**Basic analysis**.

On the two dataset that are merged on earmark of each greyhound. This is done using data for sql databases.

1. **Traceability database**. This database has only been collecting data since 2021.

|  |  |
| --- | --- |
| **NoticeSentBy** | **Count** |
| 2022 | 1023882 |
| 2021 | 24436 |
| Table 1 shows | |

A graph with a blue rectangle

Description automatically generated

The "NoticeSentBy" table appears to show the count of notices sent by different entities or sources in the years 2021 and 2022.

The conclusions that can be drawn from this data:

1. In 2022, there was a substantial increase in the number of notices to update the customers greyhound sent compared to 2021. The count of notices sent in 2022 (1,023,882) is significantly higher than the count in 2021 (24,436). This suggests a significant implementation of the changes to welfare and regulation and in communication or activity from these entities or sources is a success.
2. The very large increase in notices to update that was sent in 2022 could indicate the occurrence of a significant event such as the implementation traceability and change in communication practices and increase in the volume of communication from these entities. Further investigation or context is needed to understand the reasons behind this increase.
3. When comparing the two years, it's evident that there is a substantial difference in the level of activity between 2021 and 2022. Given the magnitude of the increase, it's also essential to ensure that the data is accurate and there are no anomalies or data quality issues. Anomalies in data collection or reporting could lead to misleading conclusions.

In summary, the data suggests a significant increase in notices sent in 2022 compared to 2021, which suggest that in 2021 the was no consequences for the notification to make updates to the customers greyhound and with the change to the rule and the uptake of the changes lead to the significant number of notifications sent. Data needs to be checked..

The data merge with a left join on traceability which allows the greyhound in traceability and their owners/ trainers update made for those greyhound the question to be asked.

The question is “can a model be creating to predict the career length of a racing Greyhound?”.

The data contains whelp date and death, and all updates that are made against each greyhound.

The limitation of this data is that at present the injuries occurred are not recoded. Also, that records begin in 2021 for traceability.

1. **RMS database.** This is a race management system and collect all data from racing greyhounds only. This database records complaint updates, these are triggered to send a notification to the customers after 43 days since the last update if the greyhound has not trailed or raced during that time.

|  |  |
| --- | --- |
| **Whelp date** | **Count** |
| 2023 | 2621 |
| 2022 | 12390 |
| 2021 | 12088 |
| 2020 | 7691 |
| 2019 | 6654 |
| 2018 | 3099 |
| 2017 | 1114 |
| 2016 | 389 |
| 2015 | 72 |
| 2014 | 16 |
| 2013 | 2 |
| Table 1 count of greyhound whelp dates | |

A graph of a graph with numbers

Description automatically generated with medium confidence

The table above represent the count of greyhound whelp dates for each year from 2013 to 2023. It provides information about how many greyhound puppies were born each year during this time frame.

1. Yearly Variation: The table shows fluctuations in the number of greyhound pups whelped each year. For example, there is a significant increase in the number of pups from 2015 to 2016, followed by a decrease in the following years. This is a direct result of the over production of pups.

2. Recent Data: The most recent data (2020 to 2023) suggests a decreasing trend in the number of greyhound puppies born, with 2023 having the lowest count so far. Which could be a direct result of changes in welfare and regulations changes that paved the way for traceability.

3. Historical Data: In the earlier years (2013 to 2014), the number of greyhound pups born is relatively low compared to the later years.

4. Data Completeness: It's worth noting that the dataset is incomplete for the year 2023, as it may not represent the full year.

5. Data Interpretation: The interpretation of this data would depend on the context and purpose of the analysis. It could be used to assess trends in greyhound breeding or to make predictions about future breeding patterns.

To gain more insights or make meaningful conclusions, additional context or analysis may be required, such as comparing this data to other relevant factors or conducting statistical analysis.

The above table shows that count of complaint updates of greyhound whelped from 2013 to 2023. These are compliant updates made by the customers. The interesting thing to notes here is that there are more greyhound’s complaint updates made on whelped greyhounds in 2022 that any other year since 2013. And, since the customers update only became mandatory in 2021 the results shown that would be expected. And for 2023 it would be expected that 2023 would be greater or equal to 2022.

This show that traceability is working.