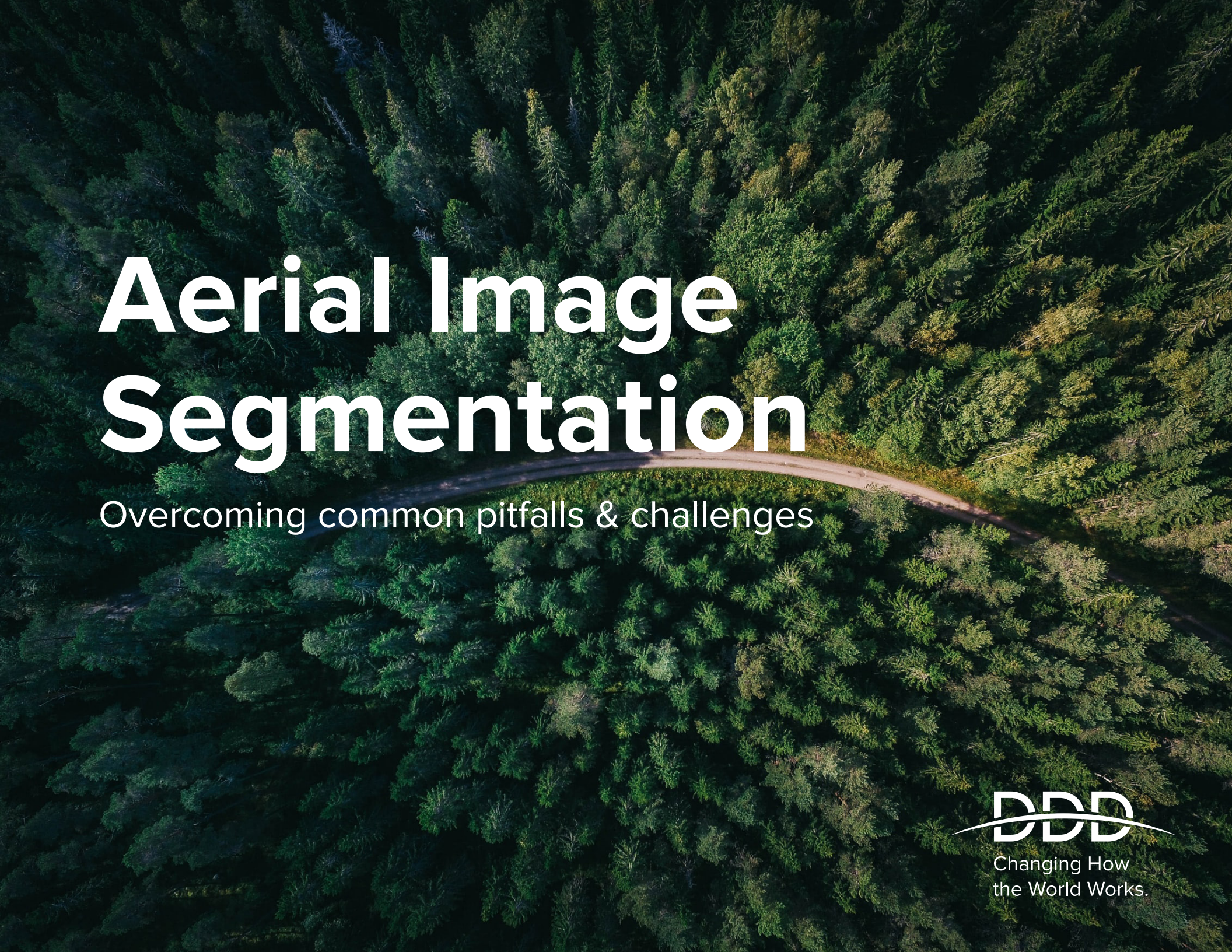
Aerial Image Segmentation
Overcoming common pitfalls & challenges
DDD
Changing How the World Works.

Aerial Image Segmentation poses unique challenges in terms of perspective, sensor fusion, and variability in data.

