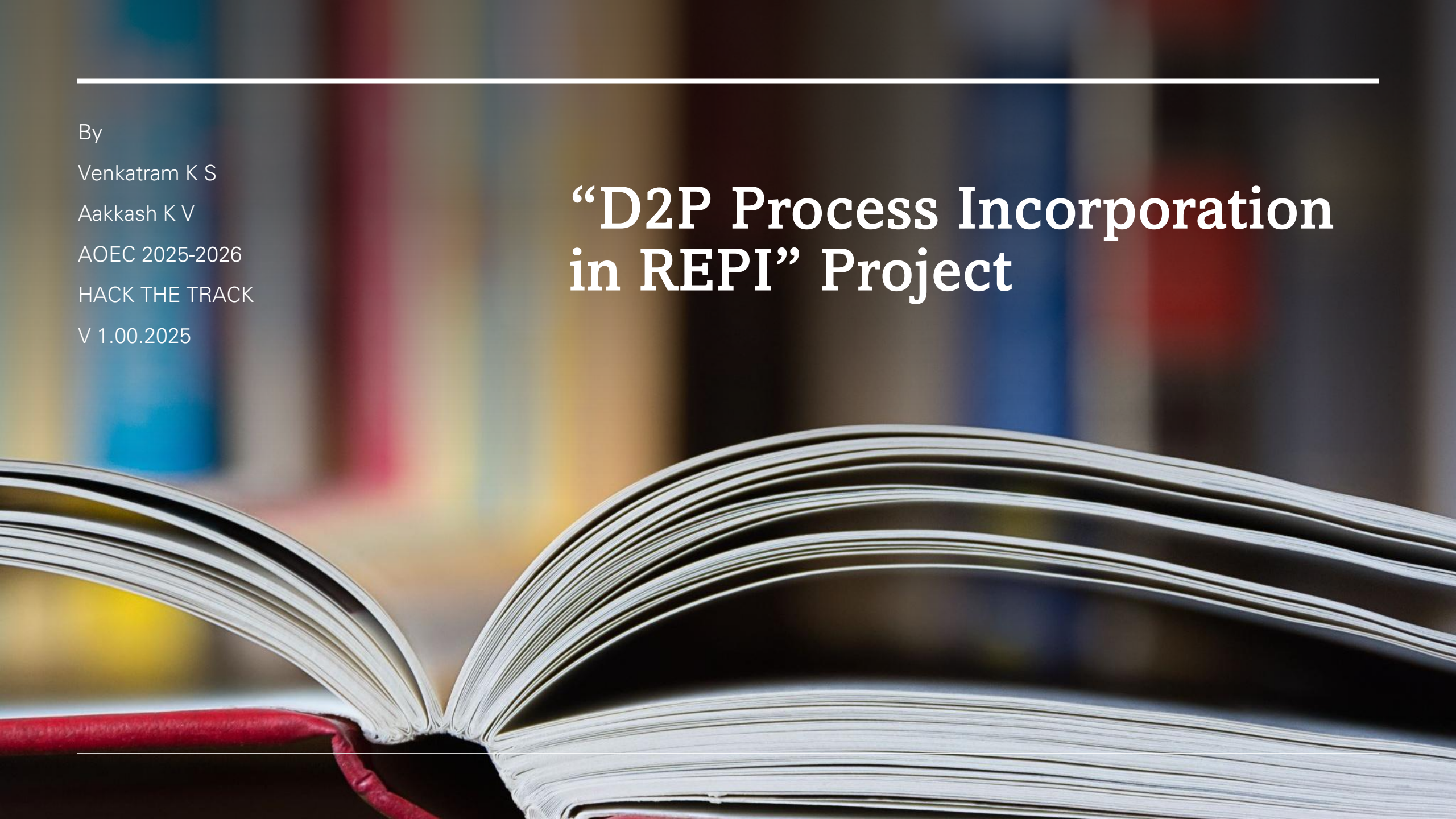

“D2P Process Incorporation in REPI” Project

By

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HACK THE TRACK

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STAKEHOLDERS

Drive to Perform for a winning flag raising finish- or D2P effectiveness-enabling teams

Race Engineering Process Improvement (REPI) teams

D2P Content Management System (D2P-CMS) teams

TARGET AUDIENCE

Race Engineering Network / Management panels

Rally/Race/Track Process conversant analysts

Yet to be **Rally/Race/Track** process conversant analysts

Quick Reference or Ready Reckoner interested parties

Go digital Next-steps Race engineering teams

STAGE - Review understanding of today's process approach

Typical processes covered in a REPI quality management system include….

Leadership, planning, administration, purchasing, training, design and development, production and service, operations, measurement and metrics, audit, corrective and preventive actions, improvement, digitization, automation, etc. Each management system uses a cut-to-fit process approach.

What is a D2P process approach?

The application of a system of D2P processes within an REPI organization is termed a D2P process approach.

