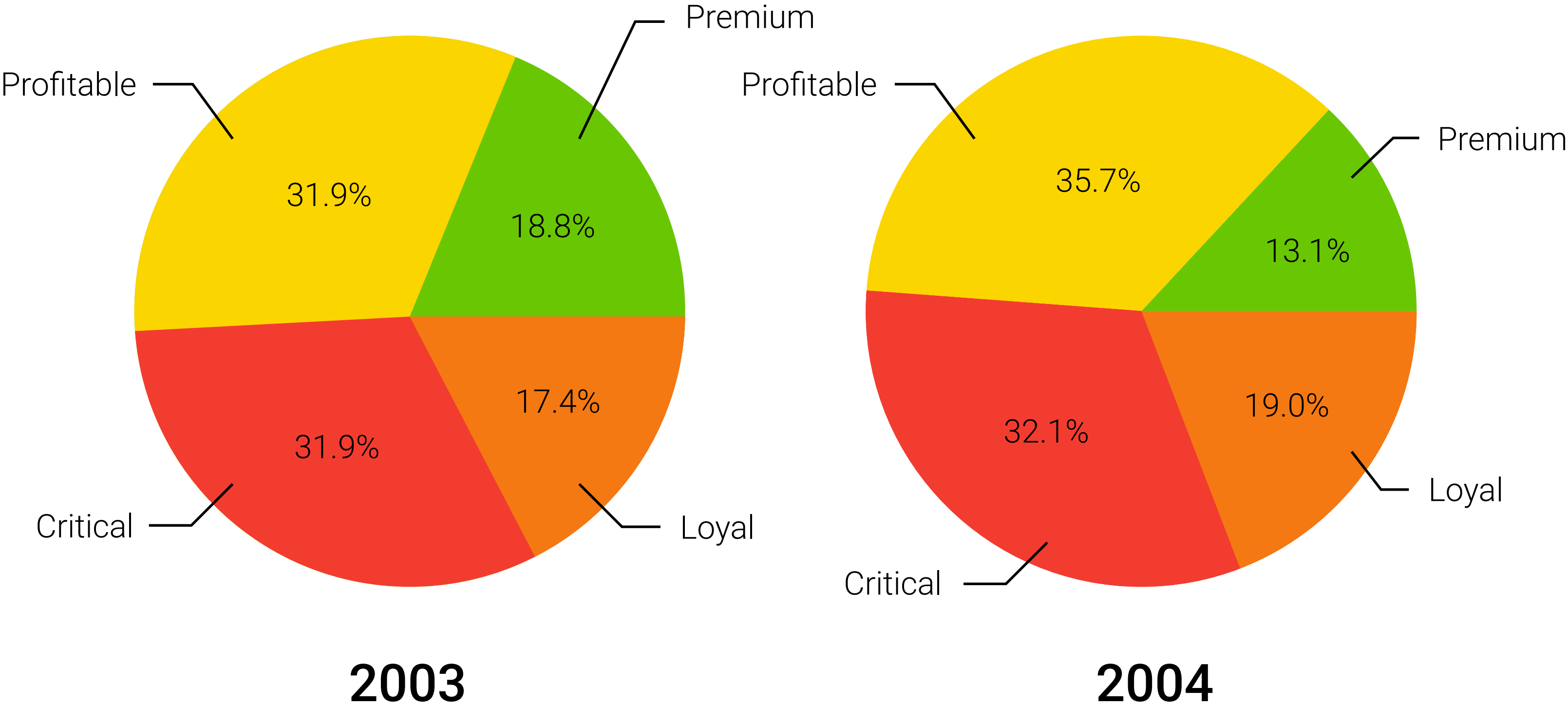


## Quadrants 2004

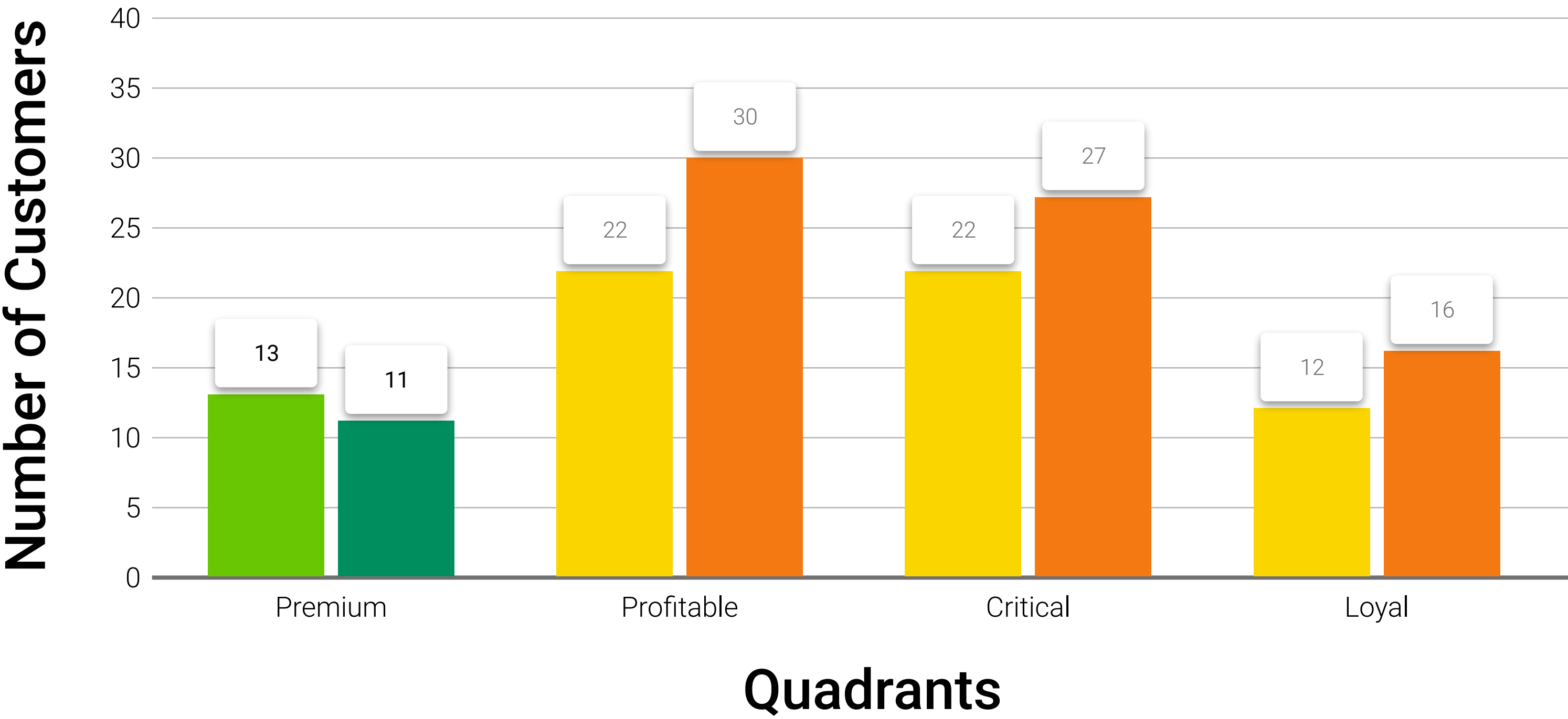


# Quadrants - Share and Growth

## Share of Quadrants



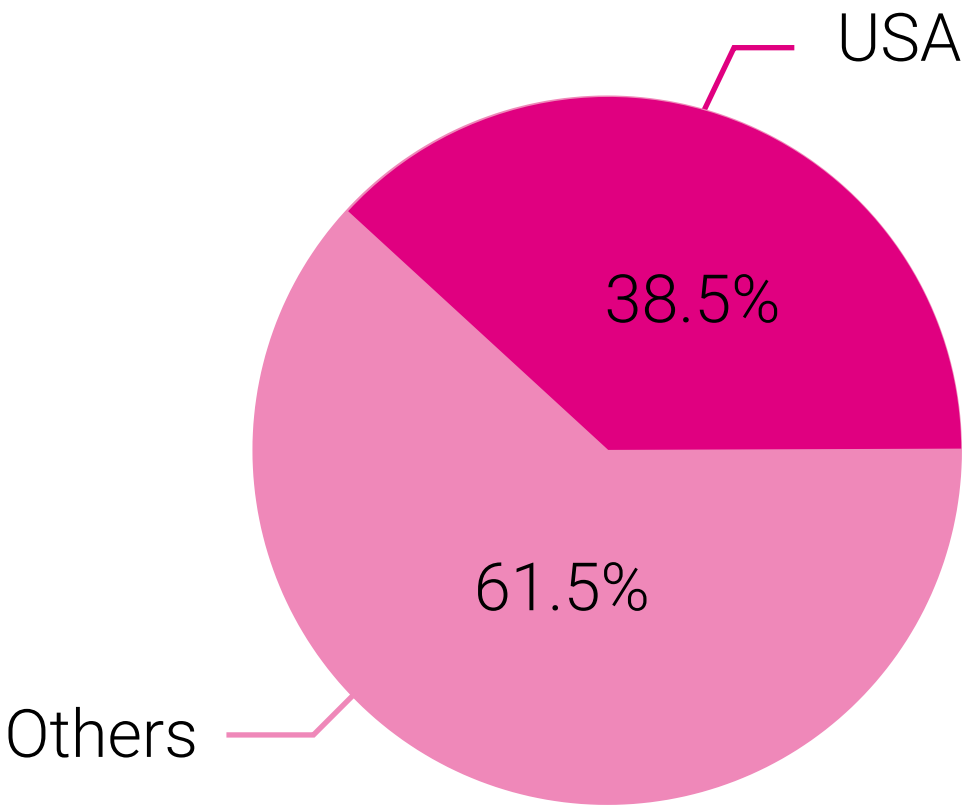
