



Computer Hardware Throughout the years

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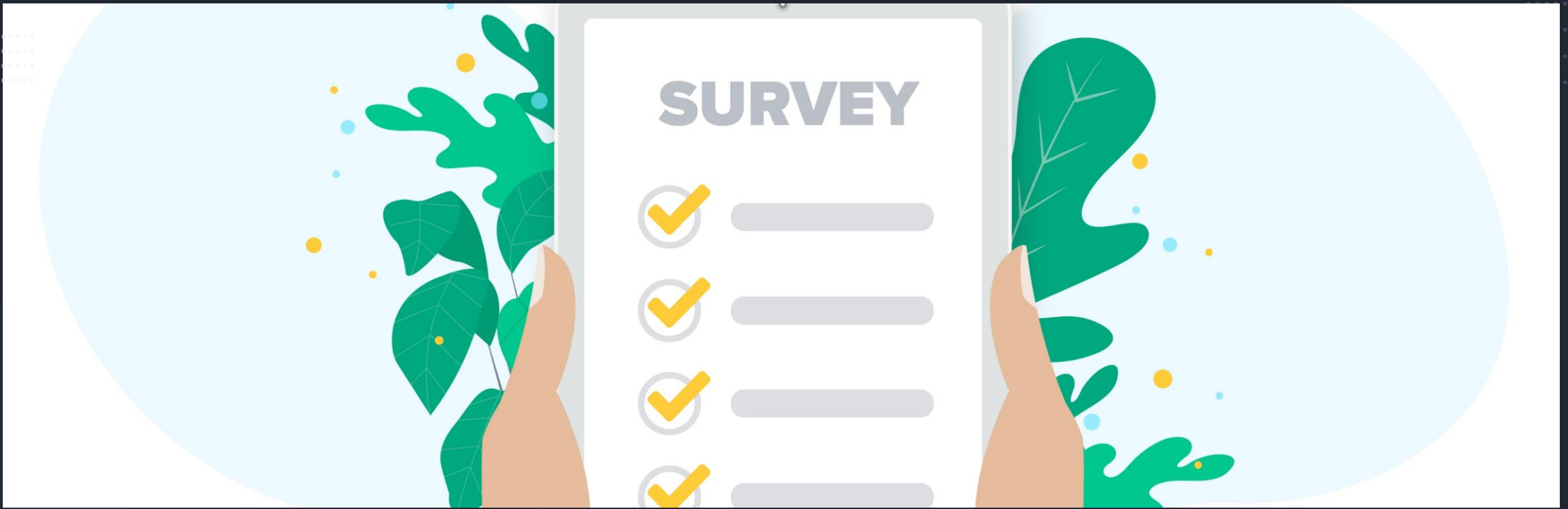


Introduction

What is Steam?

- Steam is an online game storefront.
- Steam has monthly, opt-in hardware survey.
- It reveals global computer hardware changes.



