DEVPOST NOV 2025 HACK THE TRACK SUBMISSION

SMART Resolution of DPD issues or incidences for a Race

SOLUTION:
D2P Accentuator for using Toyota GR Data sets and SMART resolution for Drive performance dimensioning

D2P ACCENTUATOR

BY

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AOEC 2025-2026

DATA SETS
SONOMA
RACE1
AND
RACE2

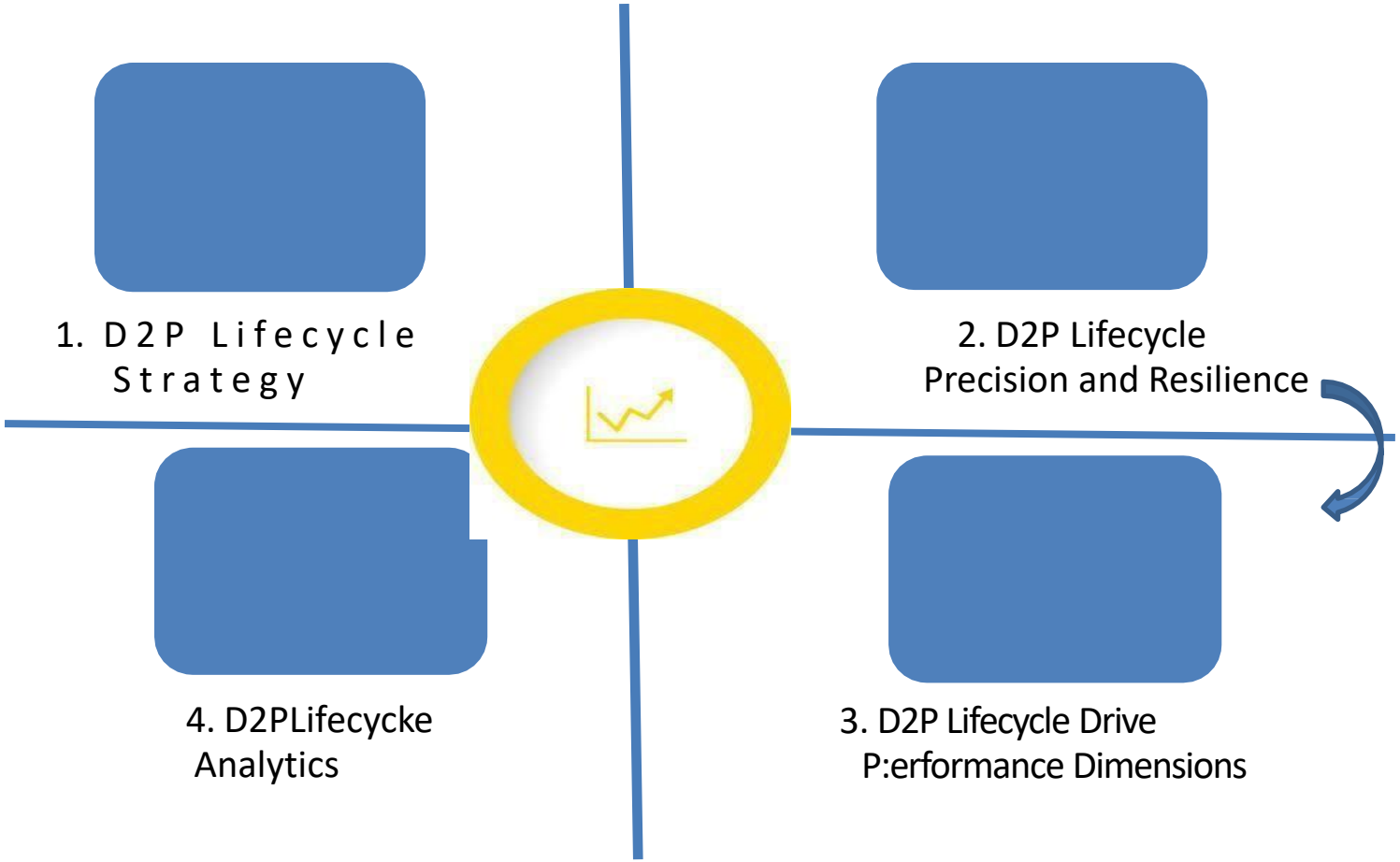
SUBMISSION SERIAL NUMBER	DETAILS	URL	COMMENTS/ STATUS
1. Race Rally category selected	SONOMA EDITION OF THE GAZOO RACING CHALLENGE	https://venkataoec.wixsite.com/d2p-accentuator - MAP DETAILS	EARLY VERSION
2. Data set category selected	SONOMA DATASETS FOR RACE1 AND RACE2	https://venkataoec.wixsite.com/d2p-accentuator - DATASETS DETAILS	EARLY VERSION
3. Text description of how the data can be used to help drive performance	A D2P Accentuator that defines workflows on the basis of the DPD and expectations to perform for different race categories	https://venkataoec.wixsite.com/d2p-accentuator - Solution Text Details	EARLY VERSION
4. URL for code / analytics	D2P Accentuator Website	https://venkataoec.wixsite.com/d2p-accentuator	EARLY VERSION
5. 3 minute Video	D2P Accentuator Video that highlights the main context of the solution without audio	https://youtu.be/AF15bQ_iC4I	EARLY VERSION