## Quadrant Share Growth



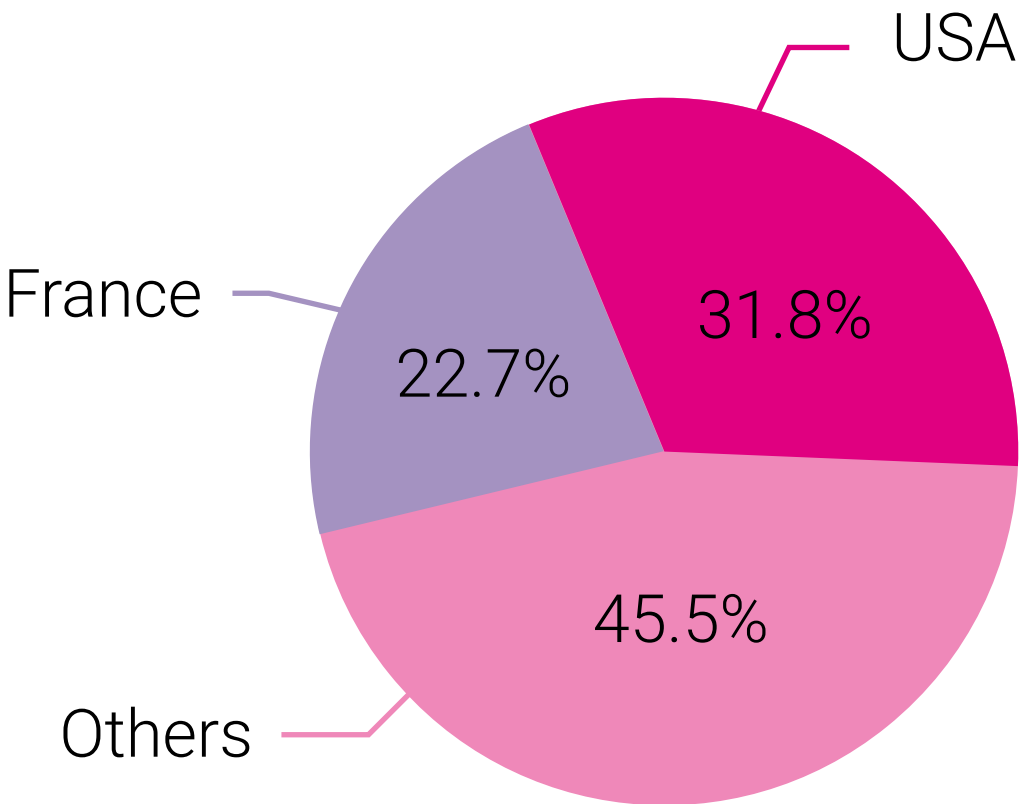
# Country

## Customer from Country

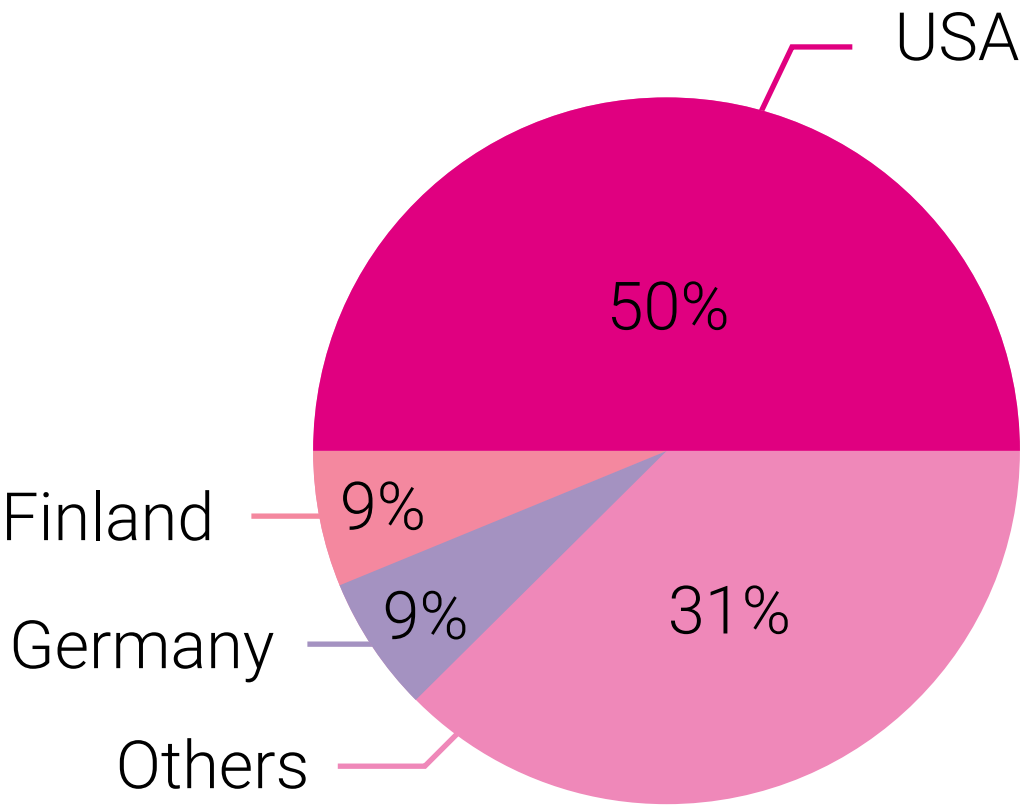
Premium



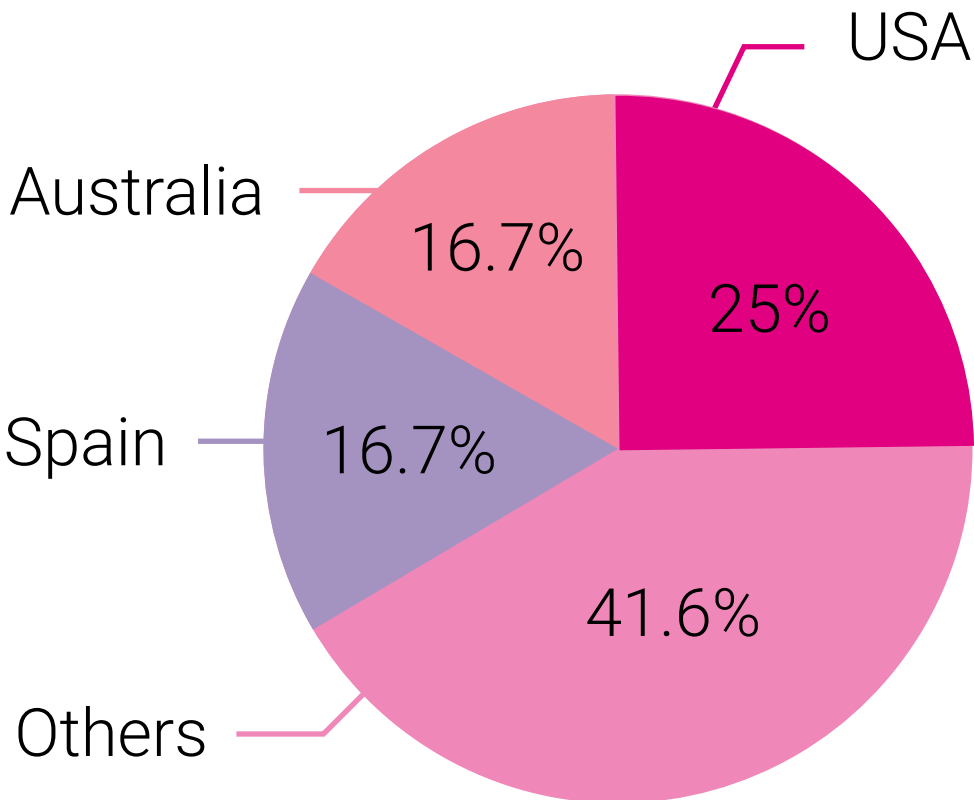