Proper setup, variance management, structural consistency, and measurement provide a successful solution.

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Live Webinar
Wednesday, September 29

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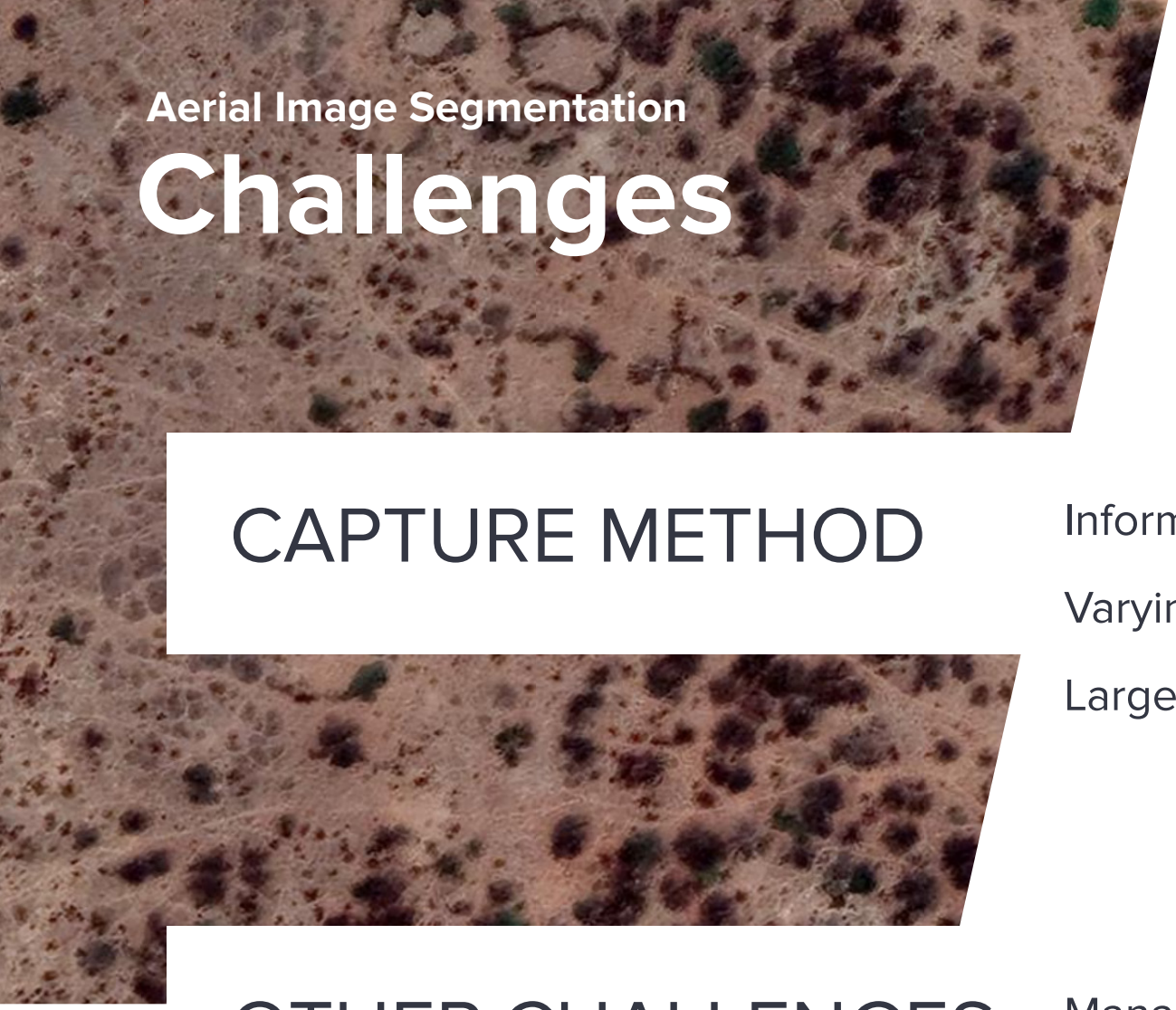
Aerial Image Segmentation