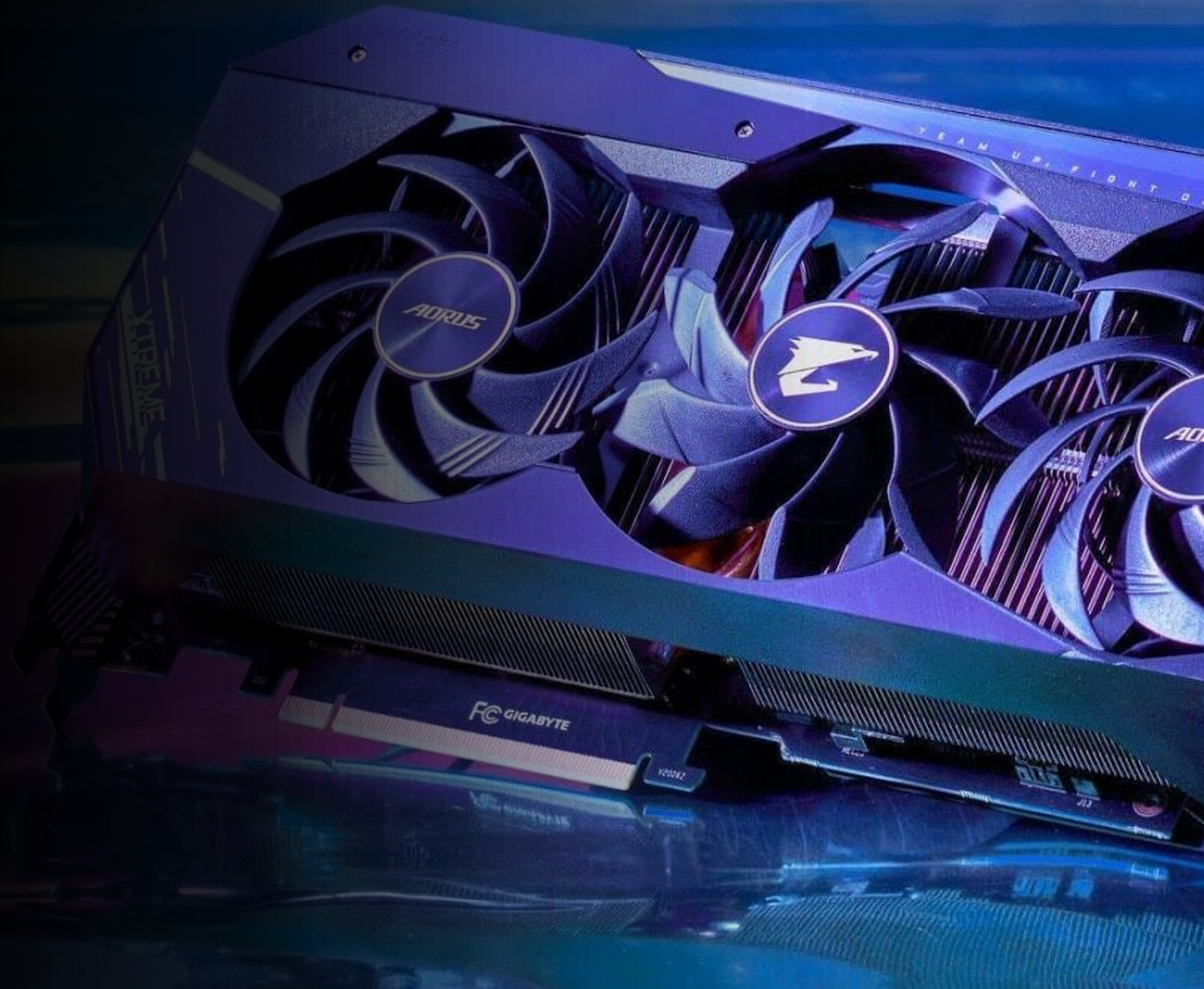


Source

- Source: <https://store.steampowered.com/hwsurvey>
- The monthly survey: Collects customer hardware/software data.
- Is optional and has anonymous participation.
- Informs tech investments and product decisions.
- The dataset includes hardware information such as RAM, Storage, GPU, CPU