Profitable



Critical

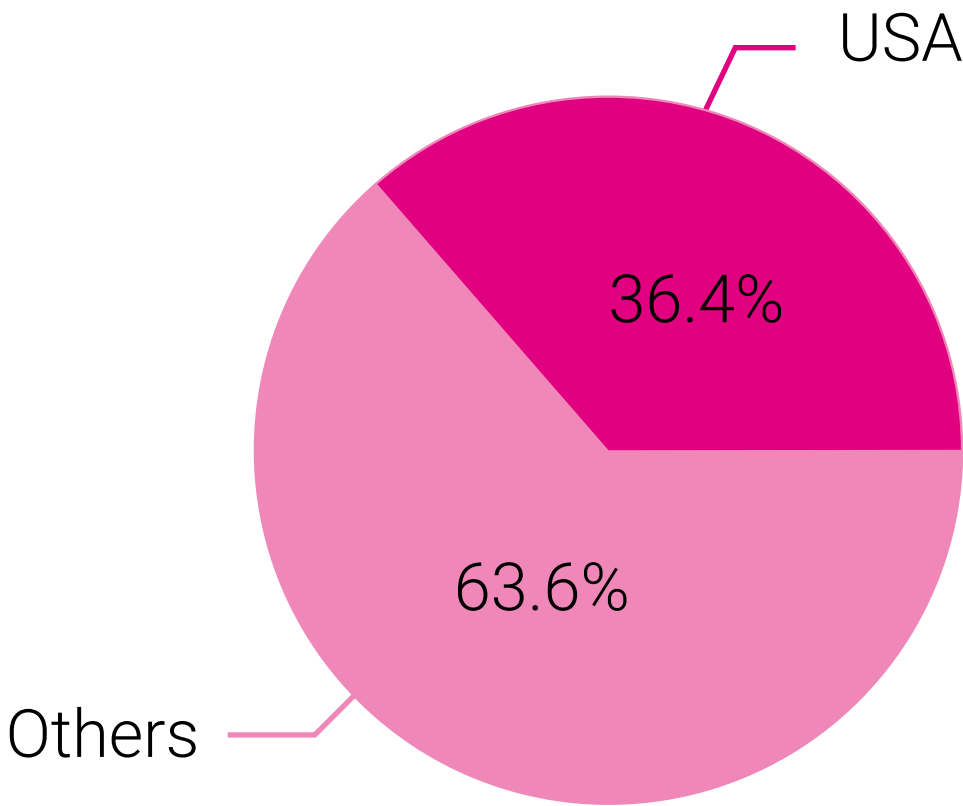


Loyal

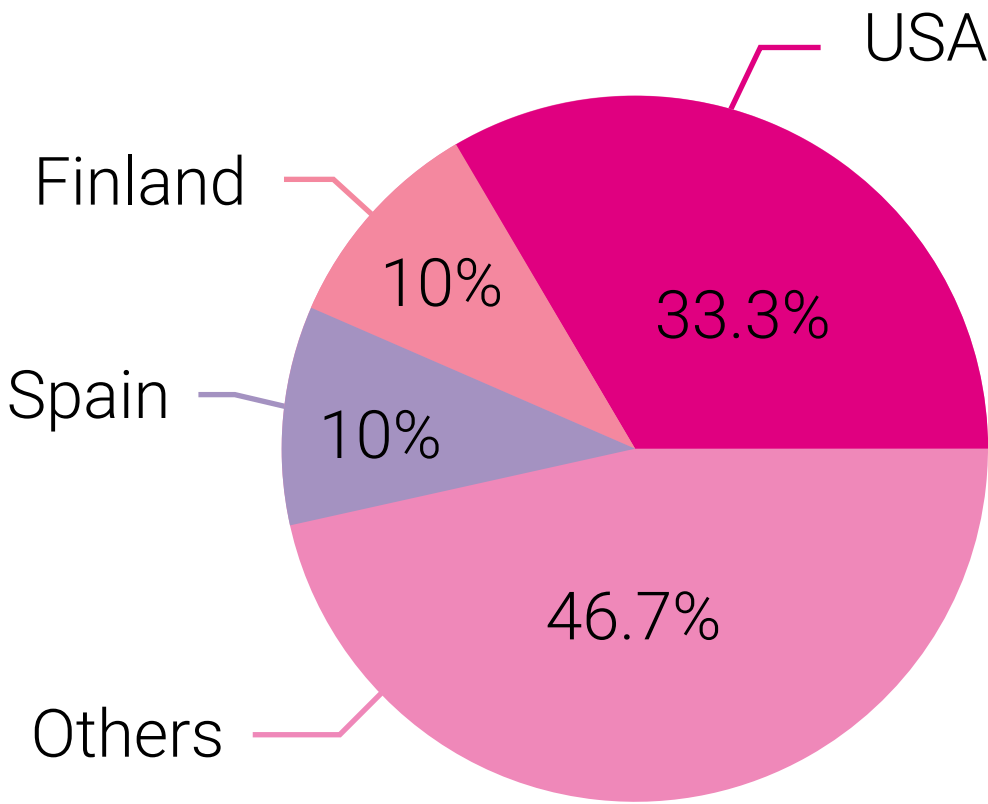


2003

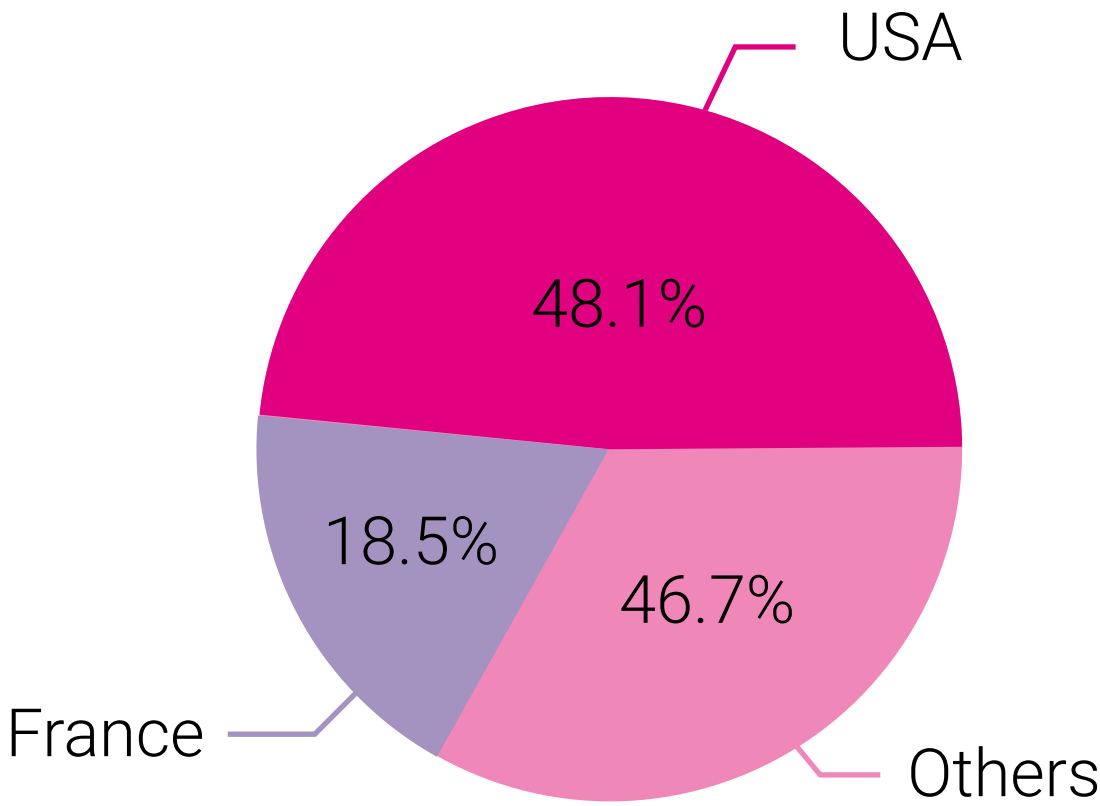
Premium



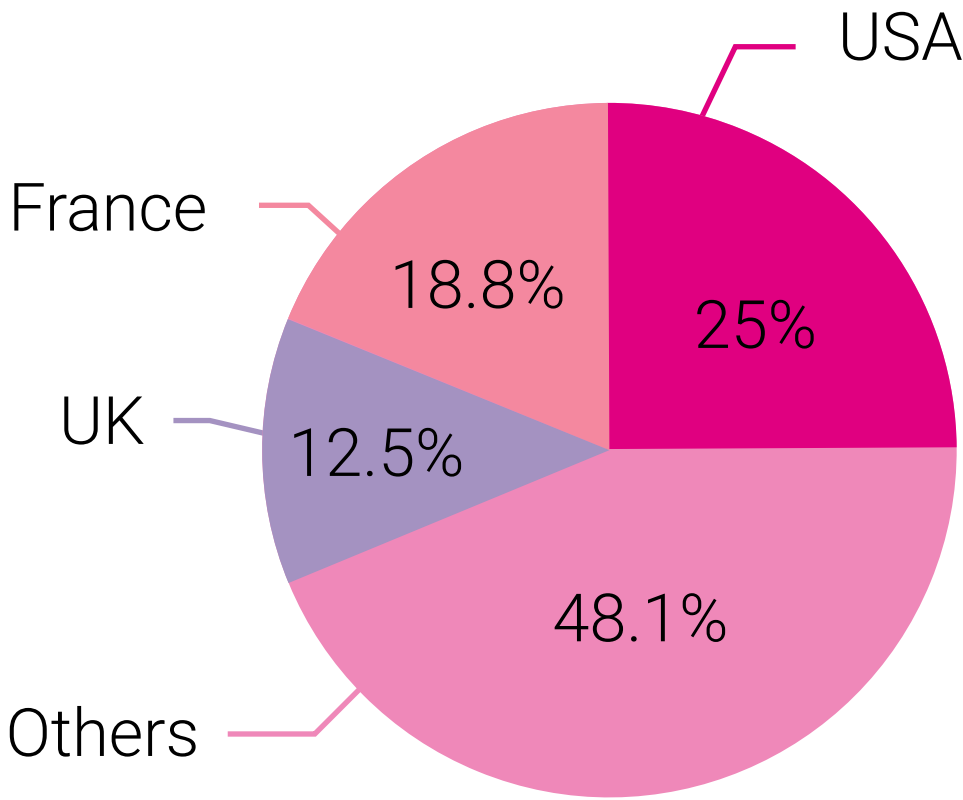