Performance for a podium finish

- **AOEC finds that for podium finish, the manufacturer, driver & co-driver team, race engineering team, drive performance dimensions D2P team** need to fine focus and design capability for the following D2P Accentuator workflows

Drive performance dimensioning

Road Surface, Distance, Drive time, and Correlation for Responsiveness, Performance and Reliability



D2P Lifecycle AND 5R(S)

Relate

Respond

Reduce Risk

Reciprocal Race insights

TMS Resilience for lap / rally designed RADIUS and CIZ

CIZ : CRITICAL INTERACTION ZONE IN A LAP/RADUIUS OF RACING

Performance for a podium finish

- AOEC finds that instrumentally, the Data to Performance (D2P) Lifecycle must define a
- workflow for accentuating
- 1. The Rally/Race track Landscape
- 2. Pre-event forecasts of the KEY PERFORMANCE INDICATORS
- 3. Pit stop Work SMART(ness) as per the rally or race track
- 4. Driver and Co-driver team SMART(ness)
- 5. 5R(s) SMART(ness) for a podium finish

CRITICAL INTERACTION DETERMINERS

ROAD SURAFCE COVERINGS, LIGHT / SHADE ISSUES, CURVES, MEANDERS, INCLINES, BOTTLENECKS, CLOSE PROXIMITY REGIONS

SMART(ness) :

SPECIFIC CRITICAL INTERACTION FOR MEETING NEED WITH APPLICABLE INSIGHT RESPONSE AND TEMPERAMENT

Data sets

EXPERT SYSTEM

SPHERE OF CONTROL, FOCUS, CAPABILITY AND INGENUITY

TIME MOTION SCA;LE / POINT SLOPE INTERCEPTION

Sampling elements

Performance for a podium finish

CRITICAL INTERACTIONS

EXPECTED COMPETITIVENESS, PROBABLE INCIDENCE/HAZARD/ RISK/RULE COMPLIANCE, PRECISE DRIVING, ENDURANCE DRIVING, INTERCEPTING CURVES, MANEUVERING OPTIONS, RESPONSE, RAPID RESPONSE, FLAGGING FOR PIT STOP WINDOWS, EMERGENCY RESPONSE / SPECIFIC NEEDS

Performance for a podium finish

- Expert system SMART(ness) for data sets and virtual POINT SLOPE INTERCEPTION can make it simpler to identify the tangible correlation between drive performance dimensions of a rally/race track with the Drive to Performance Workflow to help and improve driving performance for a podium finish. This D2P Workflow plus D2P teamwork can Record-or-review, Relate, Reduce risk, Reciprocate response and Rally Resilience for a D2P RADIUS that happens to matter for a rally/race and its dimensions like the race track/road surface, distance, drive time, perform with reliability factors, where there is agile part-lifetime mitigation via strategic displays/condition monitoring/traceable fault tolerance/preventive and corrective action, where this new Workflow development can help a racing team categorize a D2P index for a rally/race track/TMS radius, where the index can be simply (1), (2), (3), (4) or combinations of them

- **(1) D2PI1:=** where this workflow will need to address History of interaction & **Foreseeable needs** and 5R(s)

- **(2) D2PI2:** = this workflow will need to address **Critical Interaction Zone** needs and 5R(s)

- **(3) D2PI3:** this workflow will need to address **Road/Race-track dynamics** and 5R(s)

- **(4) D2PI4:** this workflow will need to address A**dvanced AGILITY needs and 5R(s)** (like air quality, rotational/unregulated acceleration, temperature/humidity, race track or road or terrain safety, with more than expected driving style for event roadmaps, reliability and performance and more than programmed drive distribution between the front and rear wheels as expected in 4WD modes)

