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AI - Another approach to avoid finance process optimization?

Digital Transformation & Services Porsche Holding

~~Ing. Mag. (FH)~~ **Andreas** Schmelzer

- **Past**
  - Technical education (IT & Telecommunication)
  - Part-time studies (Executive & business management)
  - +10 years management positions in finance/controlling
  - +4 years RPA CoE Lead & Head of Digital Competence Center / Hyperautomation
  - +3 years Founder & CEO Process Automation Consulting/Services

- **Present**
  - Head of Digital Transformation & Services
  - FH Lecturer – Traditional & Robotics Process Automation

- **Personal insights**
  - My rolemodels are Mario & Florian, 9 years old
  - Sport (Triathlon, kayaking, climbing, open water swimming,…)

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Eine Familie
Zwei Unternehmen

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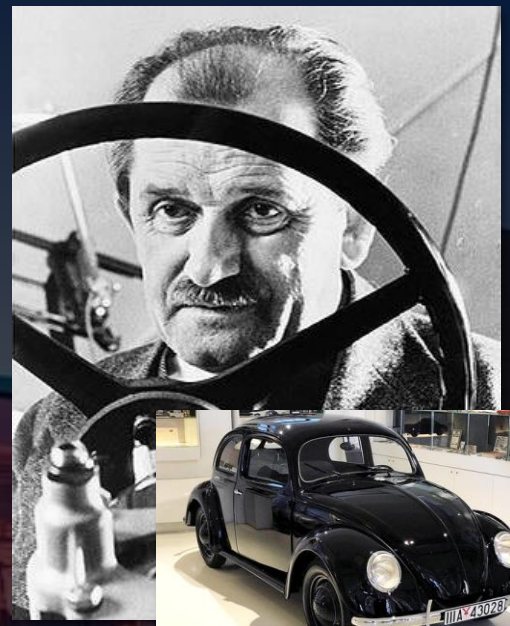

Prof. Dr. Ferdinand Porsche

Ferry Porsche

Louise Piech (geb. Porsche)

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WHOLESALE

RETAIL

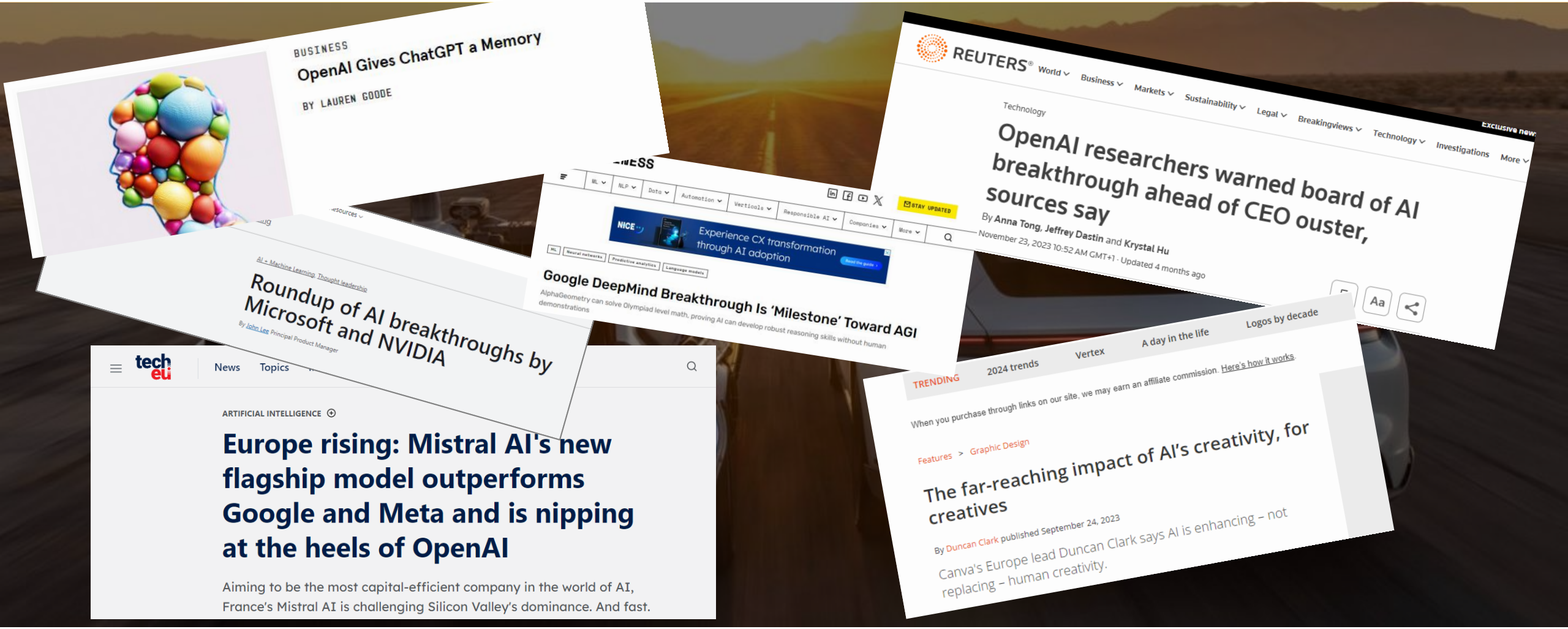
FINANCIAL SERVICES

SOFTWARE DEVELOPMENT

VOLKSWAGEN · AUDI · SEAT · ŠKODA · PORSCHE · LAMBORGHINI · BUGATTI · BENTLEY · DUCATI · Commercial Vehicles