Profitable



Critical



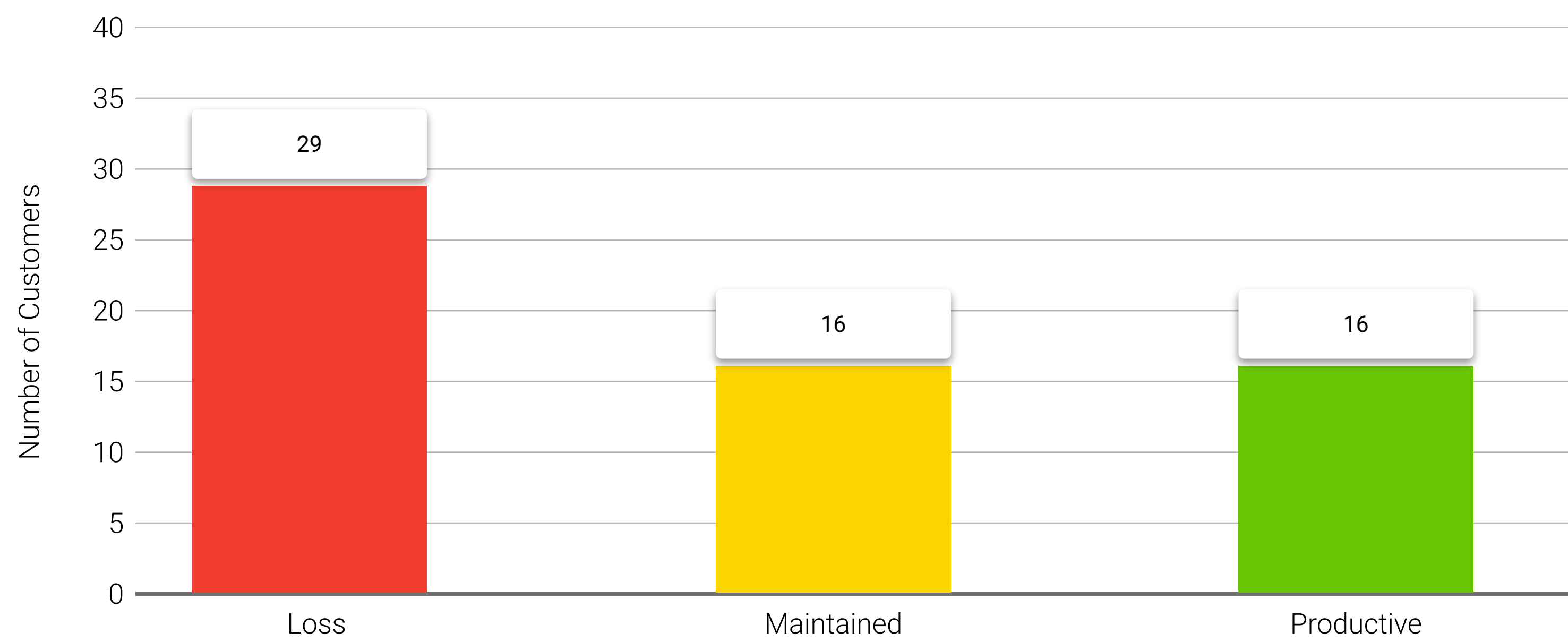
Loyal



2004

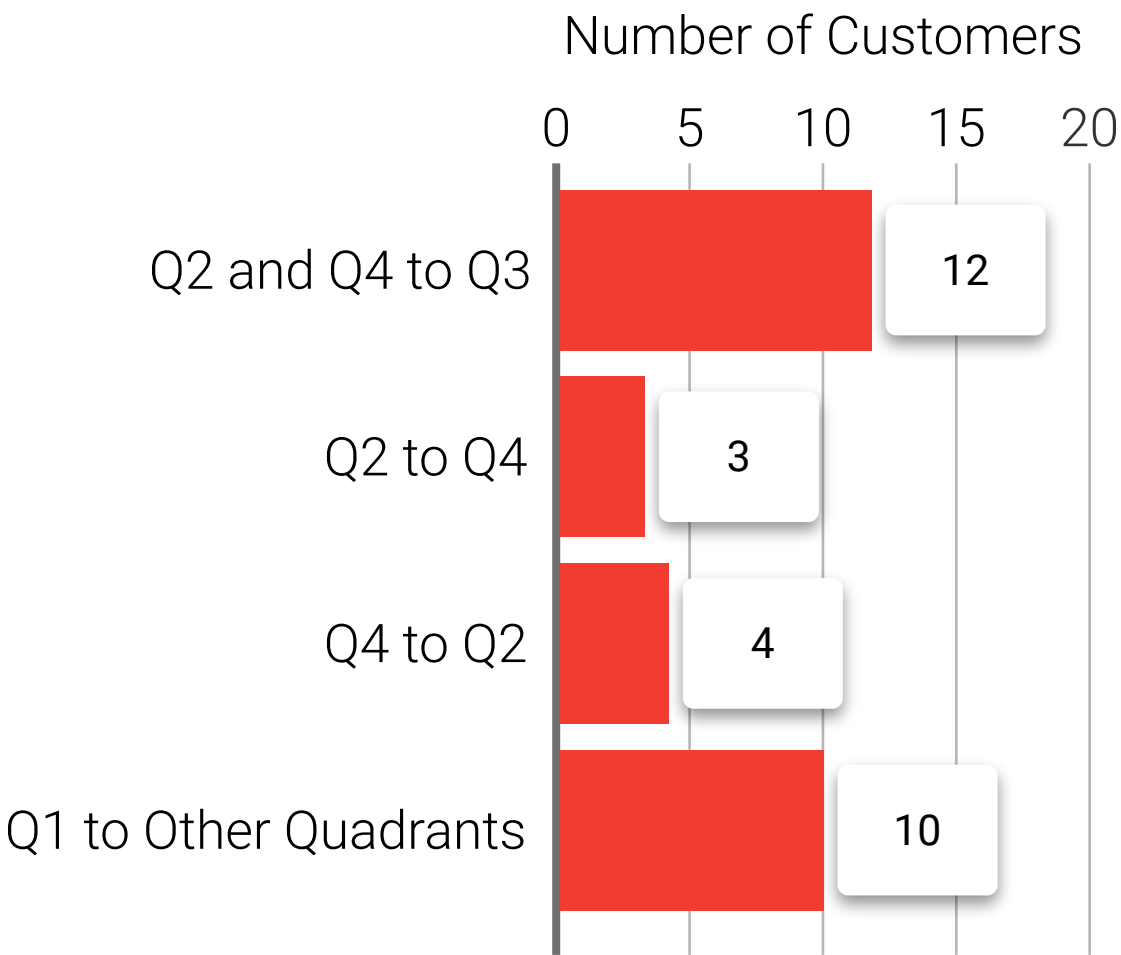
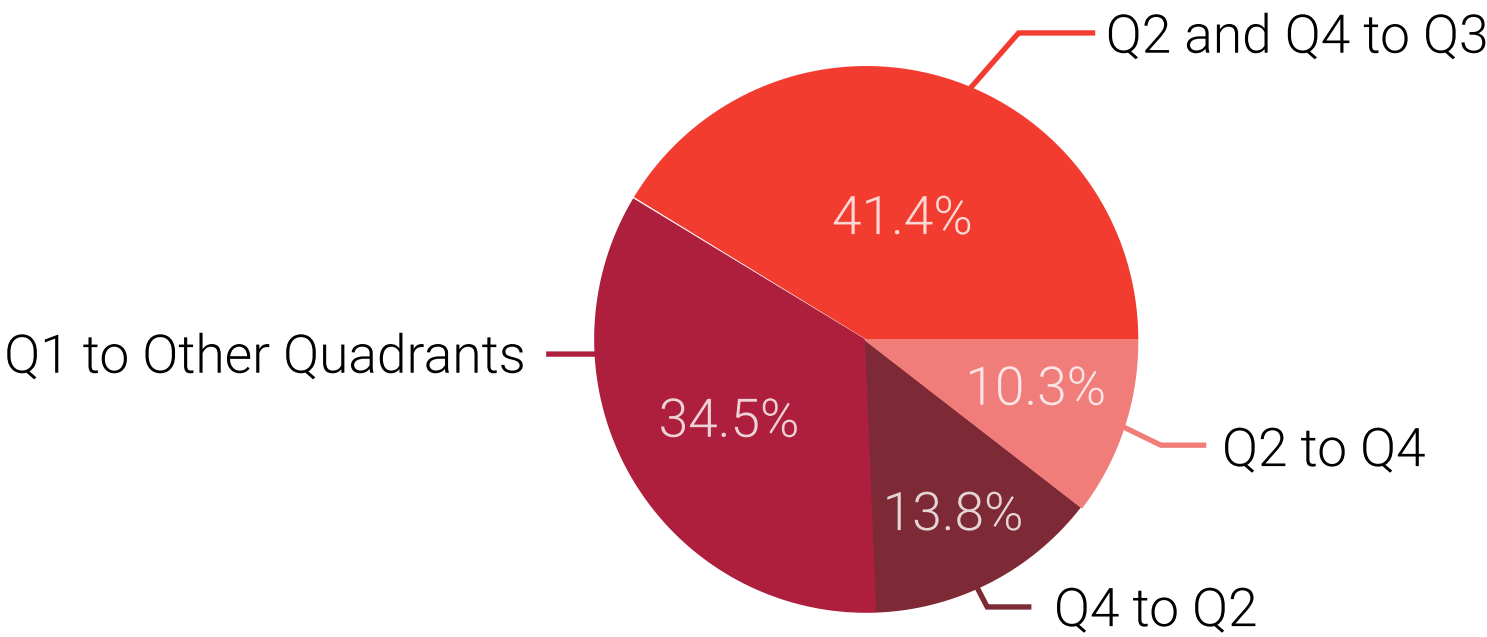
# Extended Comparison