Performance for a podium finish

- The D2P Data Analysis Channel Building for a manufacturer, the driver and co-driver team, the race-engineering team and the D2P Accentuator team for new or revised drive to performance dimensioning of the needed SMART(ness for a podium finish), will need to

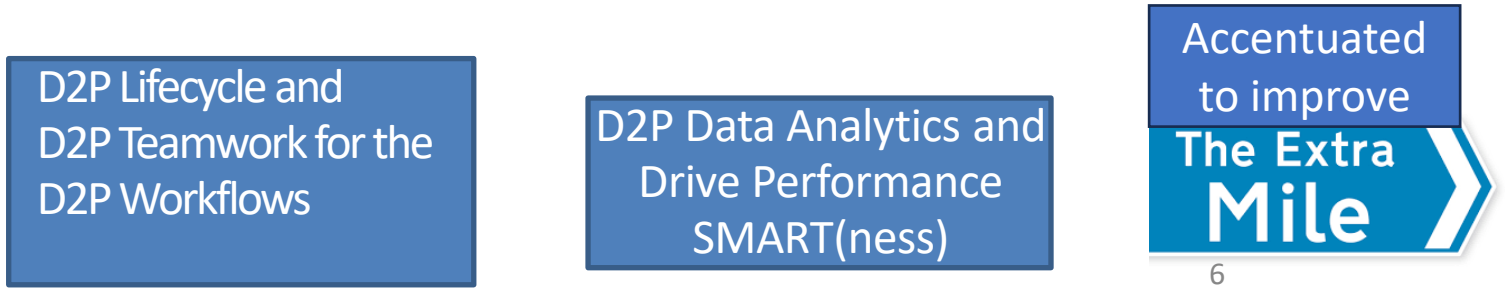
- **1. Enable D2P strategy for performance for the race category**

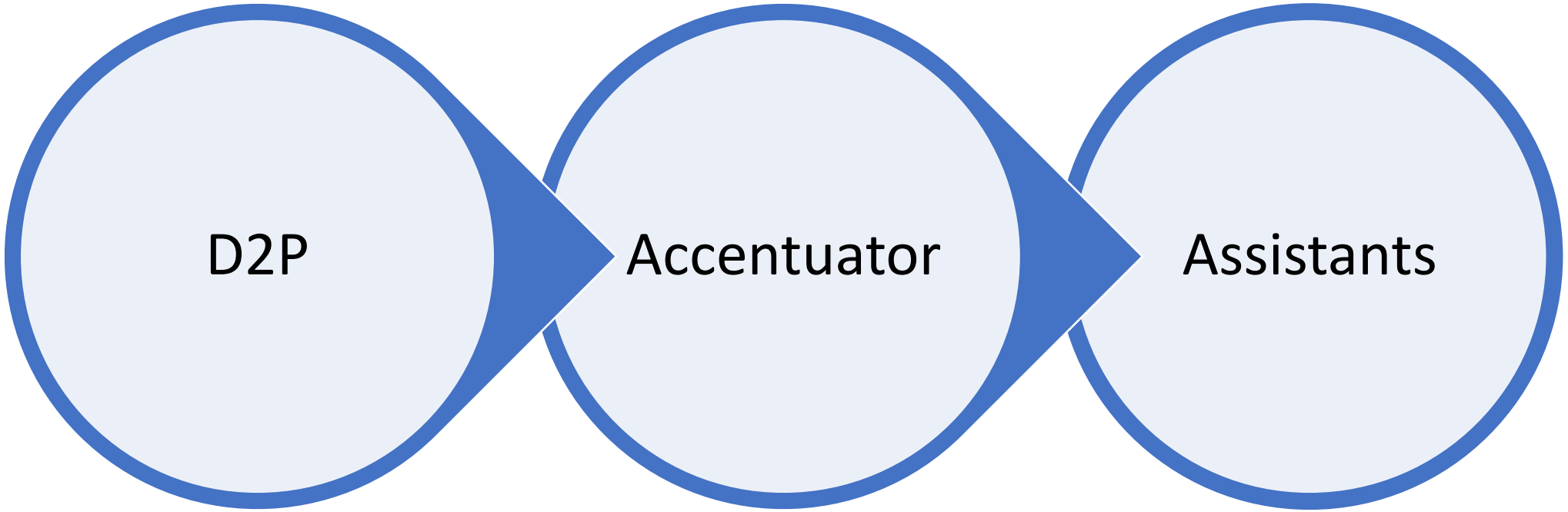
- **2. Develop D2P channelization for D2P lifecycles, workflows and teamwork**