AI will save the world and all are unemployed

Expectation and sensation



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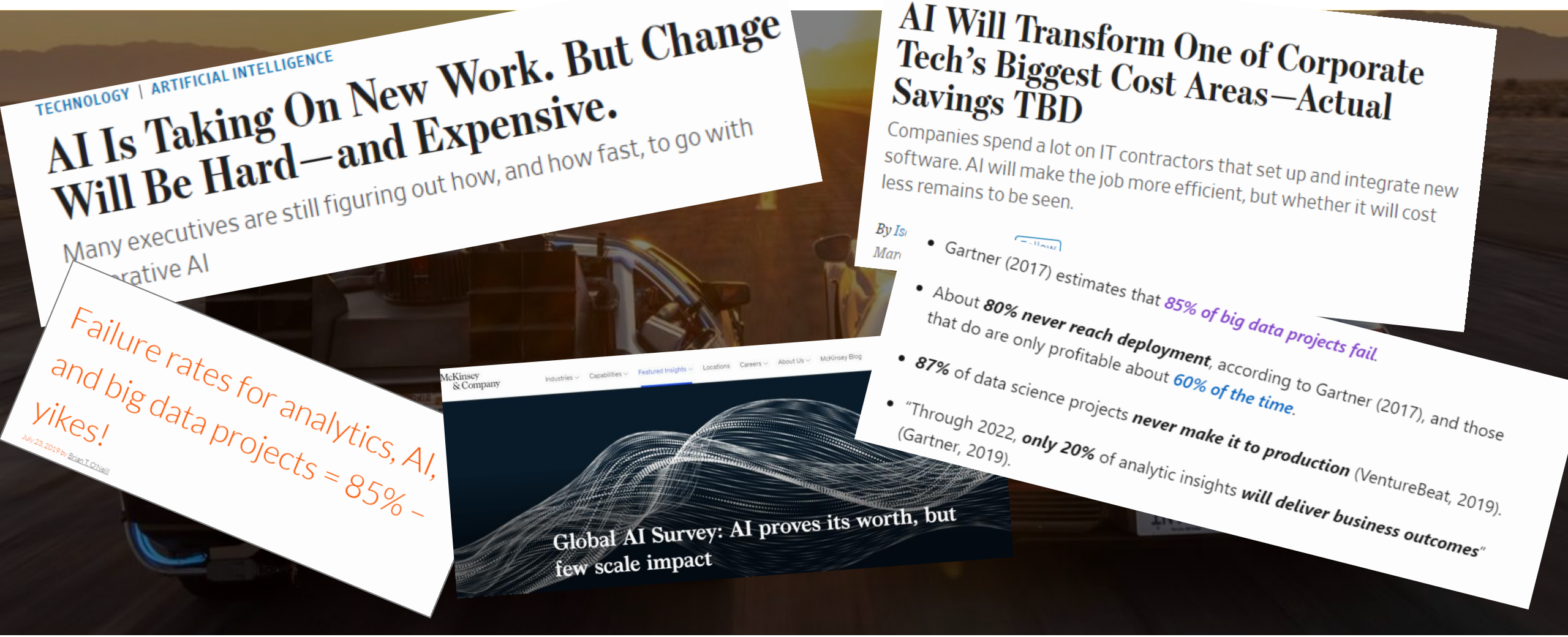
AI will save the world and all are unemployed

But ...



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Expectation

Internal

Reality

B3 | Marruary

Internal

	A	B	C	D
1	Jan	January		
2	Feb	February		
3	Mar	Marruary		
4	Apr	Aprruary		
5	May	Mayruary		
6	Jun	Junruary		
7	Jul	Julruary		
8	Aug	Augruary		
9	Sep	Sepruary		
10	Oct	Octruary		
11	Nov	Novruary		
12	Dec	Decruary		
13				
14				

Beyond the hype

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How to put AI in scaled operation

Vision & Overview

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Limitations

- AI is not a magic bullet for process automation
- Can create complex and untransparent systems