Graphics Processing Unit

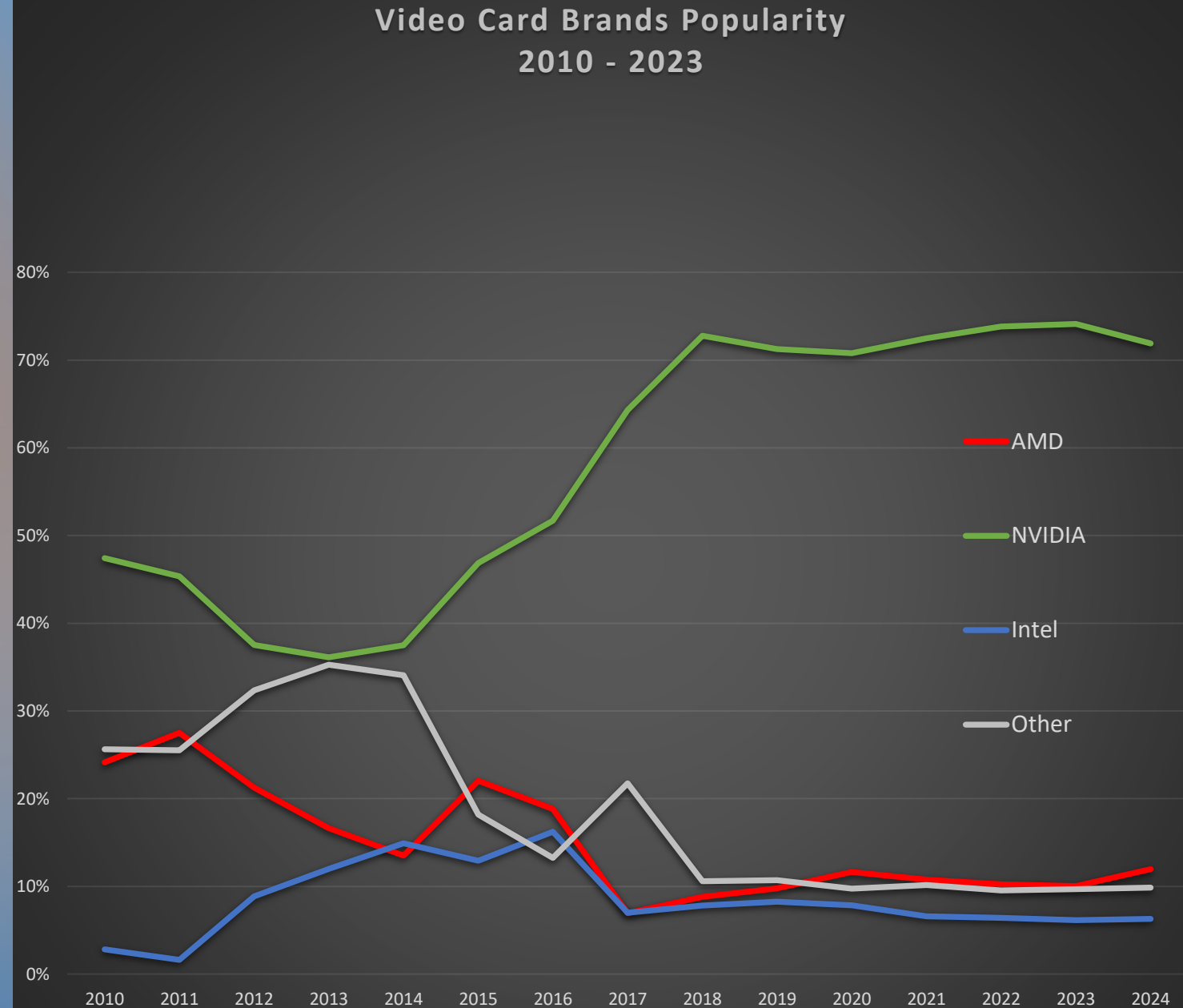
- GPUs are what powers graphics. For gaming, video editing, and other graphic-intensive applications.
- What is most popular GPU manufacturer?



Graphics Processing Units

AMD vs. NVIDIA vs. Intel

Historical gaming GPU market share. NVIDIA consistently leads, as shown in dataset.