- **3. Provide and utilize D2P sampling elements for planning/incorporation**

- **3. Manage / Innovate on D2P guided methodologies for TMS for performance to podium finish**

- **TMS: TIME MOTION SCALE**




D2P
Accentuator
Assistants

Performance for a podium finish

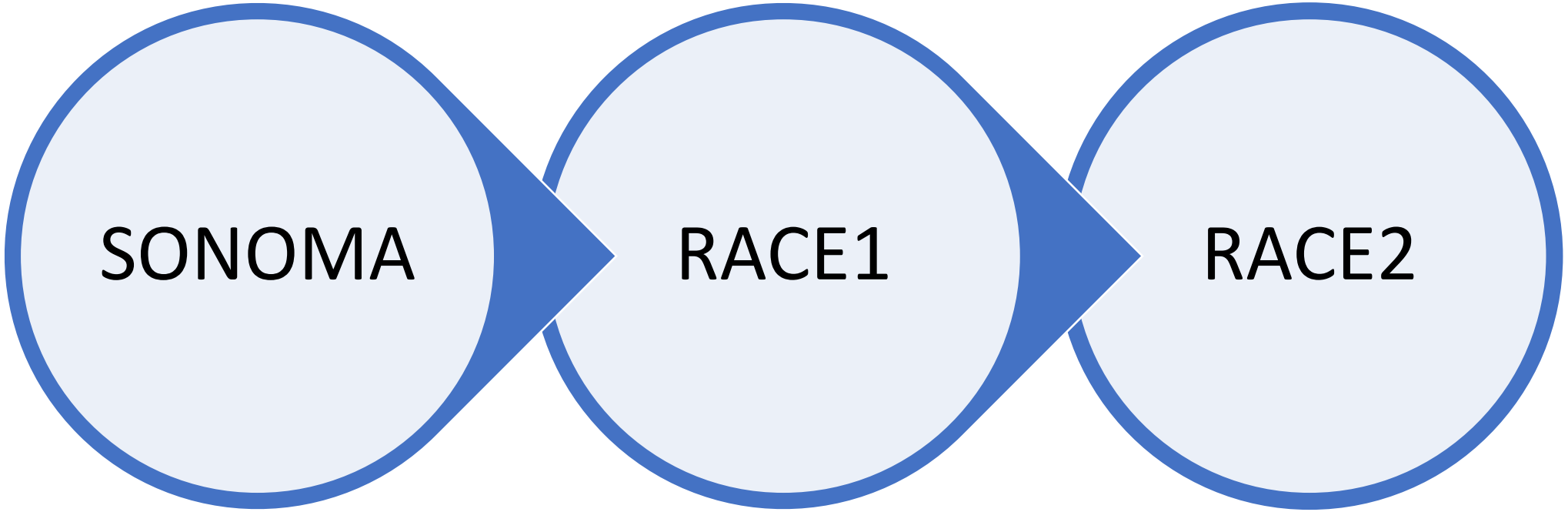
Baseline D2P guided methodologies

The following tabulation guides the driver and engineering team to perform for a podium finish, given the past and estimated changes to the DPD

Steps	Guided methodologies
D2P Management Index to D2P lifecycle	AOEC Data set Accentuating solutions
D2P Workflows and a Telemetry-or-Sensor-control Assistants	AOEC Data set Accentuating solutions
D2P Workflows and a TMS-Guiding-system Assistants	AOEC Data set Accentuating solutions
D2P Workflows and a Contingency-Plan Assistant	AOEC Data set Accentuating solutions
D2P Workflows and a Call-for-Mitigation-Plan Assistants	AOEC Data set Accentuating solutions
D2P Workflows and a Geo-Fencing System Assistant & Remote Management Assistant	AOEC Data set Accentuating solutions
The next few sections highlight the use of assistants to help performance for a podium finish	AOEC Data set Accentuating solutions

Performance for a podium finish

Data set selection, review and accentuation



JUDGING CRITERIA incorporated – DATA SET ANALYSIS PROJECT/APPLICATION, SOLUTION DESIGN, POTENTIAL AND TRIAD BASED IMPACT, QUALITY OF THE IDEA/GUIDED METHODOLGY PROMOTION FOR THE DATA REVIEWED OR ANALYSIS POSSIBLE AND SHOWCASING