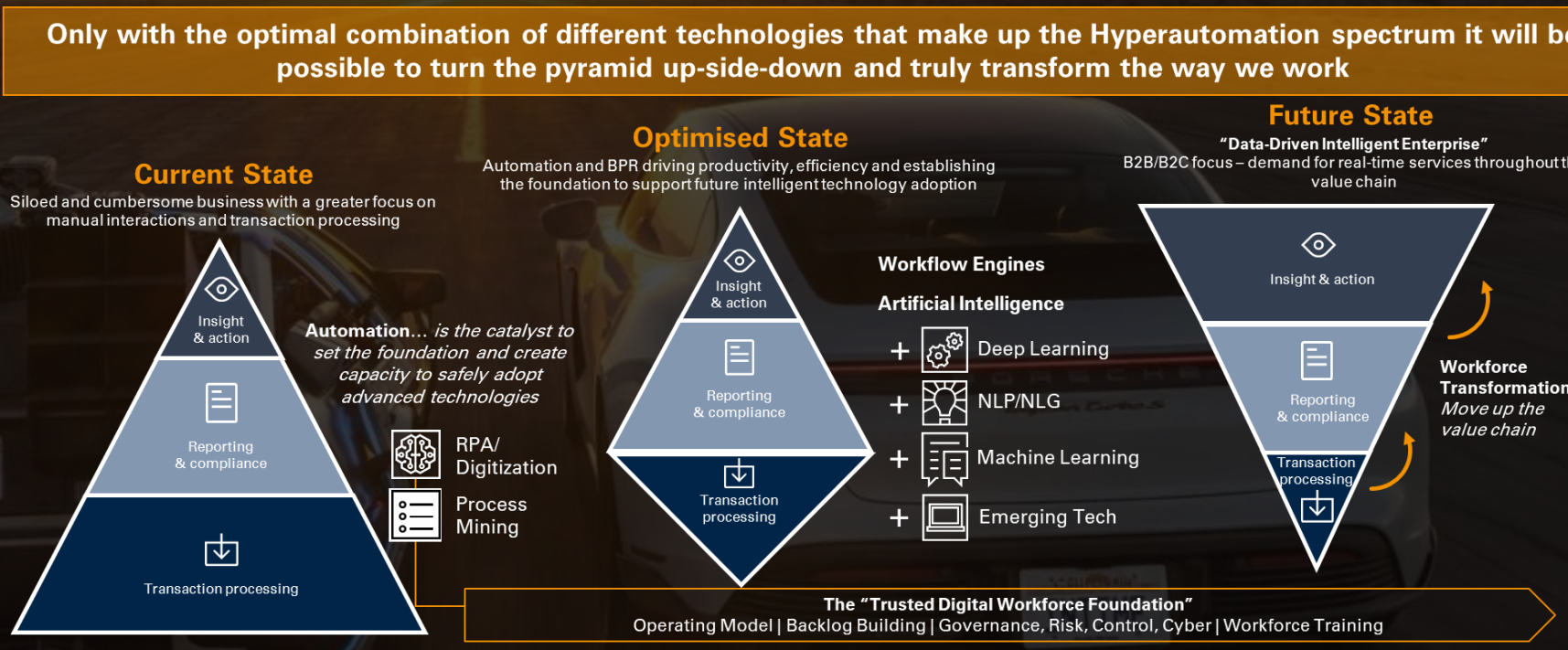
Challenges & Risks

- How to accept results from AI-assisted solutions
- Understanding potential and limitations of AI

Examples

- Predictive forecast @ PHS

Only with the optimal combination of different technologies that make up the Hyperautomation spectrum it will be possible to turn the pyramid up-side-down and truly transform the way we work



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How to put AI in scaled operation

Starting points & Action steps

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Prerequisites

- Understand technology limitation
- Realize current optimization potentials
- Plan and act future orientated

Approach

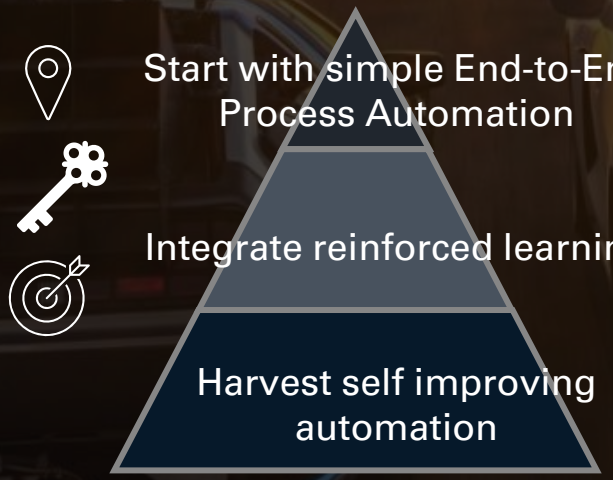
- Combine: Automation through Reinforced Learning & Data Driven operations

Examples

- Predictive forecast @ PHS (Data driven approach)
- Invoice Management (reinforced learning integration)

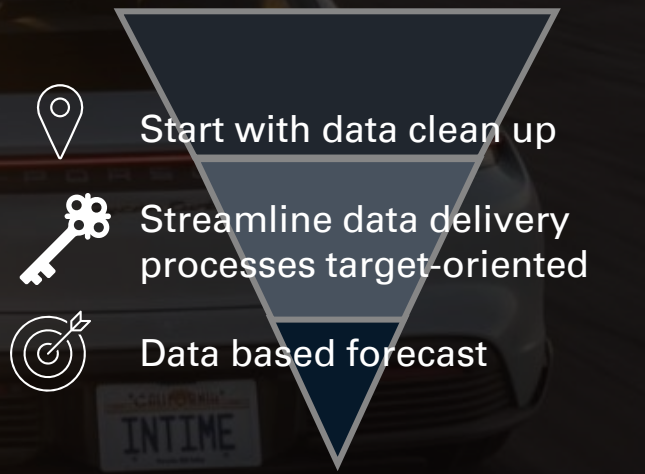
Combination of end-to-end process optimization through reinforced learning and holistic data driven approaches