## Overall Comparison

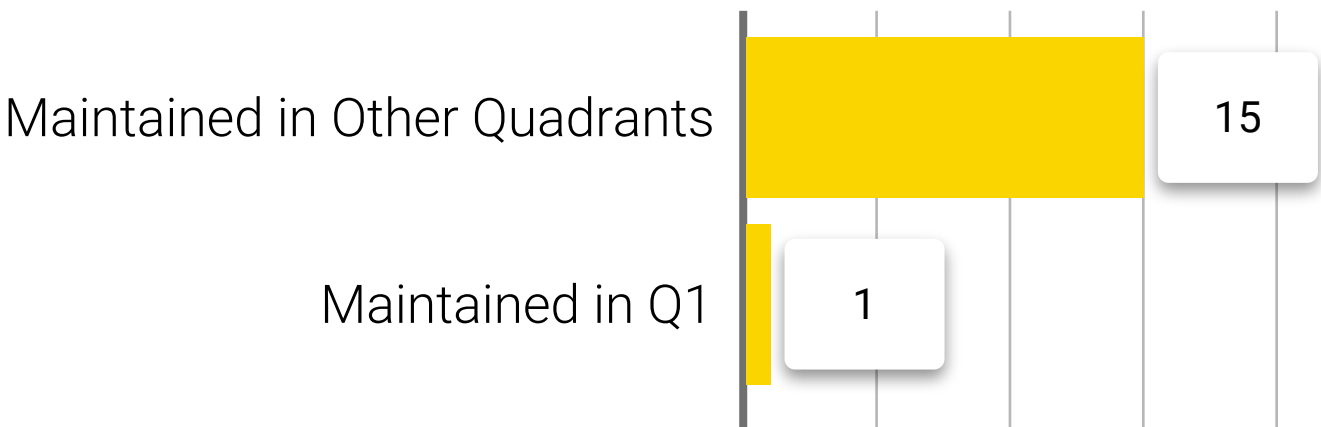
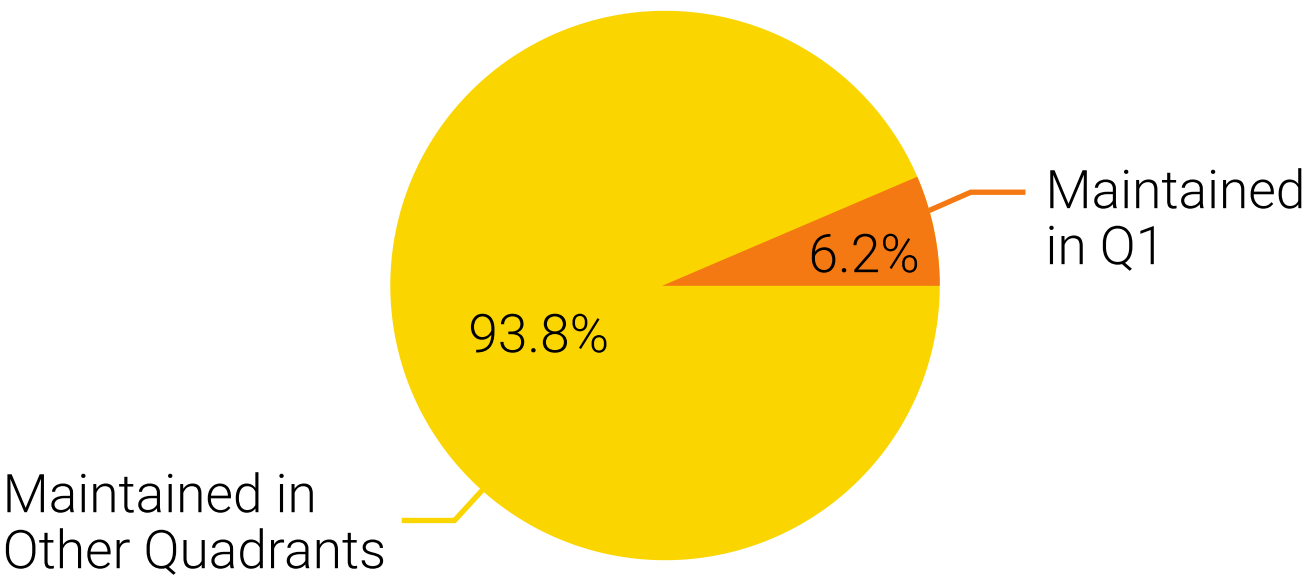


## Depth Comparison

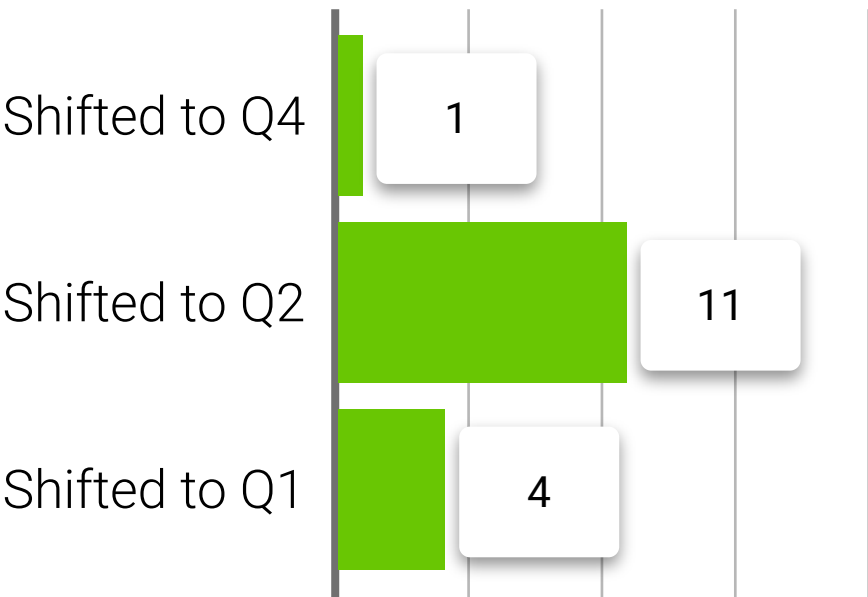
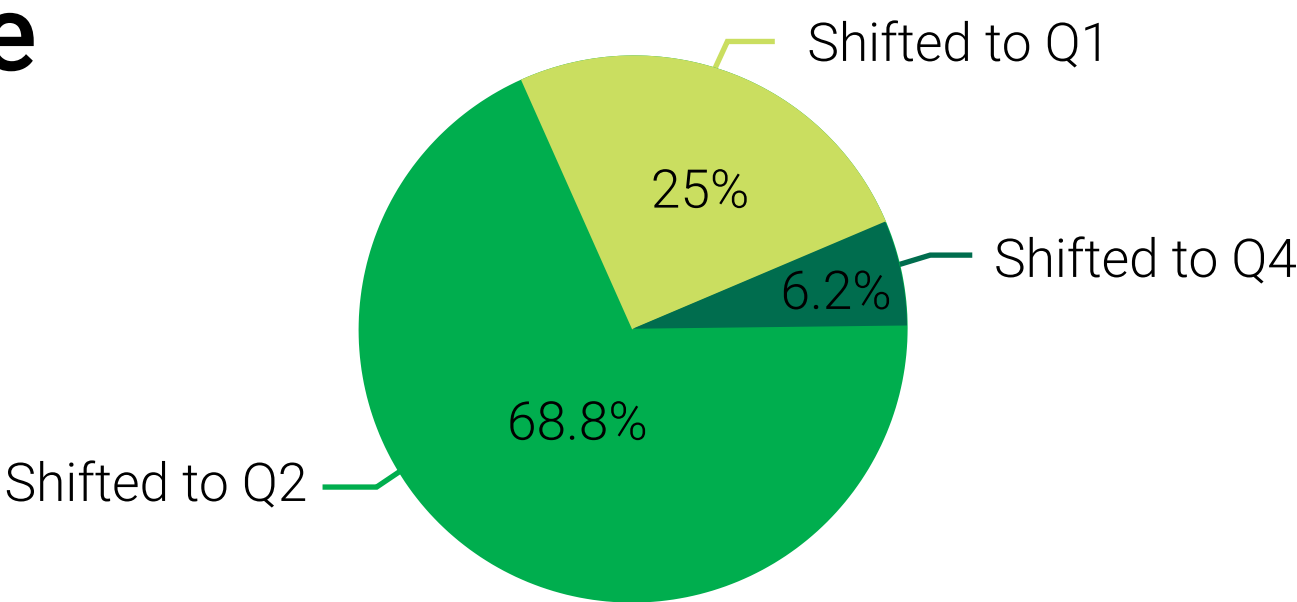
### Loss



