Analytics on Dental SaaS platform Data.

By Aaditya Balakrishnan,

A Research paper on how analytics of data processed and possessed by a dental SaaS platform can impact Dental Practices, Dental Labs, DSO's (Dental Service Organization) and the platform as well.

Abstract

The dental industry has witnessed a remarkable digital transformation with the advent of Software-as-a-Service (SaaS) analytics solutions. This research delves into the implications and potential benefits of integrating data-driven analytics tools into dental practices. The primary aim of this study is to investigate how Dental SaaS Analytics can optimize practice management, enhance patient care, and streamline overall dental operations.

The data used on this research is obtained from ███████, a digital dental SaaS Platform powered by ██████████s Pvt Ltd.

In the following research, names of private entities have not been disclosed instead numbers have been used.

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Introduction

Drawing from a diverse range of dental practices, this research employs both quantitative and qualitative methodologies. A combination of surveys, interviews, and case studies are used to assess the current landscape of dental practices utilizing SaaS analytics platforms. These methods aid in capturing valuable insights into the challenges faced by dental practitioners, the data points they collect, and the specific SaaS analytics tools employed.

The findings reveal that Dental SaaS Analytics empowers dental professionals to make informed decisions, optimize resource allocation, and improve patient outcomes. The integration of such platforms enables practitioners to efficiently manage appointments, monitor patient progress, and predict potential dental health concerns. Additionally, SaaS analytics offers invaluable tools for identifying trends, generating personalized treatment plans, and enhancing patient engagement through tailored communication.

Furthermore, the research highlights key considerations for implementing Dental SaaS Analytics, including data security and compliance with patient privacy regulations. Moreover, the study explores the challenges faced during the adoption process and suggests strategies to overcome them, fostering a seamless transition to data-centric dental practices.

Methodology

IMPORT DATA FROM FIRM's BACKEND DATABASE (THIS DATA CONTAINS CASES REGISTERED IN THE PORTAL FOR A PERIOD OF 6 MONTHS) TO EXCEL USING SQL QUERIES.