Process Automation



Use Case: Invoice Management

Data Driven Optimization



Use Case: Predictive forecast @ PHS

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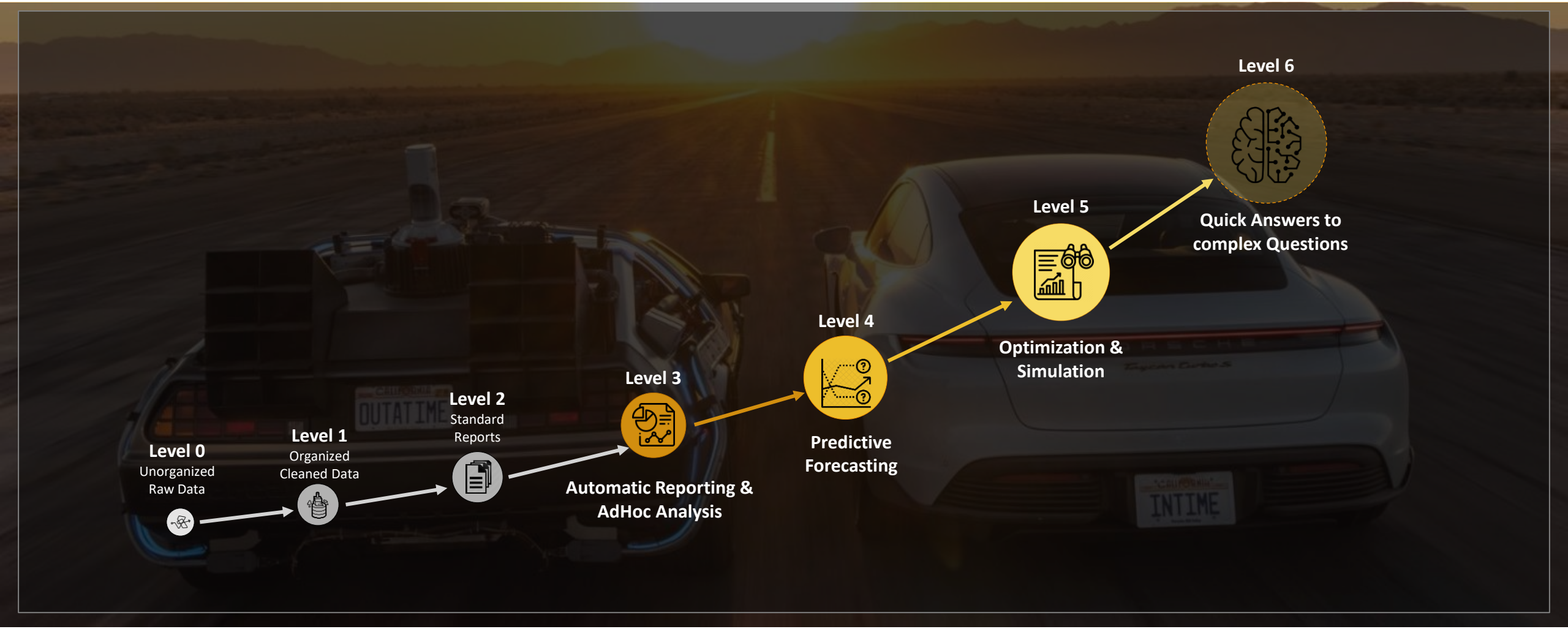
The Mission …