Challenges

PERSPECTIVE

Small, flat objects

Ambiguity in classification (short or tall objects like vegetation)



Aerial Image Segmentation

Challenges

CAPTURE METHOD

Information beyond visual spectrum

Varying angles

Large size

OTHER CHALLENGES

Managing prioritization

Inconsistency in input data, or wildly various batches

Aerial Image Segmentation

Solutions

Clearly delineate use case

Identify the most effective type of annotation - instance / semantic segmentation

Create the ontology - group and parse classes

Identify key classes

Prioritize certain classes to ensure optimal outputs

Base tooling choices on key classes

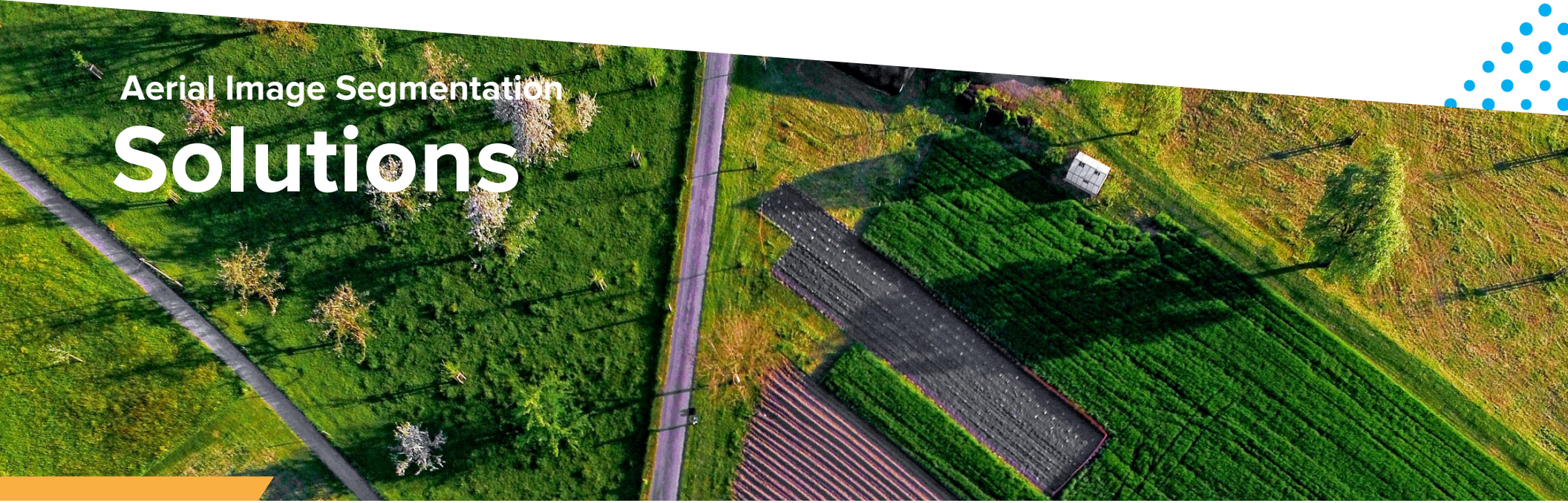
Brush vs. Polygon based on the types of geometry in a given class

User Work Order aligns to Key Classes

Understand input datasets

Variability in complexity in terms of objects per frame and geometry of those objects

Build a framework for managing significant variations in effort and expectations



Aerial Image Segmentation

Solutions

Identify Relevant Metadata

Can be completed inexpensively for every image or frame to identify where to focus

Weather, Time of Day, etc can be used to parse the dataset later and reinforce the model

Edge Case Pipeline

Identify experts and responsive parties; send complex edge cases for review

Team Composition

Train and maintain a team to ensure consistency

SLAs

Ensure SLAs are meaningful and mutually agreed upon. Focus on Key classes and process to ensure consistency

Understand quality metrics relative to the use case - is quality measured per pixel, per object, or per image

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1:00pm EST

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