The Query Behind This Graph

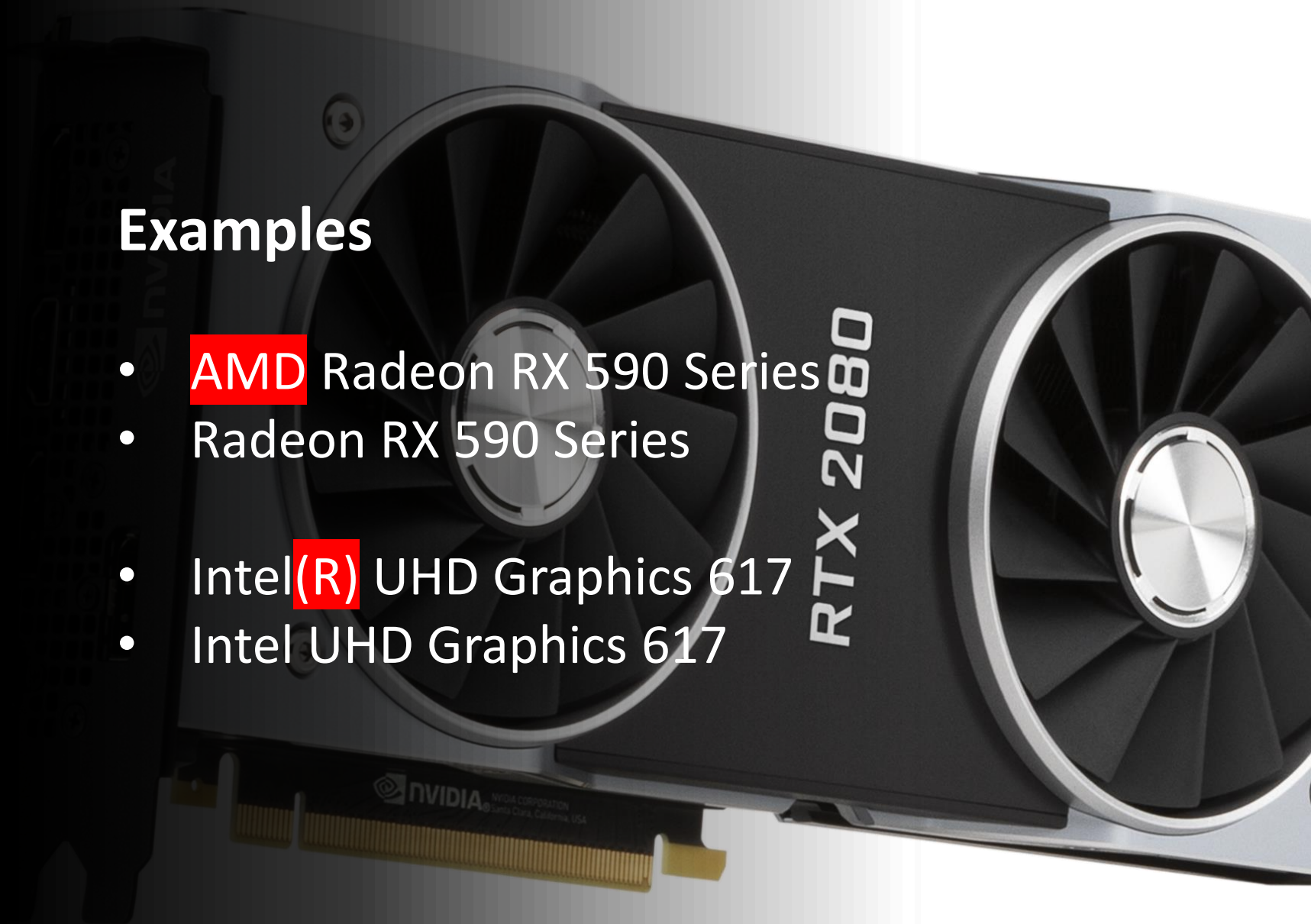
```
WITH months AS (  
    SELECT date,  
    SUM(CASE WHEN (name LIKE "%AMD%" OR name LIKE "%ATI%") THEN percentage END) AS AMD,  
    SUM(CASE WHEN (name LIKE "%NVIDIA%") THEN percentage END) AS NVIDIA,  
    SUM(CASE WHEN (name LIKE "%Intel%") THEN percentage END) AS Intel,  
    FROM `neat-library-412602.shs.HardwareSurvey`  
    WHERE category = "Video Card Description (Windows)" OR category = "Video Card Description (PC)"  
    GROUP BY date  
)  
  
SELECT  
    EXTRACT(YEAR FROM date) AS Year,  
    AVG(AMD) AS AMD, AVG(NVIDIA) AS NVIDIA, AVG(Intel) AS Intel  
FROM months  
GROUP BY Year
```