BI Center



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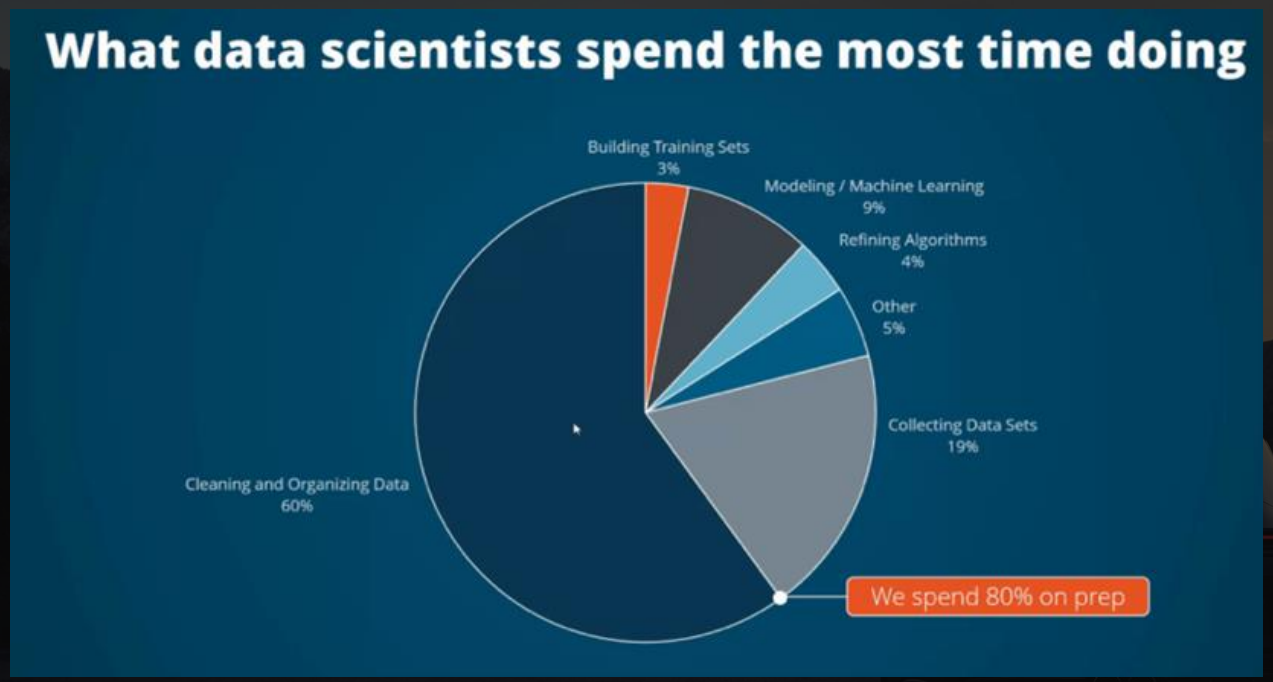
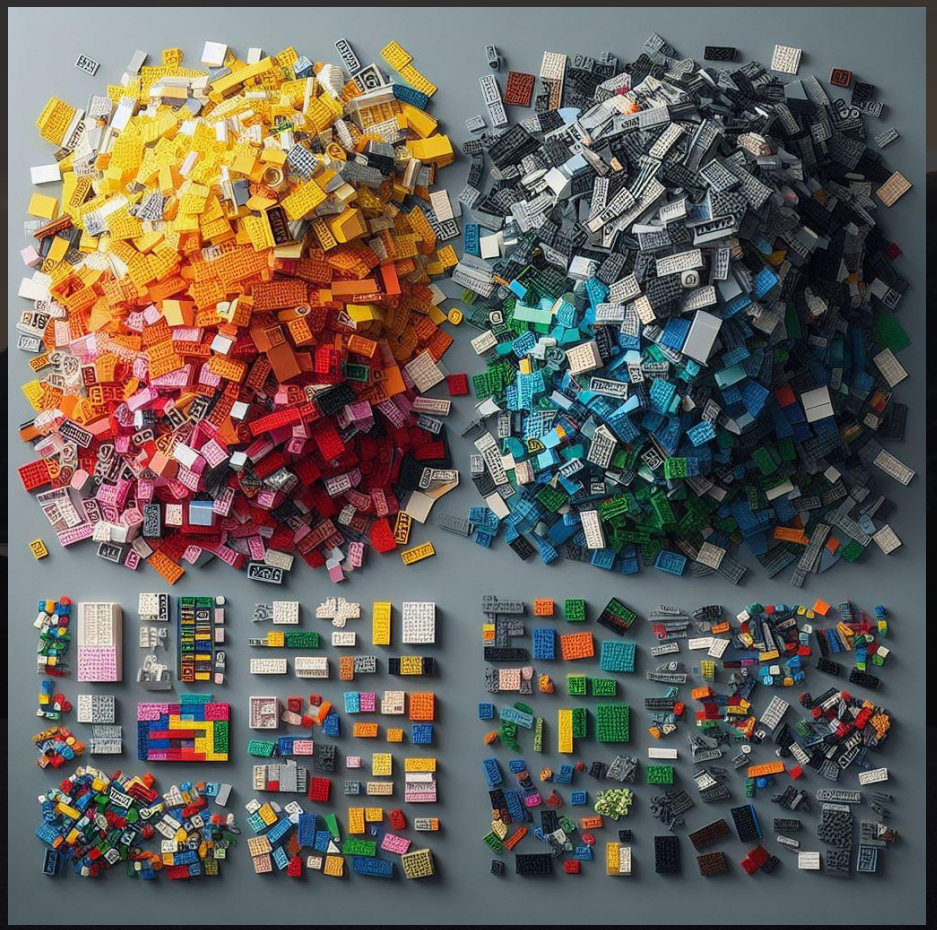
Data Driven Organization

The most time-consuming part of data projects is collecting, cleaning and organizing data





