

# DKG Presentation

• • •

By: Kade Widler

The logo consists of the letters "DKG" in a bold, white, sans-serif font. The letters are slightly slanted to the right. They are positioned on the bottom edge of a large, dark gray, three-dimensional rectangular prism that extends from the bottom right corner of the slide.

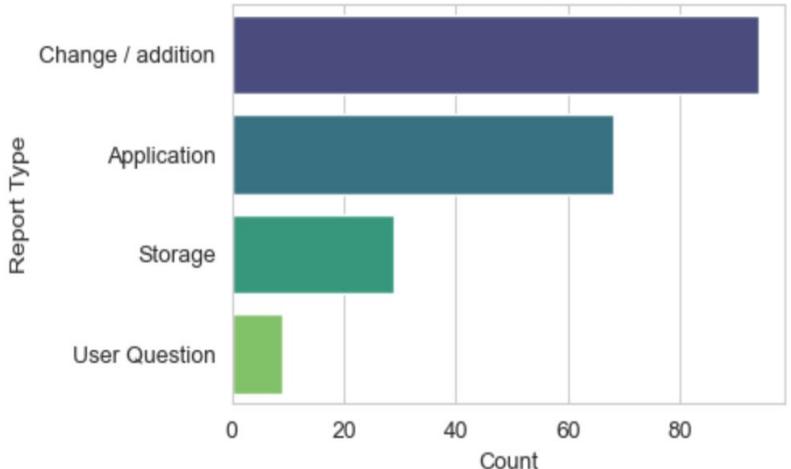
DKG

# Outline

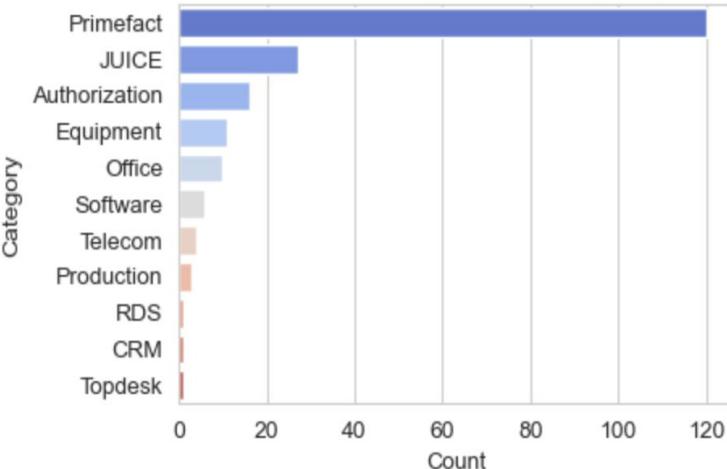
1. Initial Insights from EDA
2. Insights from K Modes Clustering Model
3. Final Takeaways