DATA CLEANING , FILTERING AND SEGREGATION

CREATE VISUALS FROMTHE DATA OBTAINED

ANALYZE VISUALS AND PROVIDE INSIGHTS

PRESENT INSIGHTS TO EXECUTIVES TO MAKE BI DECISIONS

Results

The Following Visuals are analytical insights of the data obtained from details of cases registered on the digital dental platform (████████████) with several DENTAL LABS and DENTAL PRACTICES across USA from Dec'2022- Jun'2023.
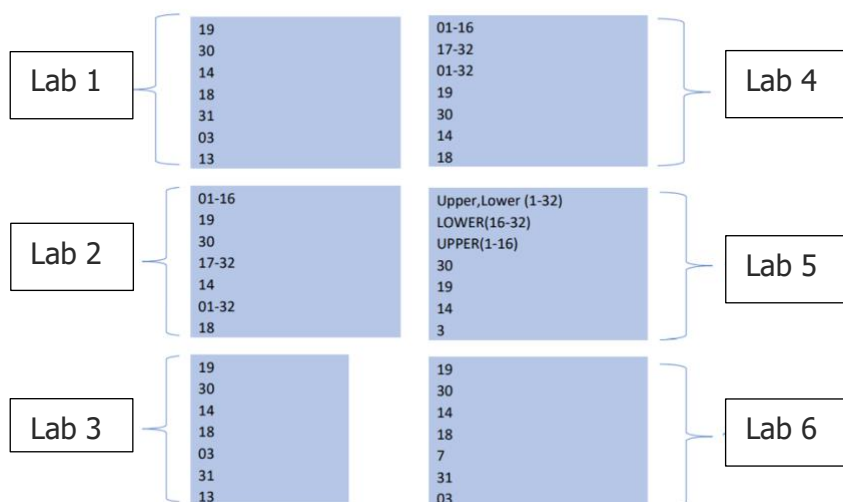
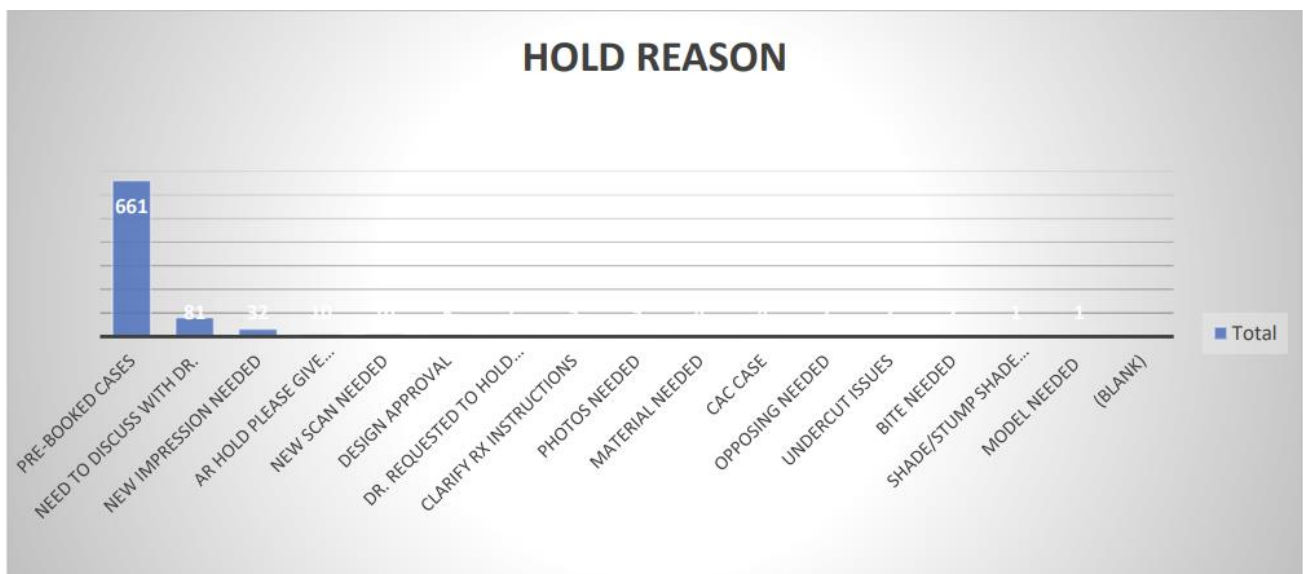- Age of Patients whose cases have been registered in the portal.
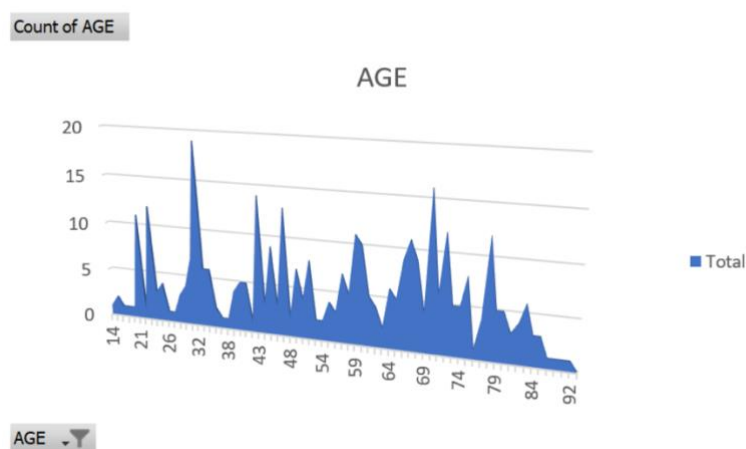
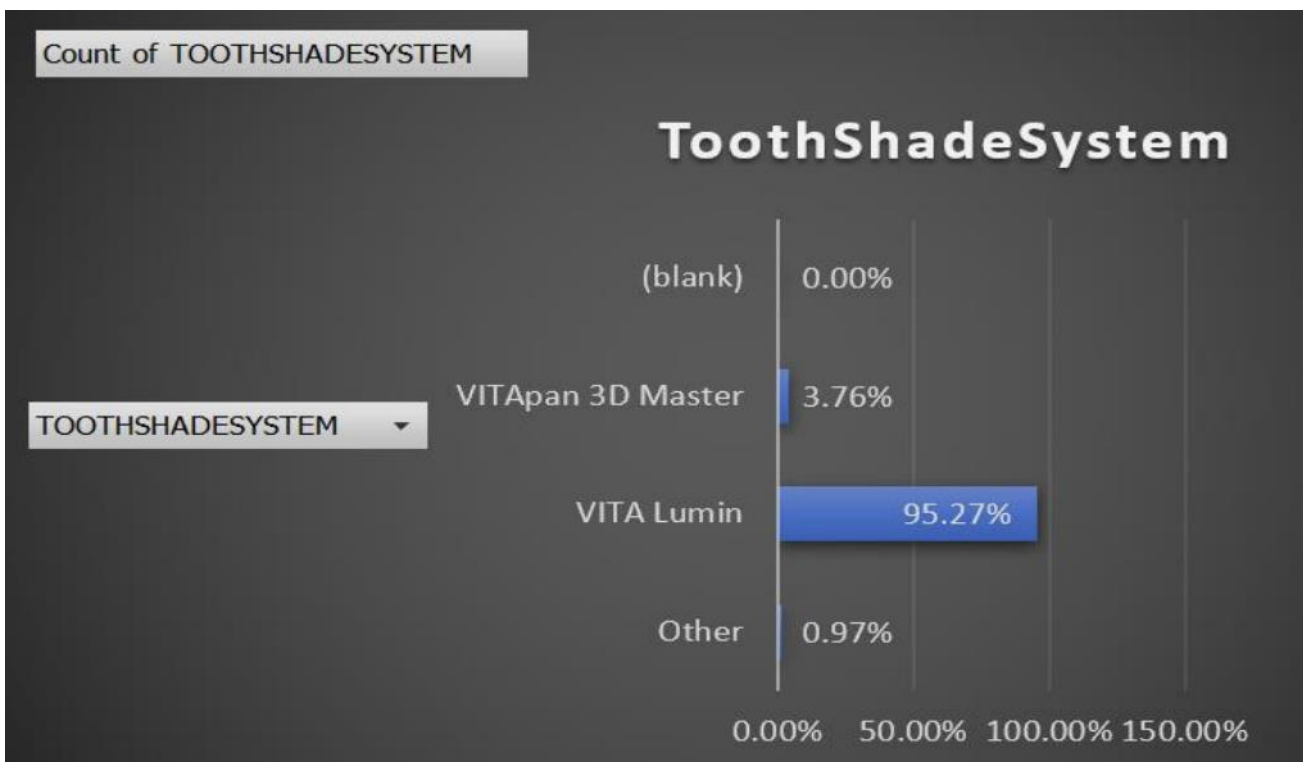- Notations (Tooth number) that dental labs have been engaged the most for making dental products.