A D2P process approach provides linkages between individual processes within the system of processes, as well as their combinations and interactions.

It is an approach, where each process can be described via a process map that identifies where a process starts and ends, and determines the various activities to be performed, where there are process owners for the activities, and DPD satisfaction measures and performance measurement metrics.

Via a process map, with the processes identified, the processes can be flow-charted in detail, realistically evaluated, improved upon, revised or updated, documented, deployed, and maintained.

STAGE - Review understanding of today's D2P process approach

A D2P process approach emphasizes objectives such as

Improved productivity

Increased value-added time

Standardized compliance

A Quick-reference view

Breaking down of silos between processes and their process management

Reduced missing process-documentation or process-help incidences

Elimination of confusion

Cooperation and cohesive thinking

STAGE - Review understanding of today's process approach

A D2P process approach emphasizes the importance of

Understanding DPD requirements, applicable rally/race/track statutory and regulatory requirements, and REPI organizational requirements

Fulfilling DPD requirements, applicable **rally/race/track** statutory and regulatory requirements, and REPI organizational requirements

Need to consider or develop processes in terms of added value

Continual improvement of processes based on objective measurements

Note though sense & respond concepts are important in rallying and racing: The ISO 9001:2008 QMS standard suggests that applying the P-D-C-A methodology to processes can help achieve objectives and effectiveness

STAGE - Review understanding of today's process approach

The P-D-C-A methodology uses steps and activities like

Plan: Establish objectives, organizational goals (at relevant functional stages and levels within the REPI organization), and D2P processes necessary to deliver results. The results need to be in accordance with DPD requirements and REPI organizational policies

Do: Implementation of policies as per a D2P Workflow/Lifecycle plan/vision

Check: Monitor and measure the D2P processes and workflow/lifecycle Report the results. Monitoring and measuring the D2P processes and D2P **workflow/lifecycle** should be done with reference to the REPI organizational policies, objectives, and requirements, guidelines or channelizing of analysis for the D2P workflow/lifecycle

Act: Take corrective, preventive or futuristic action to continually improve the performance of the D2P processes

STAGE - Debate on the 15-folder compendium model called "ProDoc Compendium"

Design a D2P Workflow/Lifecycle classification approach for D2P process documentation or D2P process help documentation, where the classification approach incorporates the use of different physical or logical folders for the information/documentation being archived, on the basis of the D2P type, purpose, nature, and levels of information

Design or enable scope for D2P access control to this classification

Standardize D2P process documentation or process help so it fits into these classifications

Apply the P-D-C-A methodology so this standardization is a commitment

Apply ISO 9001:2008 REPI/D2P QMS methodologies to the D2P process management solution

Q & A

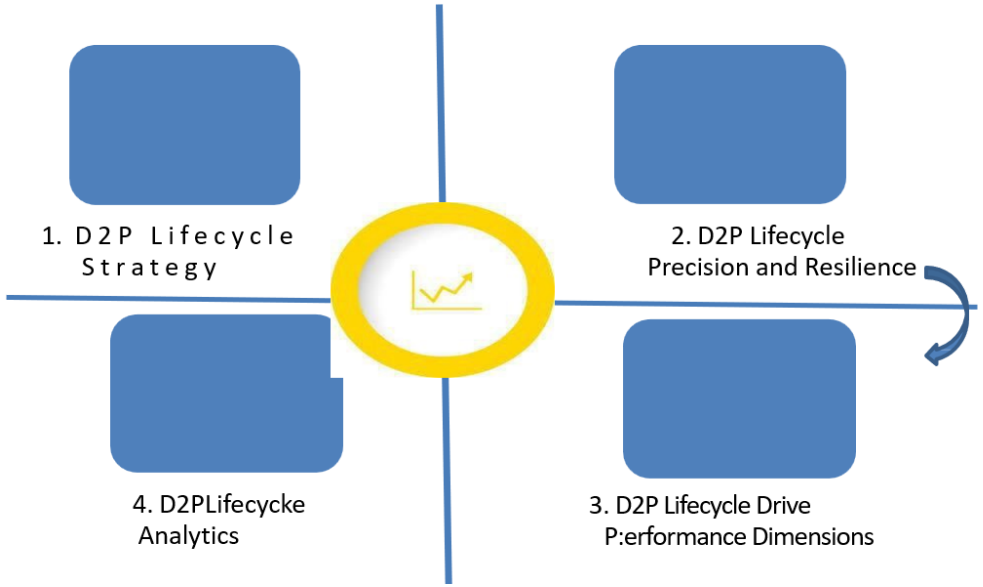
NOTES

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

Q & A

NOTES

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

Q & A

NOTES

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

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Q & A

NOTES

Performance for a podium finish

- **(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)

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Q & A

NOTES

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 Lifecycle and D2P Teamwork for the D2P Workflows

D2P Data Analytics and Drive Performance SMART(ness)

Accentuated to improve The Extra Mile

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GEARING UP

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 Vehicle Condition, or 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 D2P-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