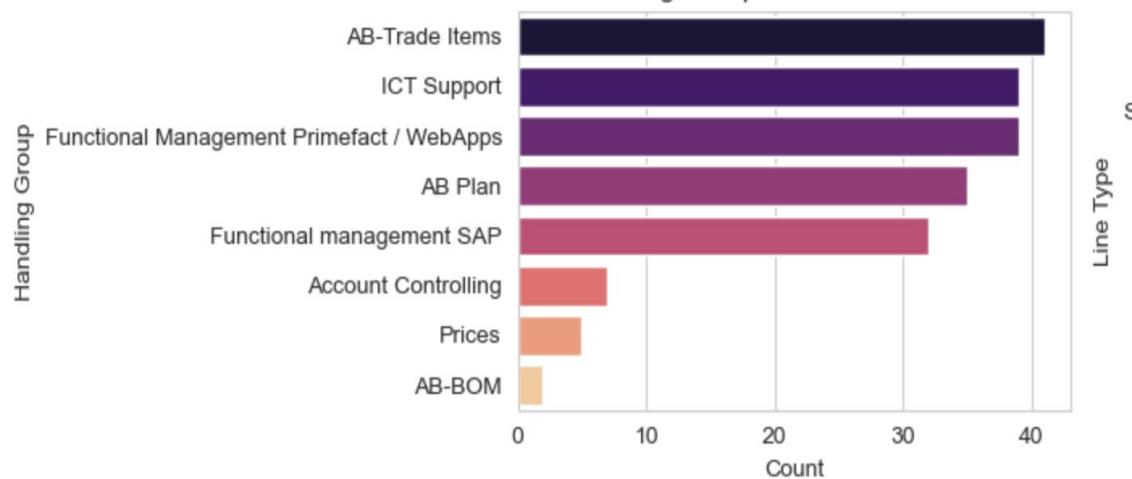
### Distribution of Report Types



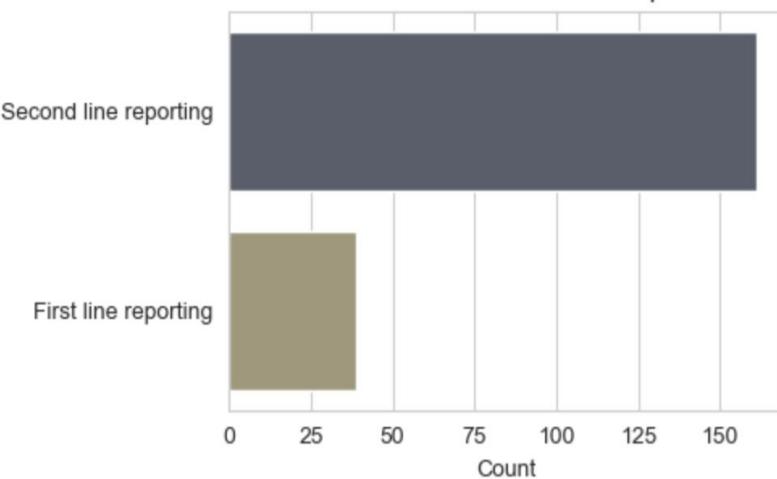
### Most Affected Systems (Categories)



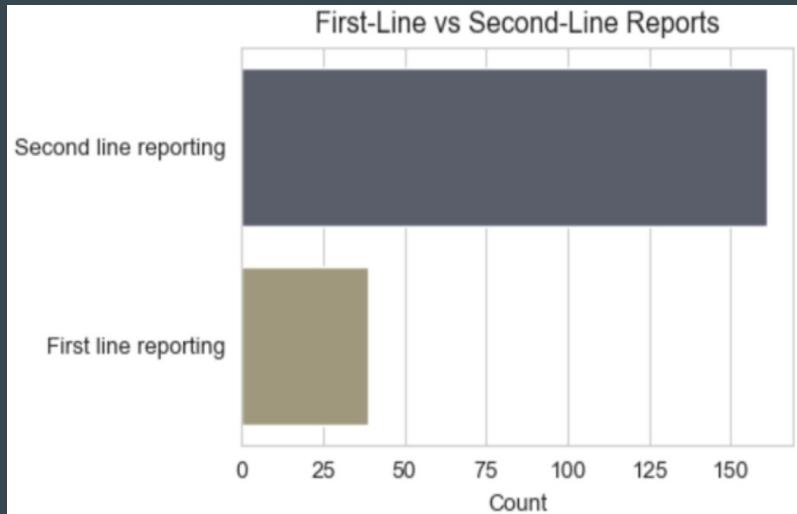
### Handling Group Workload Distribution



### First-Line vs Second-Line Reports



# Reports



- First-line support may not be sufficient, as too many cases are handled by second-line teams
- Improve first-line troubleshooting guides to spread workload

# Report Types

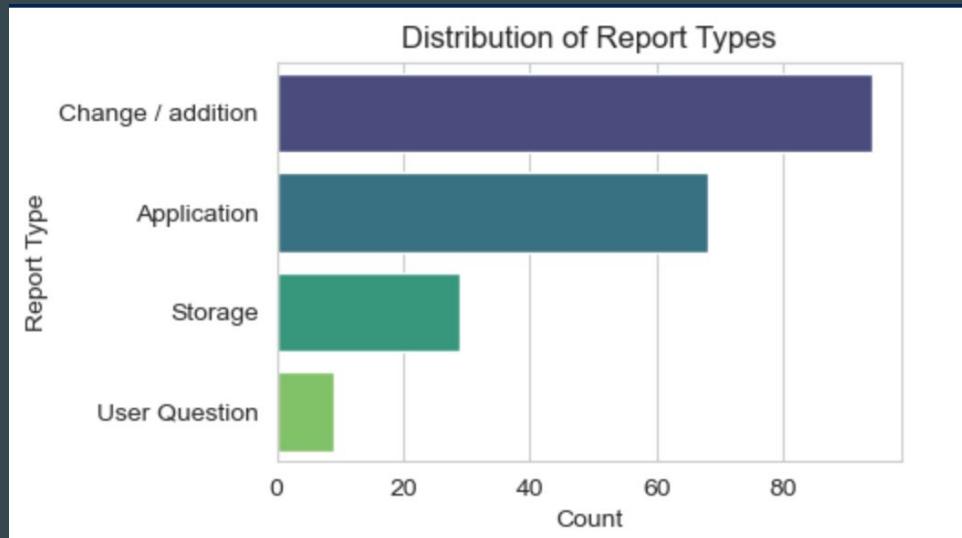
The most common types of reports are Application Issues and Change/Additions requests.