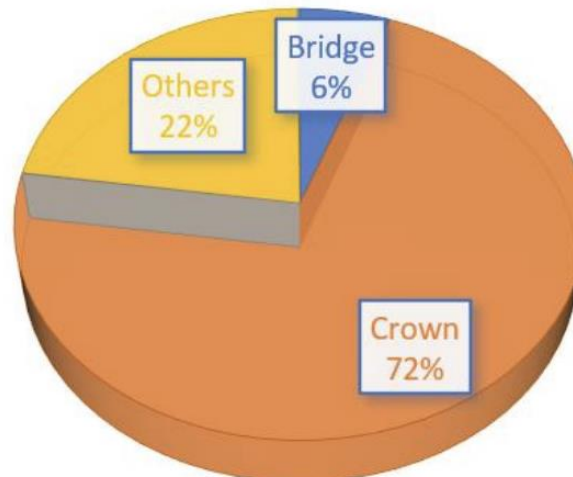- Reasons that dental labs provide , when they put a case on hold.

- Ratio of two kinds of ToothShadeSystem (Vita Master 3d and Vita Lumin) that labs have averagely used on cases.

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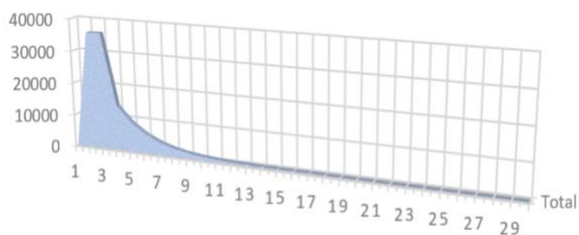- Type of ITERO UNIT dental labs have been dealt with the most.