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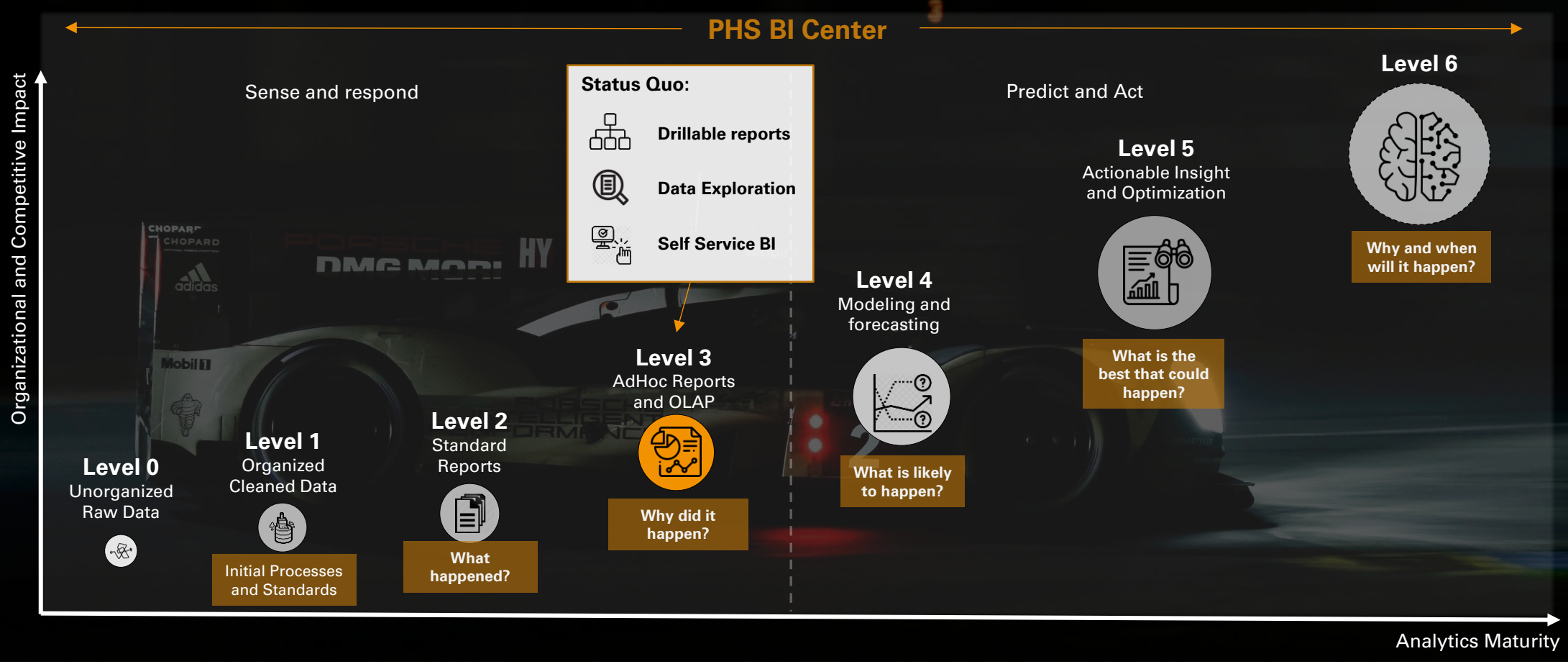
3 The Mission …

BI Center

… to a data driven company!



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3 The Mission …

BI Center

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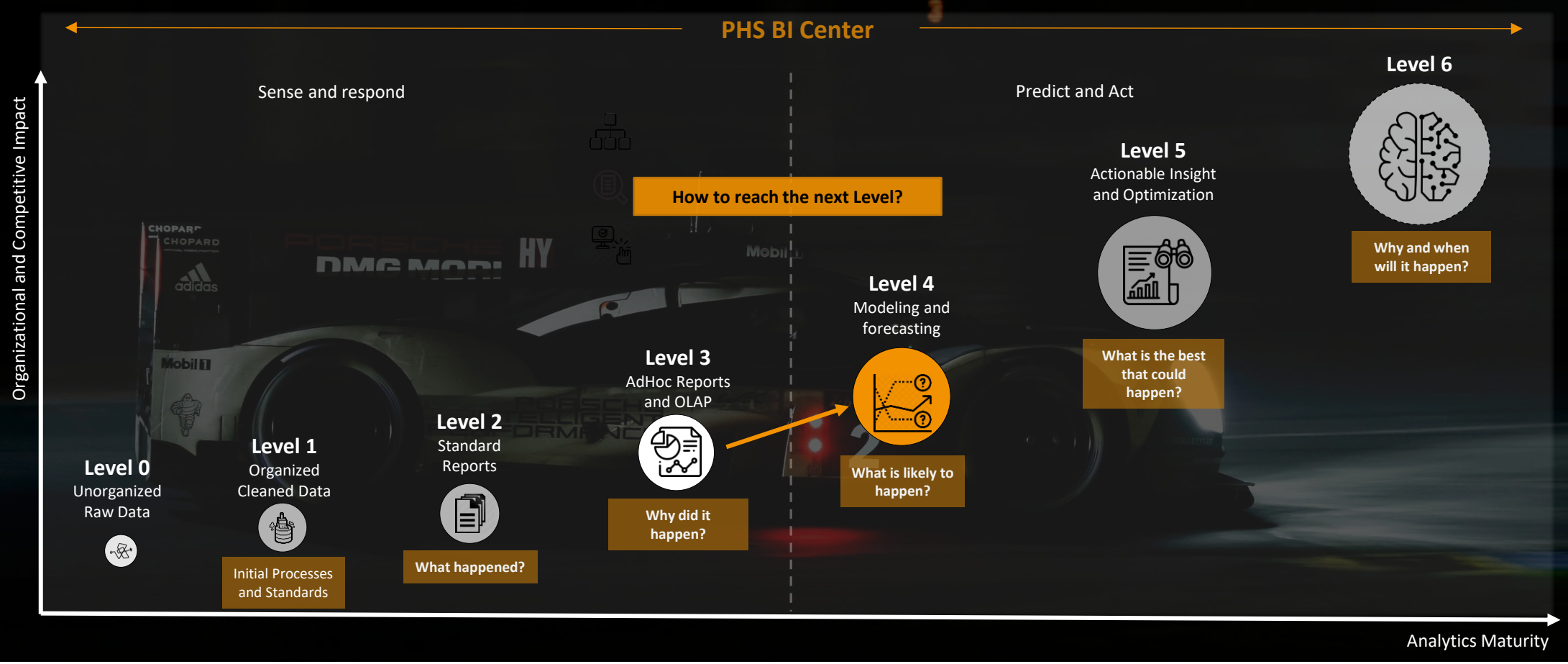
… to a data driven company!