Business Impact:

- The company is frequently modifying software applications (Primefact)
- IT teams spend a significant amount of time managing changes and resolving system issues

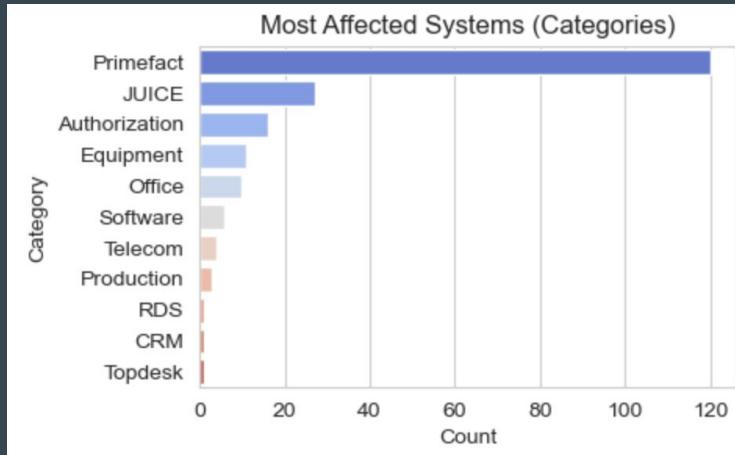
Business Application:

- Enhance software stability (Primefact & JUICE may require more proactive maintenance)
- Automate (tickets) simple change requests (chatbot or self-service portal)



# Systems

Primefact dominates the reports, followed by JUICE



Business Impact:

- Primefact is critical but unstable, causing frequent interruptions and requiring constant maintenance
- (JUICE) impact warehouse & finance functions tracking the course of inventory items picked, packed, and shipped.
- Authorization & storage issues indicate access management inefficiencies (security vulnerabilities and data breaches)

Business Application:

- Investigate why Primefact has so many issues: Is it a software flaw? Are users trained properly? What is wrong with ticket submissions/resolutions?
- Improve system monitoring for early detection of problems
- Automate authorization changes

# Workload Distribution

Top 5 handling teams receive majority of requests

Business Impact:

- These teams might be overloaded, causing slower resolution times
- Resource allocation issues (automation)

Business Application:

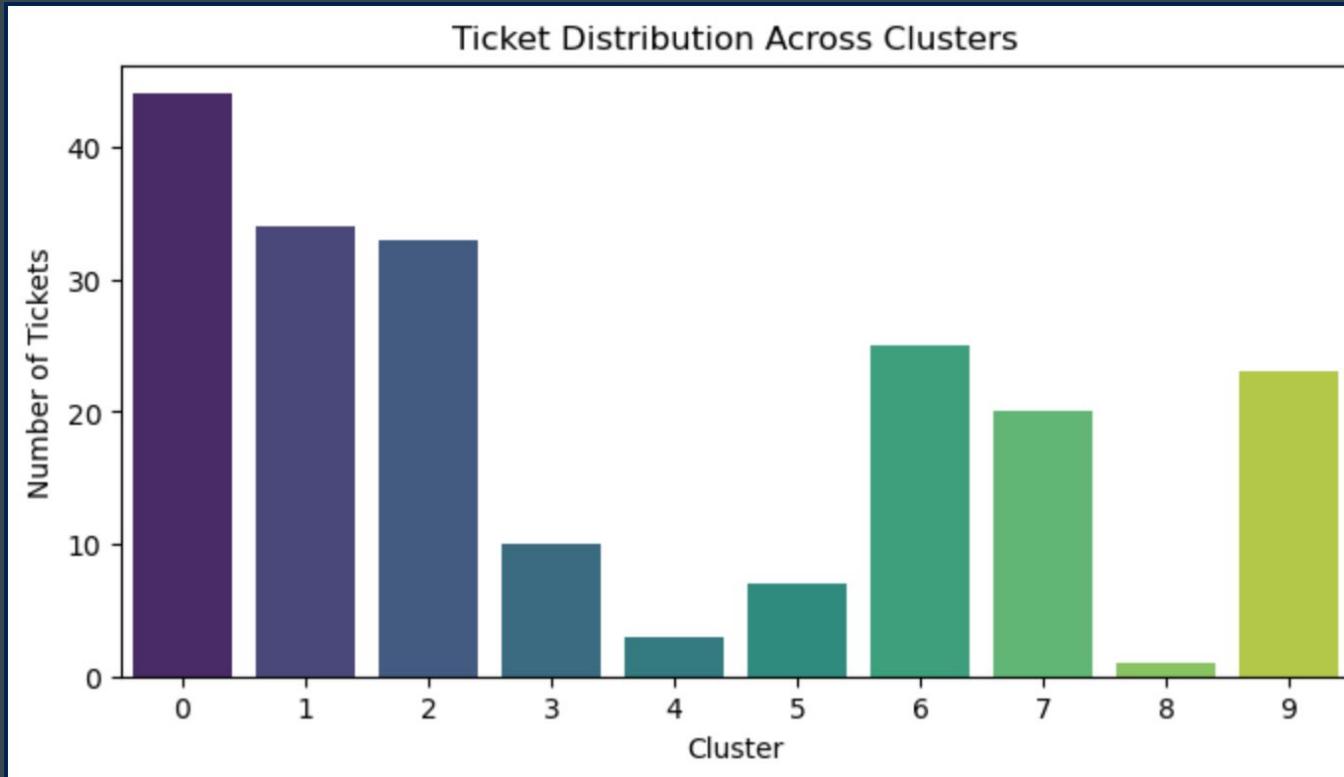
- Balance workload by training more employees
- How are these assignments getting allocated?
- Introduce performance tracking



# Final Takeaways from EDA

1. Primefact & JUICE require more proactive maintenance
2. Chatbot for ticket submissions
3. Balance Workload

# Clustering Model



# Report Type

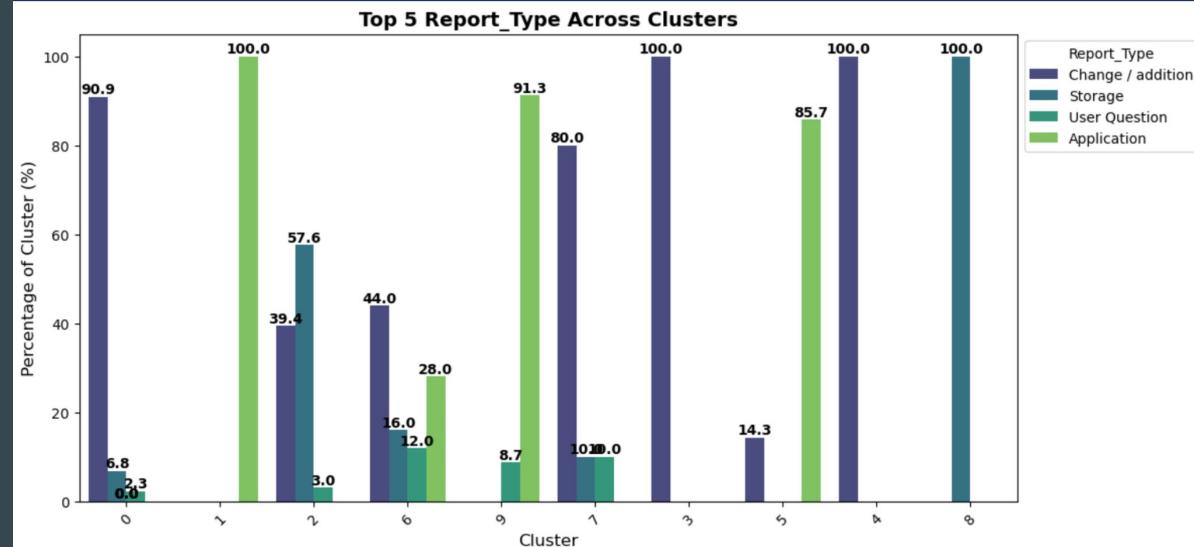
Cluster 0 → 90.9% of tickets relate to "Change/Additions" →  
Indicates frequent Primefact modification

Cluster 1 → 100% of tickets are "User Questions" →  
Suggests training or system usability issues.