Video Card Counting Issue

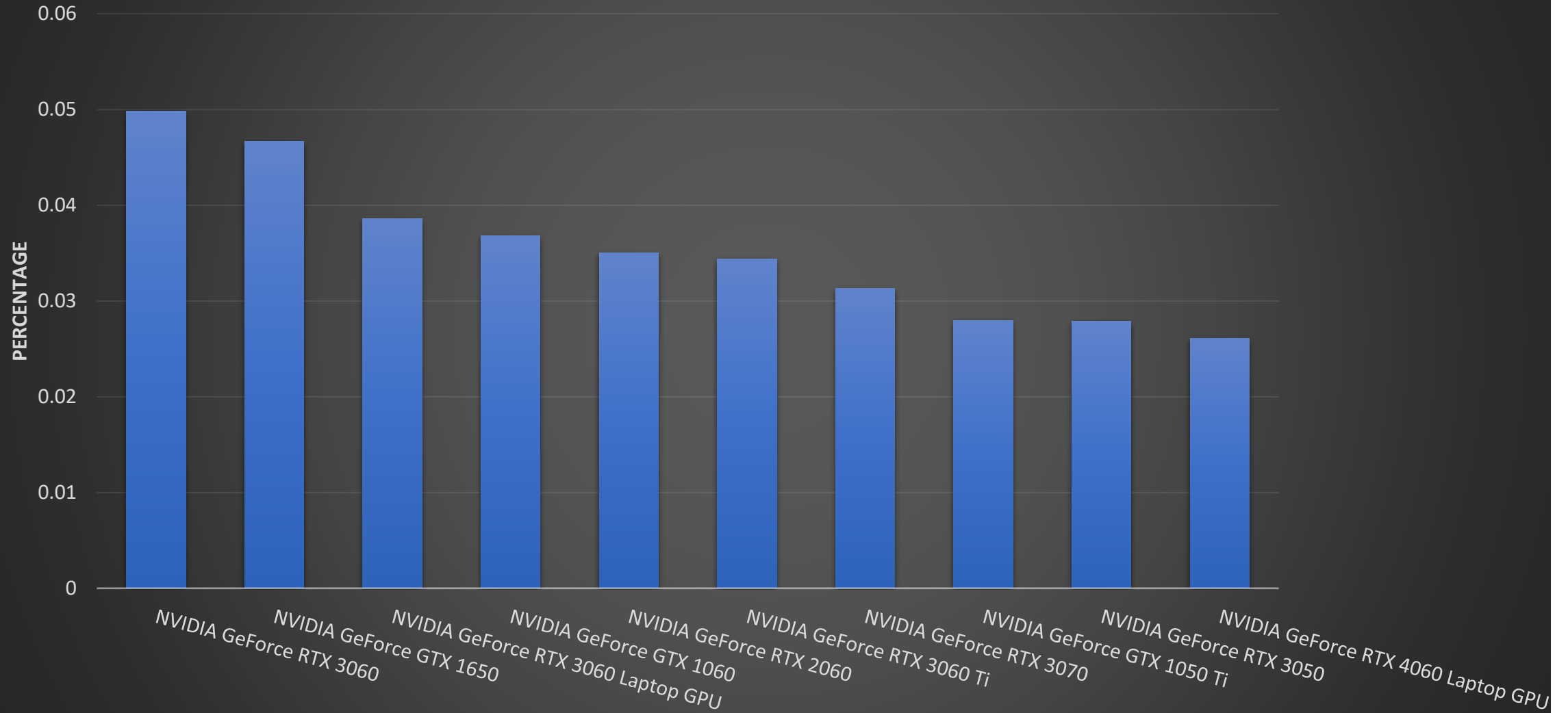
- We identified duplicate names caused by brand in name
- We removed the duplicates
- There are a total of 598 distinct video cards in the dataset. Was 614 before

Examples

- **AMD** Radeon RX 590 Series
- Radeon RX 590 Series
- Intel**(R)** UHD Graphics 617
- Intel UHD Graphics 617



Top 10 Video Cards On Windows



The Query Behind This Graph

```
SELECT category, name, percentage FROM `neat-library-412602.shs.HardwareSurvey`  
WHERE category = "Video Card Description (Windows)" AND name != "Other" AND date = "2024-1-1"  
ORDER BY percentage DESC  
LIMIT 10
```