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Forecasting - PoC automated Forecast

How does an algorithm perform on a subset of our data compared to our manual Forecast?

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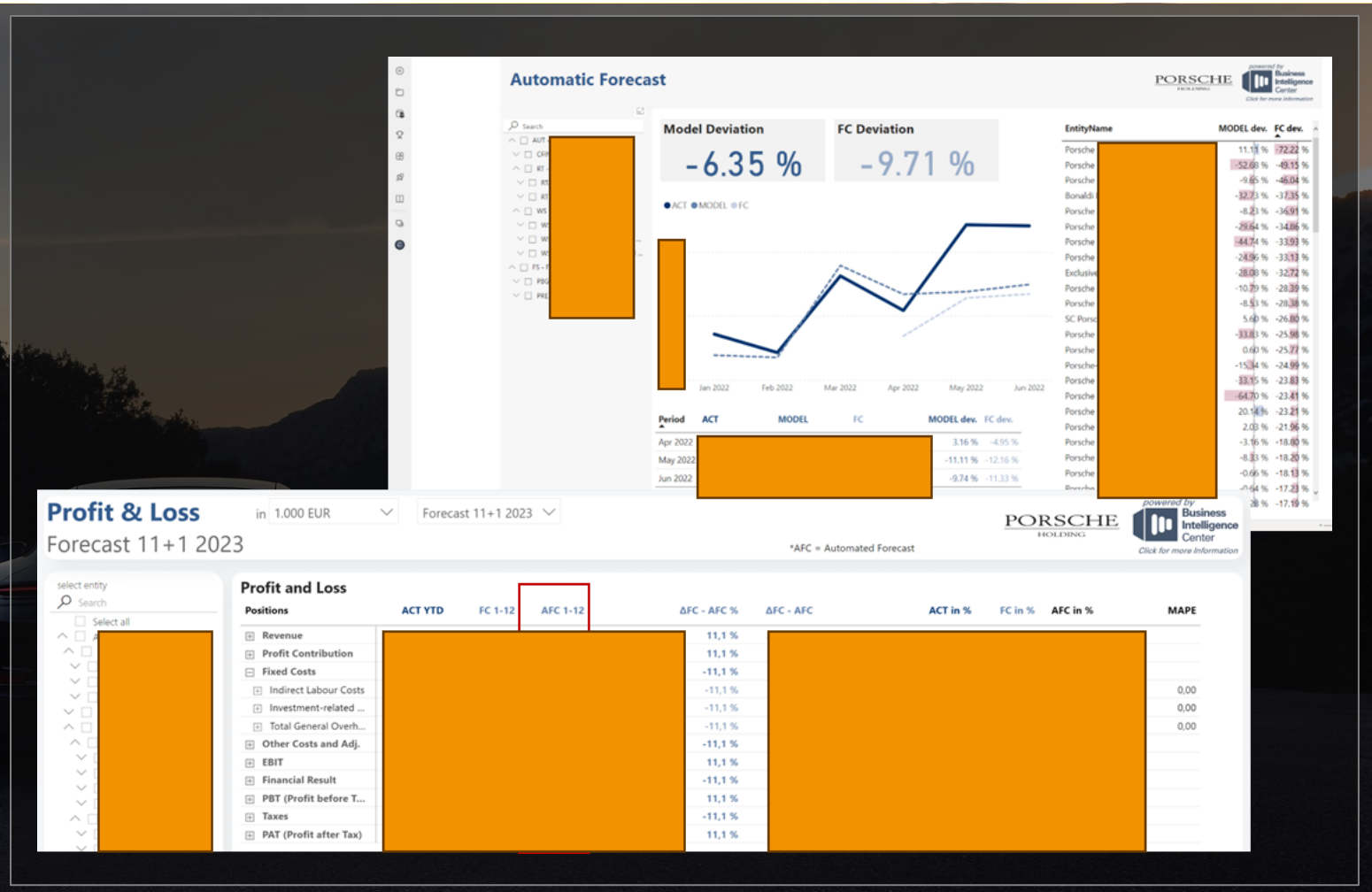
PoC Setting