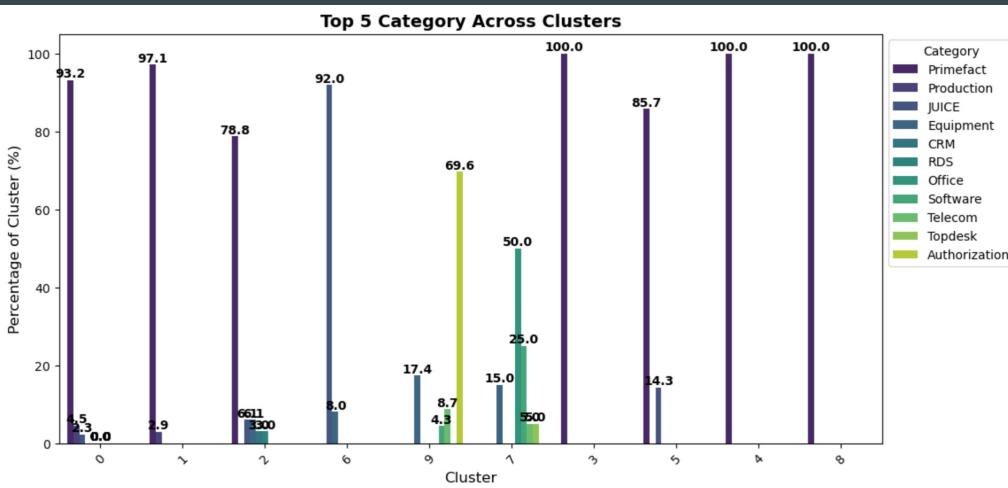
Cluster 2 → 57.6% of tickets relate to "Storage" → Likely  
related to inventory or access problems (JUICE)

Cluster 3, 4, 5, 6, 9 → 100% "Change/Additions" →  
Workflow / Assignment allocation errors

Cluster 8 → 100% "Storage" → Indicates a separate, critical  
storage issue. (Automate authorization)



# Category



Primefact dominates in most clusters (0,1,3,5,9) →  
Indicates a centralized system dependency

Cluster 2 → Mix of Production, Equipment, and RDS  
categories → Likely related to hardware and logistics  
(JUICE for repeat tickets)

Cluster 7 → Telecom & Office issues (50%) → Suggests  
communication-related between teams (Workflow)

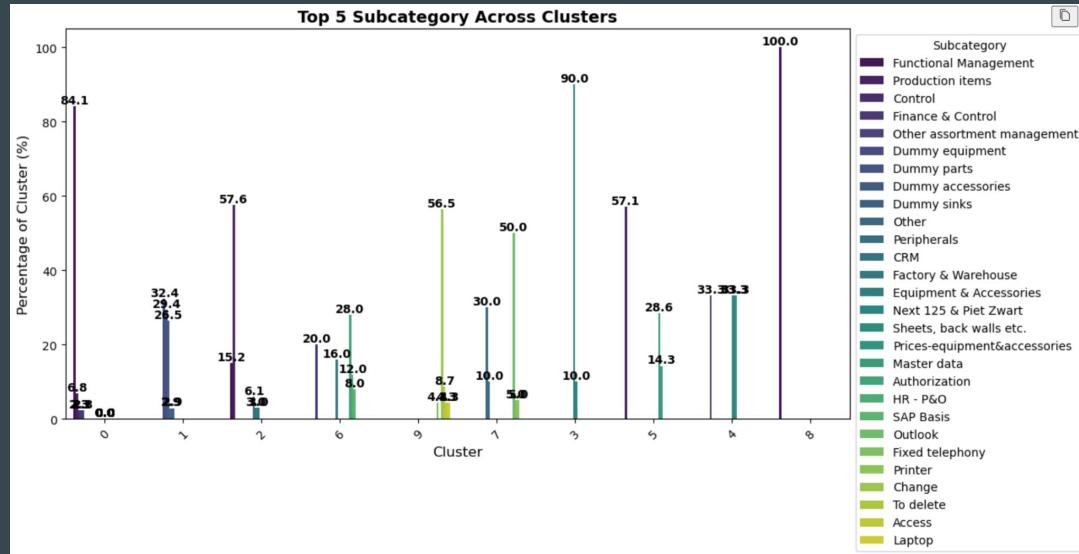
Cluster 9 → Authorization (69.6%) → Indicates frequent  
access/security changes (Automate authorization)