The Decline of Optical Drives

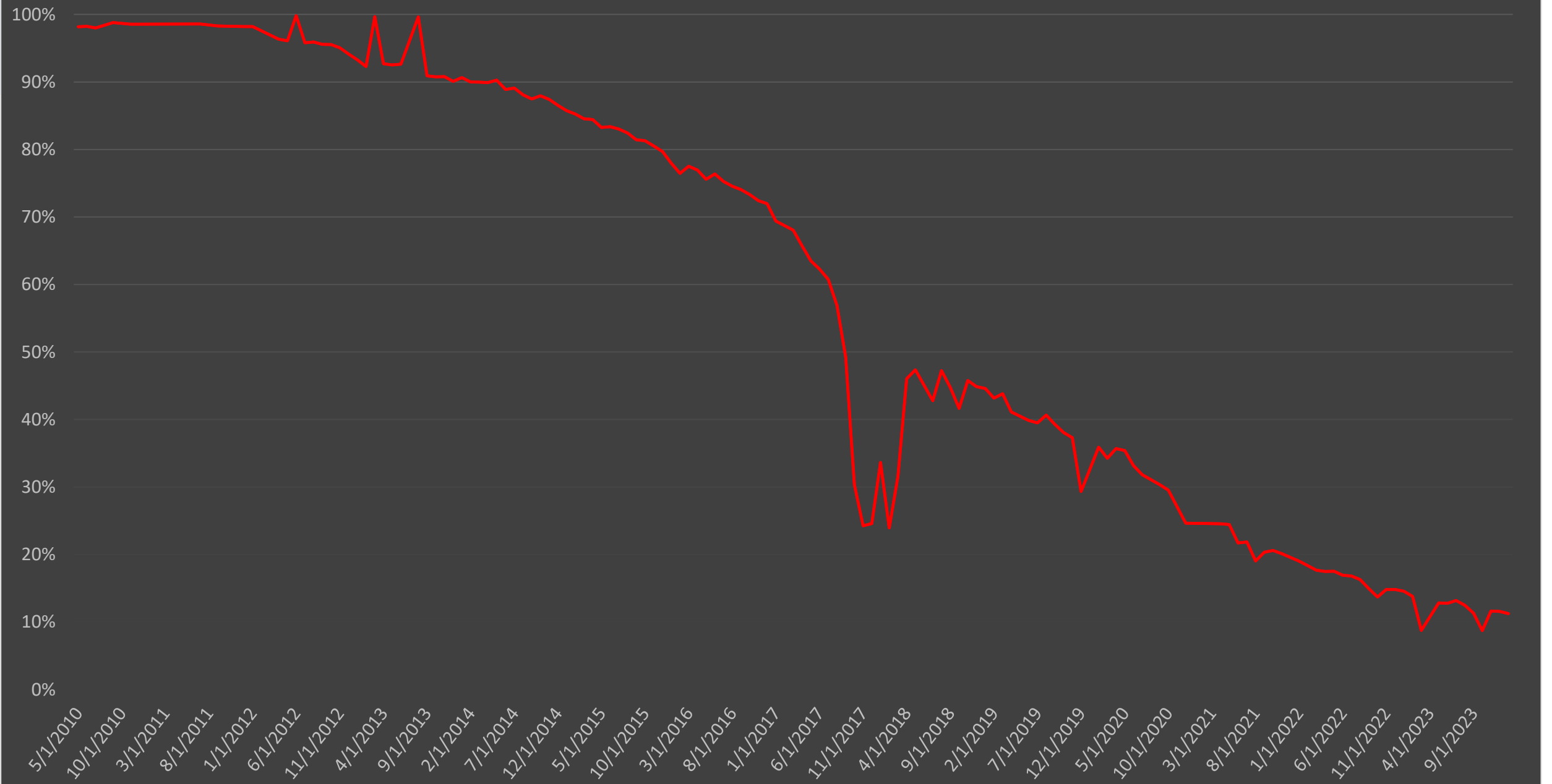
Remember Optical Drives?
Many workplaces still use them.

Manufacturers are phasing
them out. Replaced by modern
storage.