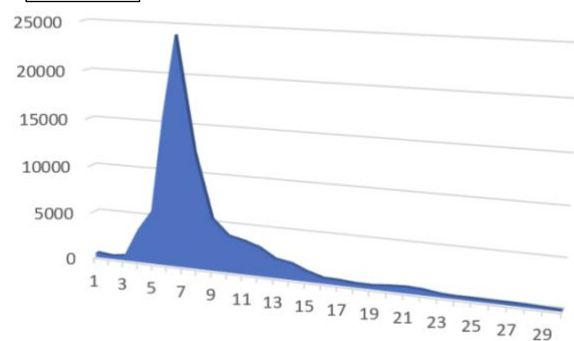Count of ITEROUNITTYPE

ITERO UNIT TYPE

- Shipment pace difference between a **digital dental designs** service lab (Lab 1) and a **tradition dental designs** service lab (Lab 2)
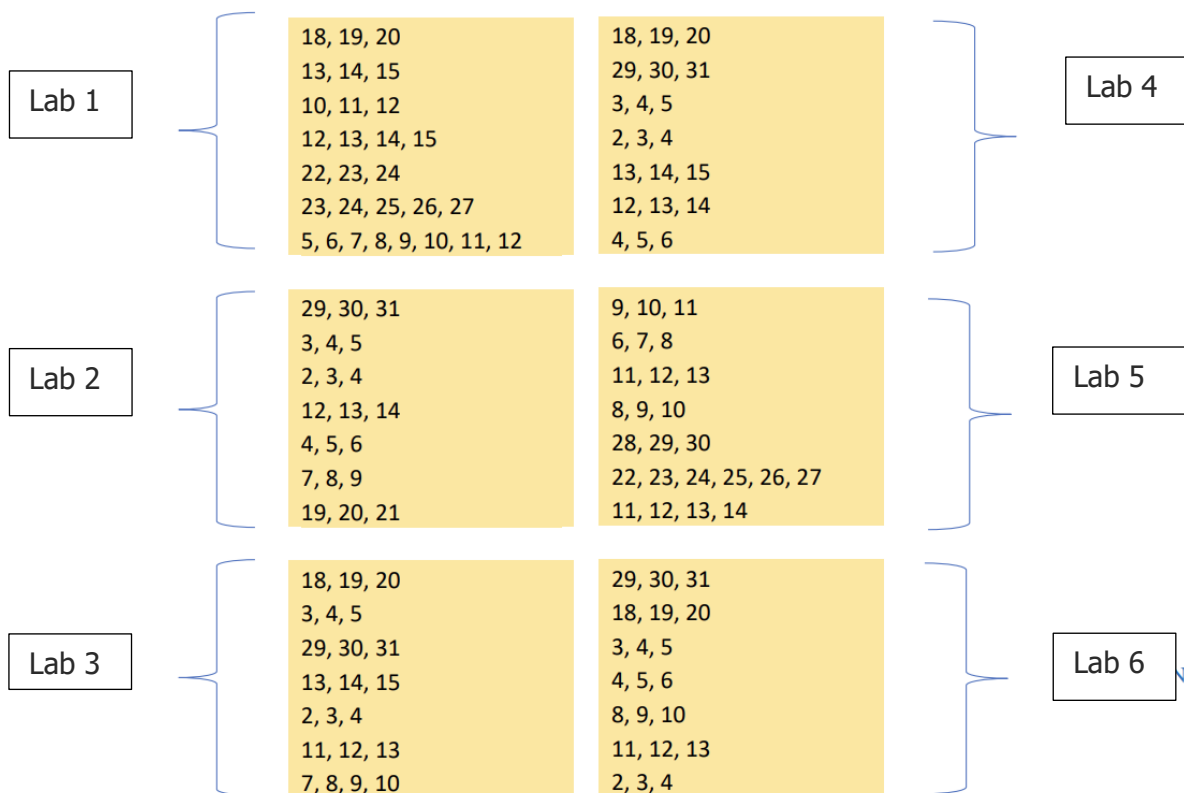
Lab 1 — SUBMITS ITS 92% OF CASES WITHIN 7 DAYS

Lab 2 — submits its 57% of cases within 7 days

- Bridge cases and the notation(tooth number) they are most used in
  (Bridge Cases are cases where missing teeth are replaced with false teeth).

MOST NOTATIONS WITH BRIDGE	Most Count of NOTATION
29, 30, 31	8.12%
18, 19, 20	7.78%
3, 4, 5	5.31%
2, 3, 4	5.31%
12, 13, 14	4.99%
9, 10, 11	4.54%
13, 14, 15	4.52%
4, 5, 6	4.42%
6, 7, 8	4.12%
11, 12, 13	4.02%
8, 9, 10	2.86%
28, 29, 30	2.59%

LABS AND THEIR TOP USED BRIDGE CASE NOTATIONS

Lab 1
18, 19, 20
13, 14, 15
10, 11, 12
12, 13, 14, 15
22, 23, 24
23, 24, 25, 26, 27
5, 6, 7, 8, 9, 10, 11, 12

Lab 4
18, 19, 20
29, 30, 31
3, 4, 5
2, 3, 4
13, 14, 15
12, 13, 14
4, 5, 6

Lab 2
29, 30, 31
3, 4, 5
2, 3, 4
12, 13, 14
4, 5, 6
7, 8, 9
19, 20, 21

Lab 5
9, 10, 11
6, 7, 8
11, 12, 13
8, 9, 10
28, 29, 30
22, 23, 24, 25, 26, 27
11, 12, 13, 14

Lab 3
18, 19, 20
3, 4, 5
29, 30, 31
13, 14, 15
2, 3, 4
11, 12, 13
7, 8, 9, 10

Lab 6
29, 30, 31
18, 19, 20
3, 4, 5
4, 5, 6
8, 9, 10
11, 12, 13
2, 3, 4

Conclusion

In conclusion, this research establishes that Dental SaaS Analytics has the potential to revolutionize dental practices, offering practitioners actionable insights for improved patient care and practice management. By harnessing the power of data-driven decision-making, dental professionals can elevate their performance and deliver enhanced, personalized services, ultimately advancing the standard of dental care in the digital era.