- Forecast Version 3+9
- KPI: Revenue
- All Entities
- Excluded Months with high impact from COVID-19
- No further Model- Parameter optimization

Results of PoC

- On average 6,35% deviation to ACT, compared to 9,71% from manual Forecast
- More accurate prediction for 54% of entities & comparable prediction accuracy (±5%P) for 68% of entities



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Forecasting - Next steps automated Forecast

There is **no more manual work to create the Forecast**, while **increasing forecast accuracy** and giving the **possibility to simulate business scenarios**

1. Create Data Asset *(done)*

Achievements:
- Connected to Datasources
- Created & automated ETL Processes
- Clean data & implement Business Logic
- Build Datamodels
- Visualize for Analysis / Reporting

→ **Completed / Foundation for further Steps**

2. Predict *(ongoing)*

Next Steps:
- Expand Forecast to End of Year
- Forecast EBIT
- Define scope with business areas
- Define additional KPIs

Goal:
- Forecast Balance Sheet, P&L, Cashflow and further KPIs with sufficient accuracy
- Provide a probability range for each value
- Automated Forecast as control instance for manual Forecast

3. Automate *(next)*

Next Steps:
- Requirements workshop with Business Areas
- Define Deployment, Frequency, User Groups

Goals:
- Eliminate manual work for business areas
- Eliminate human & political bias
- Automated Foreacst fully replaced manual Forecast

4. Simulate *(future project)*

Steps:
Requirements workshop

Goals:
Provide a tool for a quick simulation of different scenarios based on defined input parameters

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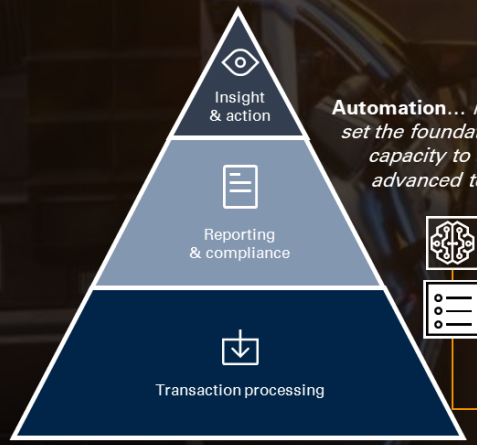
Use Predictive FC as assistant

- Standardize the processes & KPIs
- Technology is the enabler but not the solution
- Fixing Data with a concrete reporting need
- It‘s a journey not an one-time event

Only with the optimal combination of different technologies that make up the Hyperautomation spectrum it will be possible to turn the pyramid up-side-down and truly transform the way we work

Current State

Siloed and cumbersome business with a greater focus on manual interactions and transaction processing



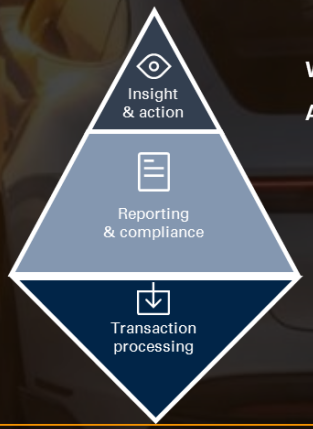
Automation... *is the catalyst to set the foundation and create capacity to safely adopt advanced technologies*

RPA/ Digitization

Process Mining

Optimised State

Automation and BPR driving productivity, efficiency and establishing the foundation to support future intelligent technology adoption



Workflow Engines

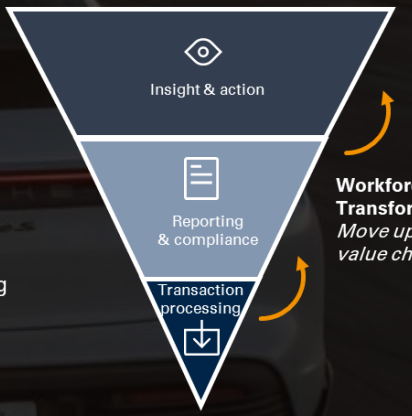
Artificial Intelligence

+ Deep Learning
+ NLP/NLG
+ Machine Learning
+ Emerging Tech

Future State

“Data-Driven Intelligent Enterprise”

B2B/B2C focus – demand for real-time services throughout the value chain



Workforce Transformation – *Move up the value chain*

The “Trusted Digital Workforce Foundation”

Operating Model | Backlog Building | Governance, Risk, Control, Cyber | Workforce Training

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