Computers with Optical Drives

This graph was created using a pivot table

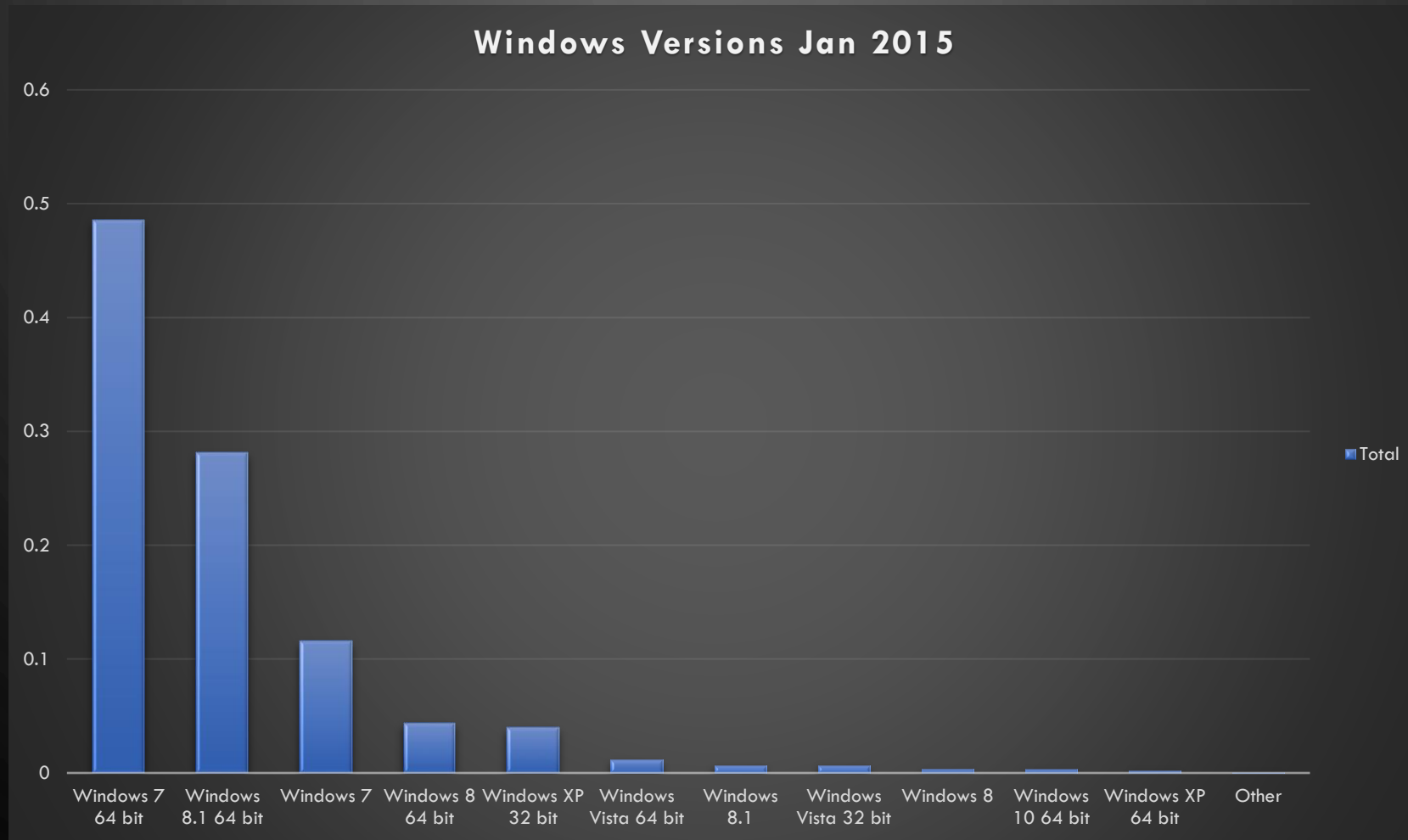




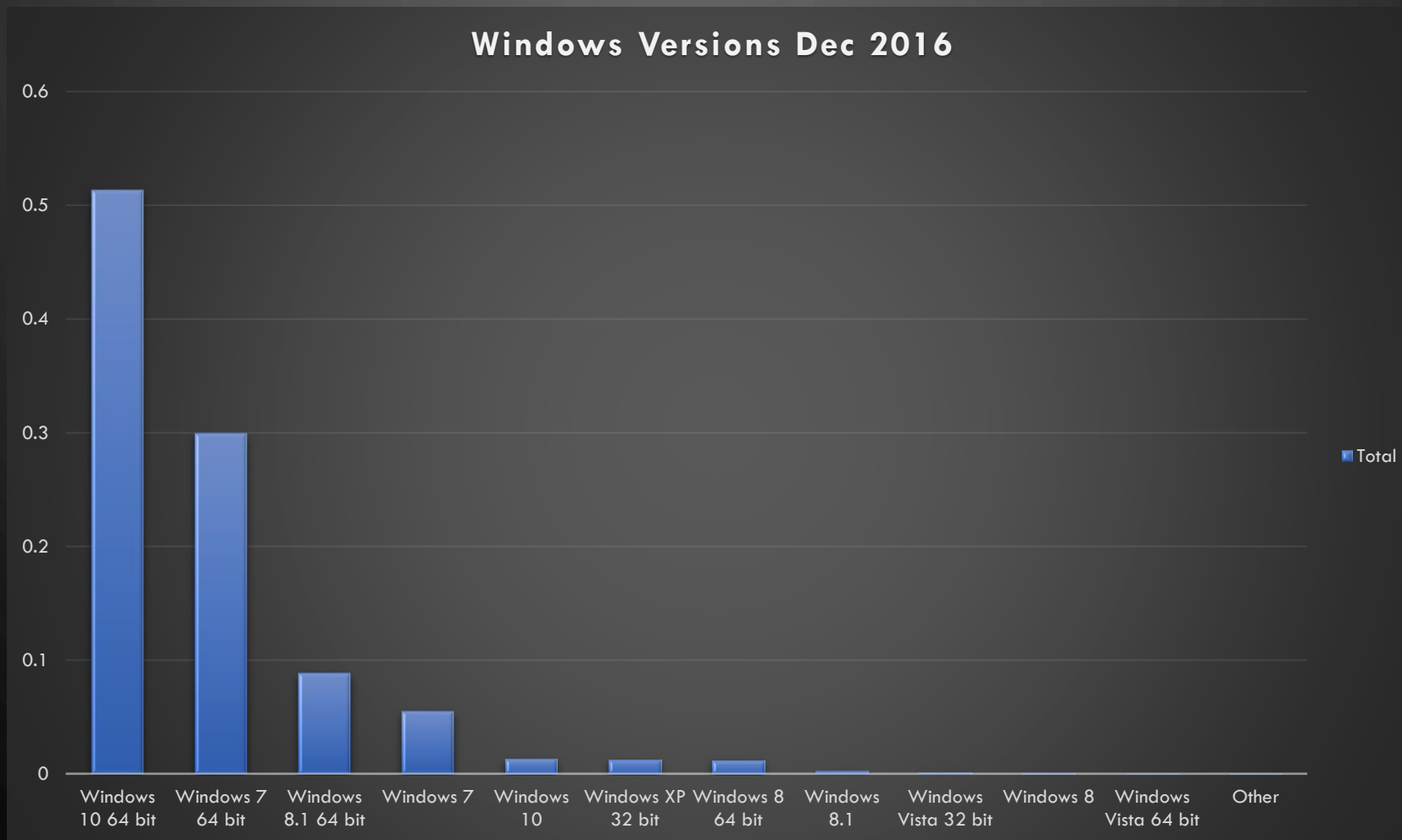
The Windows Software change

- On July 29, 2015, Windows 10 was released.
- Prompting users to transition from Windows 7 and 8.
- Explore the user experience shift between versions.

WINDOWS VERSIONS BEFORE THE RELEASE OF WINDOWS 10



WINDOWS VERSIONS AFTER THE RELEASE OF WINDOWS 10





Conclusion

- Provides insight on Computer Hardware
- Helps developers identify hardware support priorities
- Provides historical data for computer hardware
- Shows hardware and technology evolution