### Maintained



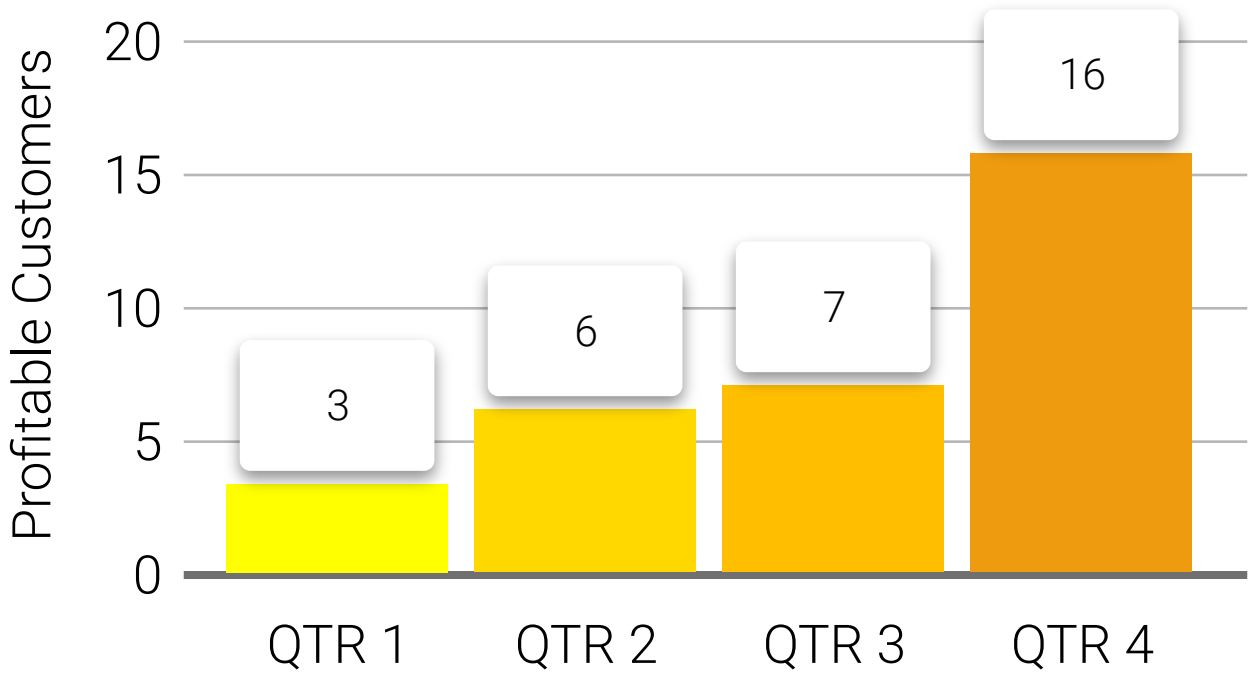
### Productive



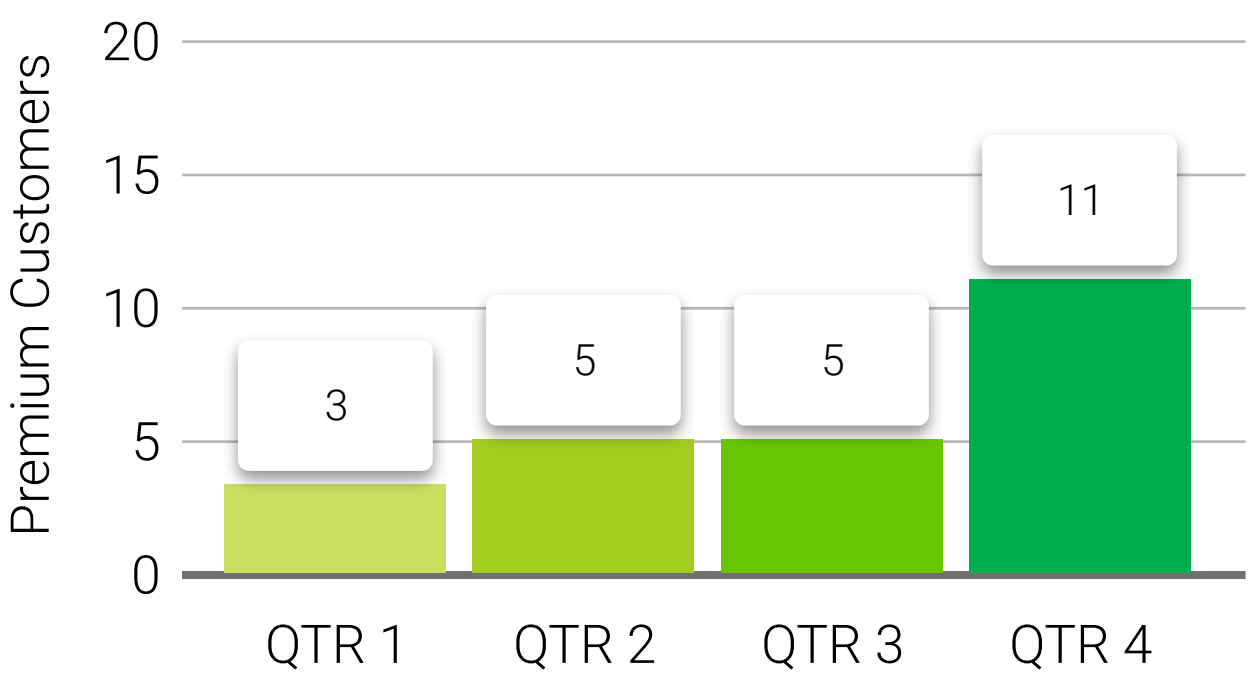


# Quarters 2003

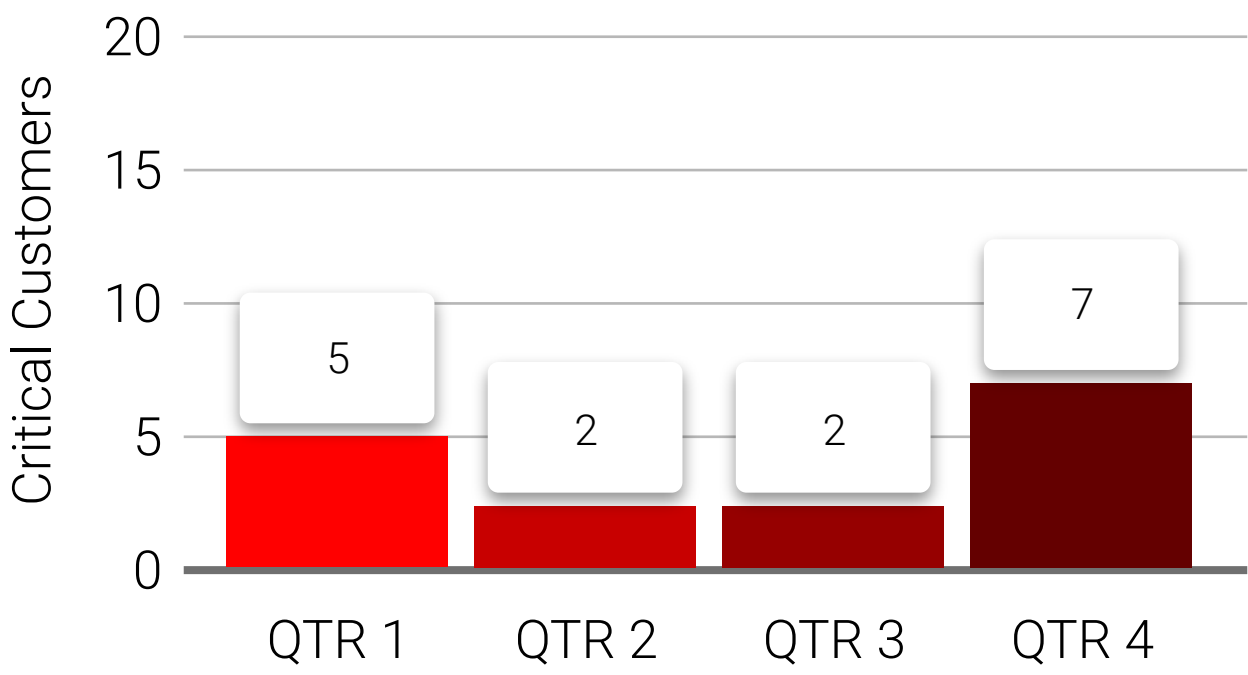
## Quadrant Comparison



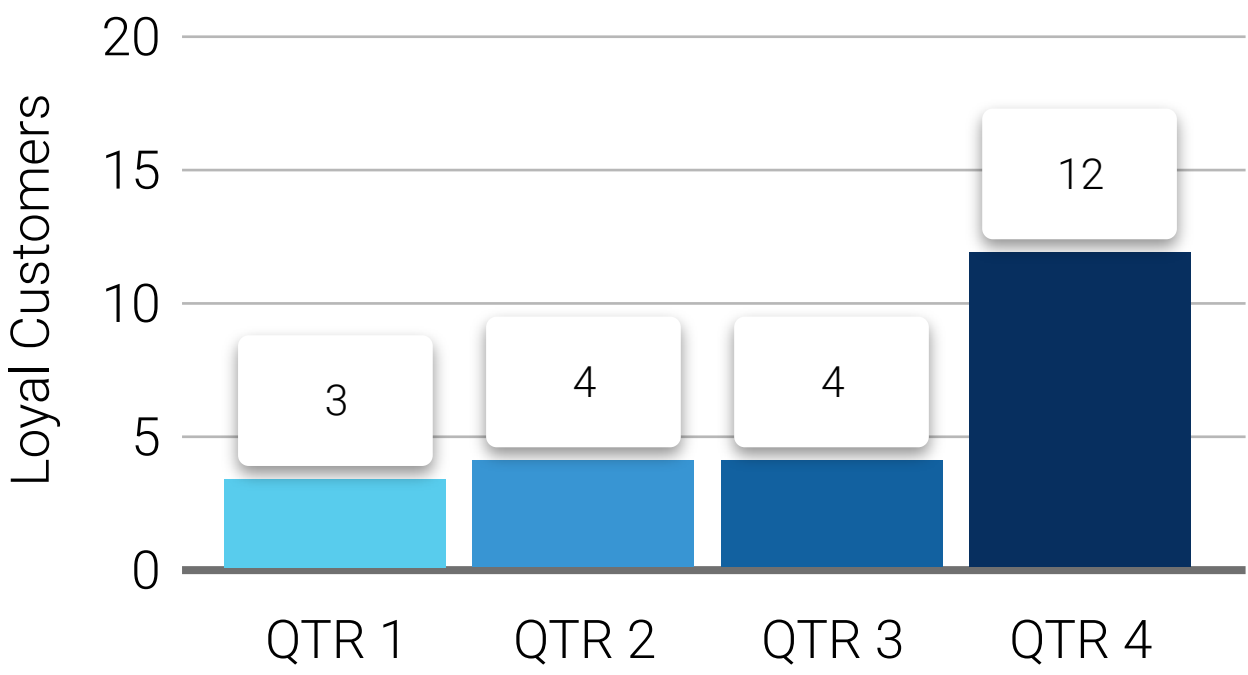
Profitable



Premium

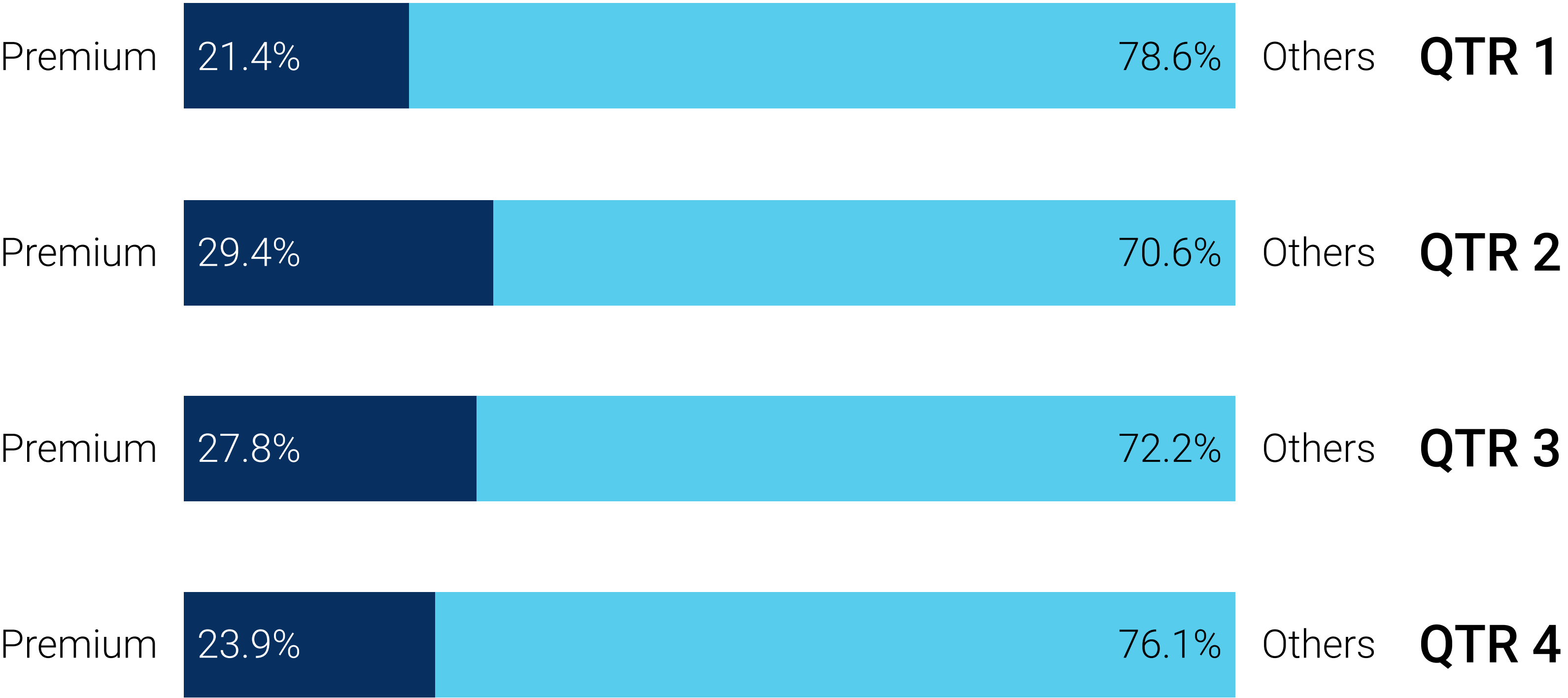


Critical



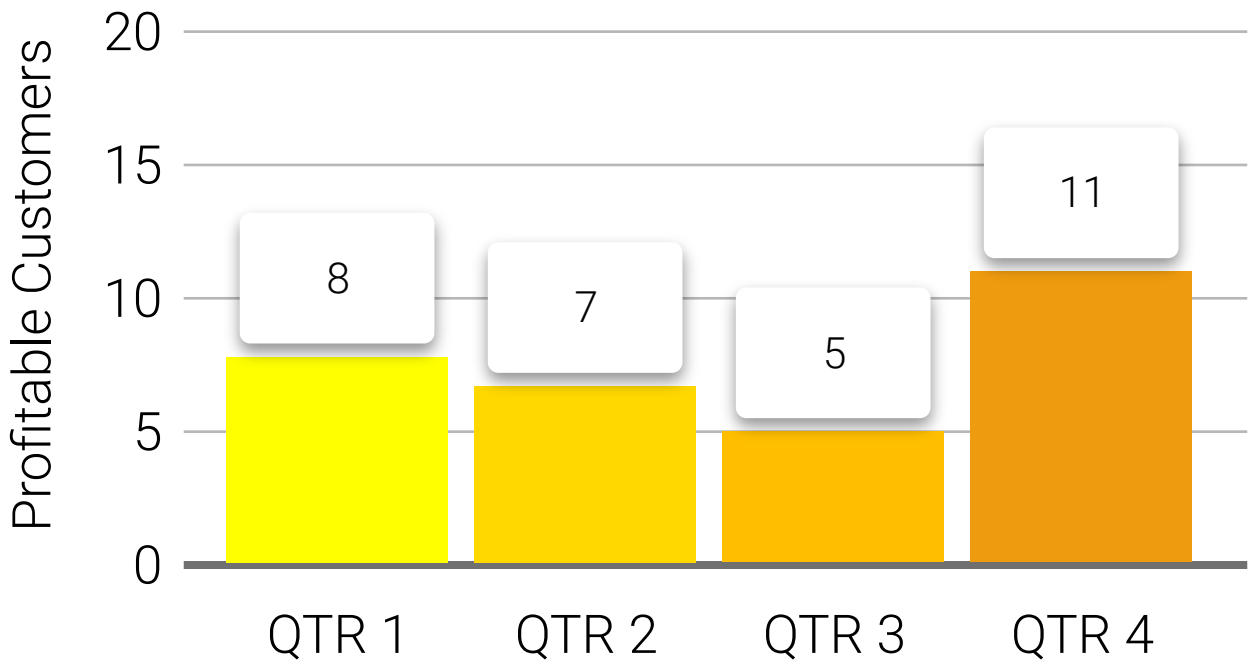
Loyal

## Premium

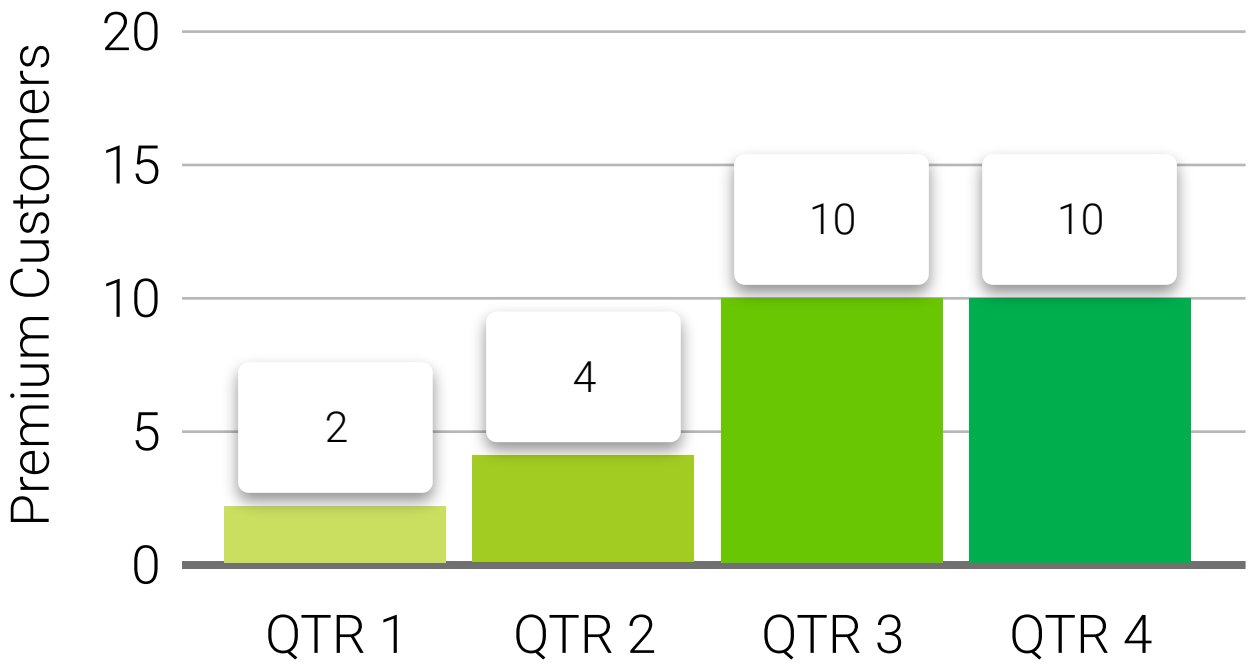


# Quarters 2004

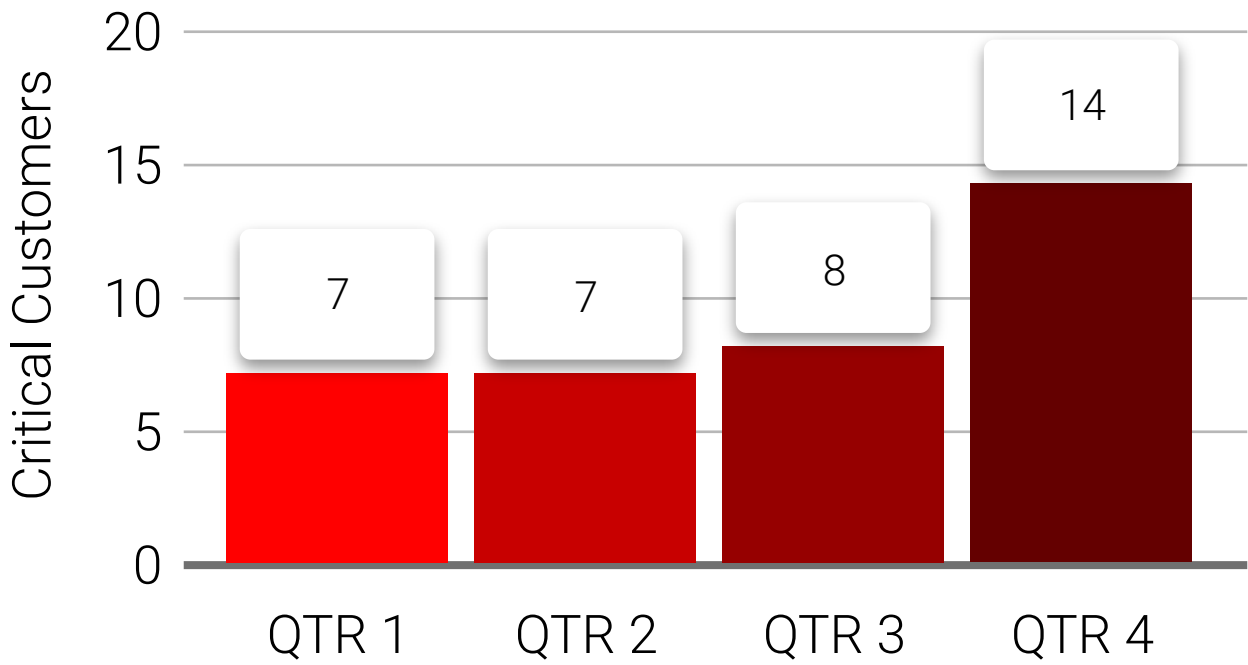
## Quadrant Comparison



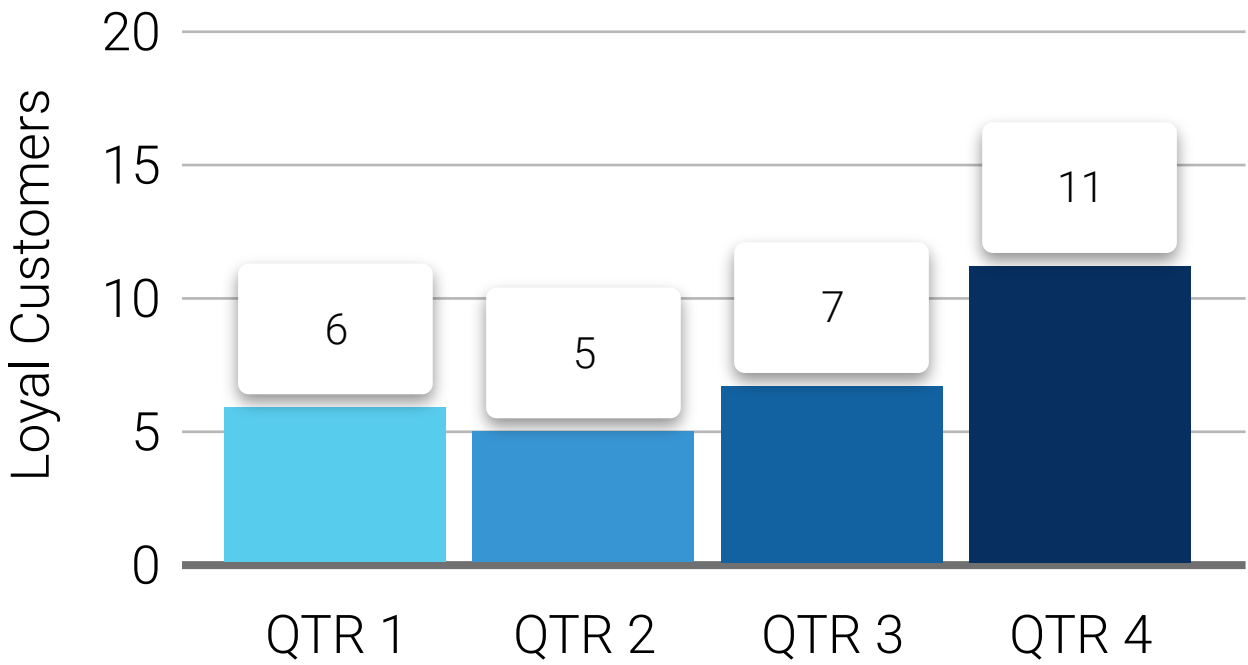
Profitable



Premium

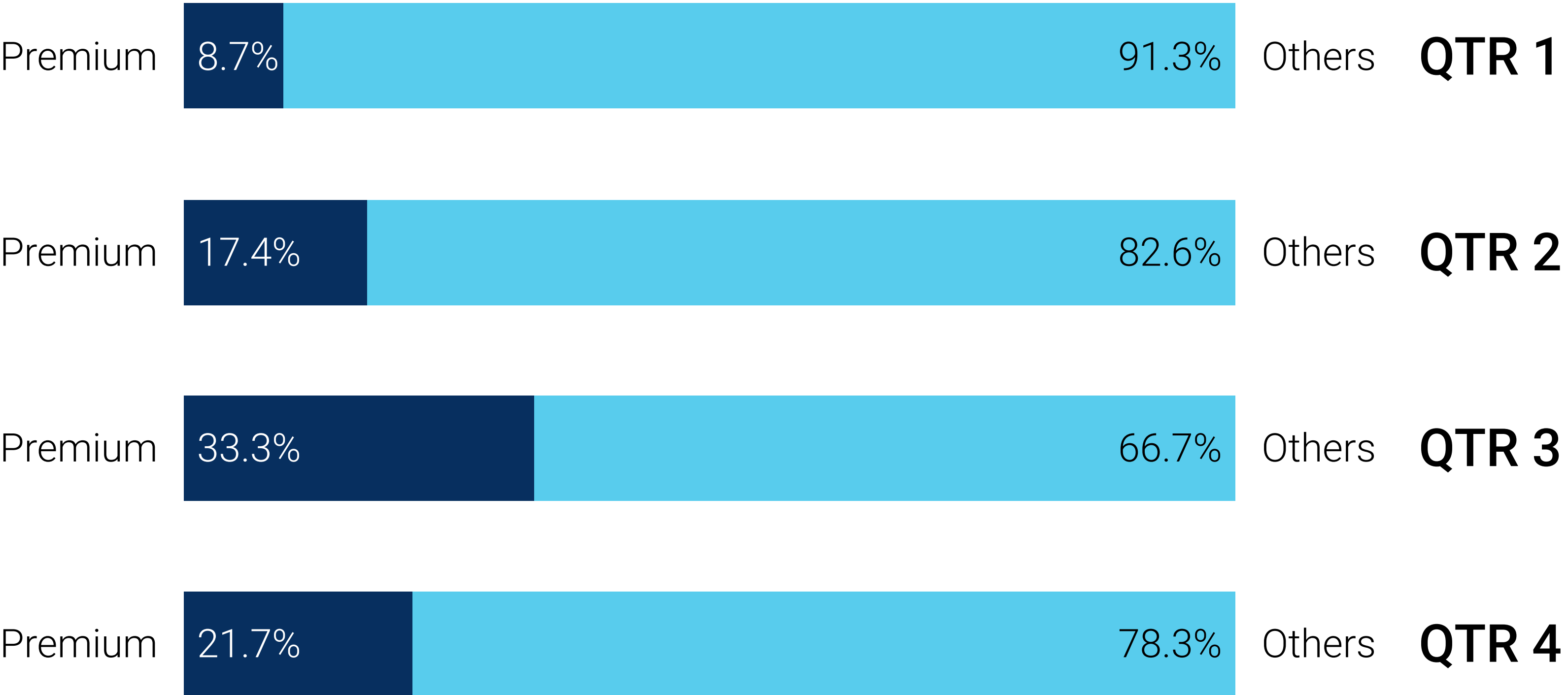


Critical



Loyal

## Premium



# Conclusion of Yearly Analysis

- Total sales, number of customers, number of transaction and transaction per customer is increasing but average sales per customer is slightly decreasing that means in upcoming years critical and loyal customers will increase but customers who can give maximum business i.e. premium customer will decrease.