# Subcategory

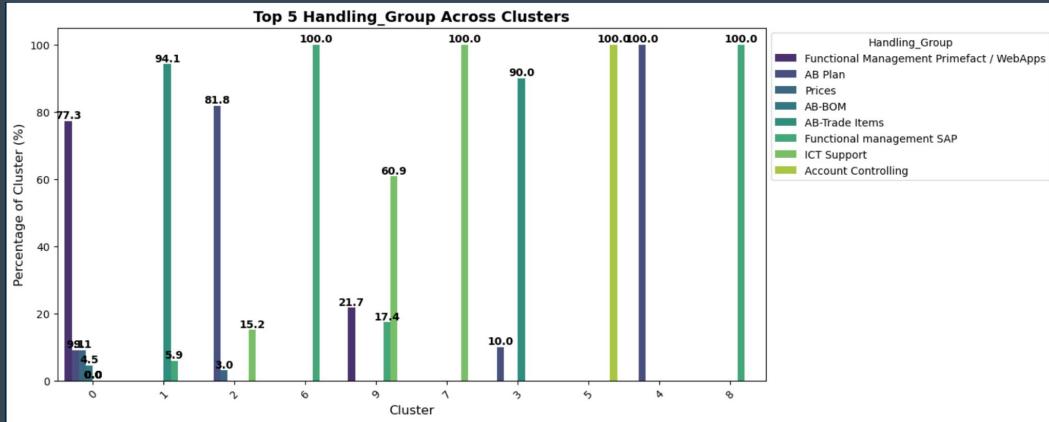
Cluster 0 → 84.1% related to "Functional Management" → (Automate assignment allocation)

Cluster 6 → High percentage of “Production Items” (57.6%) → (JUICE) Detection of supply chain errors

Cluster 9 → High mix of Authorization (56.5%) & Master Data (30%) → Indicates data governance (Automate authorization)

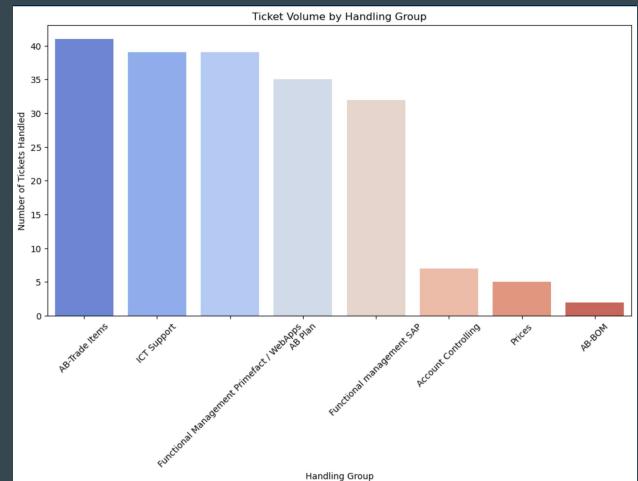


# Handling Group



Cluster 0 → Functional Management Primefact / WebApps (77.3%) → Automation (chatbot)

Cluster 1 → 94.1% handled by AB Plan → Indicates a bottleneck in resource planning (increase efficiency) (investigate time it takes for each group to resolve issues)



Cluster 5, 4, 8 → 100% handled by specialized groups → Suggests clear-cut issue categories (dedicated tooling and training)

# Final Takeaways / Future Research

1. Ticket Automation (chatbot for submissions)
2. Primefact and team resource allocation
3. Investigate AB Plan ticket resolution (time quantity)

The logo consists of the letters "DKG" in a bold, white, sans-serif font. These letters are centered within a dark gray, three-dimensional rectangular prism. The prism is oriented diagonally, with its front face parallel to the bottom-left corner of the frame. The background is a solid dark teal color.

**DKG**