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  - 27.3% growth in new customer and 88.5% efficiency in retaining customers is a good sign for business. A team can also connect to those 11.5% customers who are not giving response. *Connect, listen the query, solve it.*

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  - In quadrants, every quadrant has a growth and one of the main reason is increase in number of customers but there is significant fall in premium customers. Hence, business has to look for their most connected customers to ensure that the maximum revenue should come from that section.

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  - Clearly, primary market which is giving maximum business is USA. Also, there are potential countries where business can look to expand :
    - a. France and Spain : Next potential market to get premium customers.
    - b. Germany and Finland : Research on buying behaviour.
    - c. Australia and UK : Already connecting with brand. Research on need of customers to increase the deal size and get a premium business.

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  - As per data, the loss of upper quadrant customers is significantly high than maintaining customers in same quadrant or being productive. This should be a point of concern. In depth :
    - a. Customers moving to critical quadrant is maximum. Review their buying behaviour to get the touchpoints that are missing out.
    - b. In total of maintaining customer, only 6.2% maintained in premium quadrant. Change the strategy to deal with premium customers.
    - c. Shifting to premium quadrant from other quadrant is 25% of total positive shifts. This section is going good.

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  - Season of business is last two quarters and also chance of getting premium business is high in 3<sup>rd</sup> and 4<sup>th</sup> quadrant.
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