

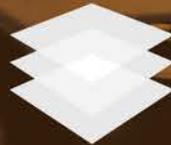
LIVESTREAM HOUR

THE RISE OF AI & ANALYTICS IN LOGISTICS

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FESTIVAL of TRANSFORMATION
SURVIVING AND THRIVING IN 2020

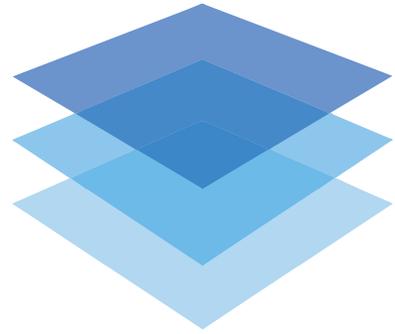
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Today's Guests



Lars Bäumann
Director, Information Management
& Digitalisation
Volkswagen



Jürgen Schmelting
Head of Logistics
Fraunhofer ISST



Dr. Wolfgang Hackenberg
CEO
Synaos

Host



Christopher Ludwig,
Editor-in-Chief
Ultima Media

Episode 10: The rise of AI & analytics in production and logistics

9.30 EST/15.30 CET **Global roundup: The good, the bad, the unknown in supply chain**
Christopher Ludwig, Automotive Logistics, AMS

9.40 EST/15.40 CET **Presentation: Volkswagen Industrial Cloud**
Lars Bäumann, Volkswagen

9.50 EST/15.50 CET **Improving supply chain transparency through IT**
Jürgen Schmelting, Fraunhofer ISST

10.05 EST/16.05 CET **AI and analytics in production and logistics**
Wolfgang Hackenburg, Synaos

10.20 EST/16.20 CET **Q&A and panel discussion**

10.40 EST/16.40 CET **Wrap up**

The good this week in auto supply chains...



- Gradual recovery underway (French market +1%)
- In Germany some plants up to 95% pre-crisis levels
- EV acceleration & incentives: battery & plant investments, i.e. VW Zwickau plant now 100% EV



- **Audi** Mexico reopening means region has restarted
- Production ramping up to refill depleted inventory, especially of truck & SUV



- June sales and production expected to be strong
- **Xpeng** starts in-house production of EV model in Zhaoqing (in addition to contract manufacturing)
- **BMW Mini-Great Wall** start plant construction



- **Toyota** ramping up Japan and global production for domestic and export recovery



The bad...



- Intense lockdown in Chennai extended to July 5; general lockdown in Tamil Nadu to July 31
- **Ford, Renault Nissan, BMW, Daimler** plants now closed until at least July 6th
- **Hyundai** open w/ low output (housed workers)



- Rising cases and new restrictions in three largest US markets: California, Florida and Texas
- **GM** eliminates third shift from Spring Hill, Tennessee Plant to adjust to demand
- Union request **GM** to shut Texas SUV plant



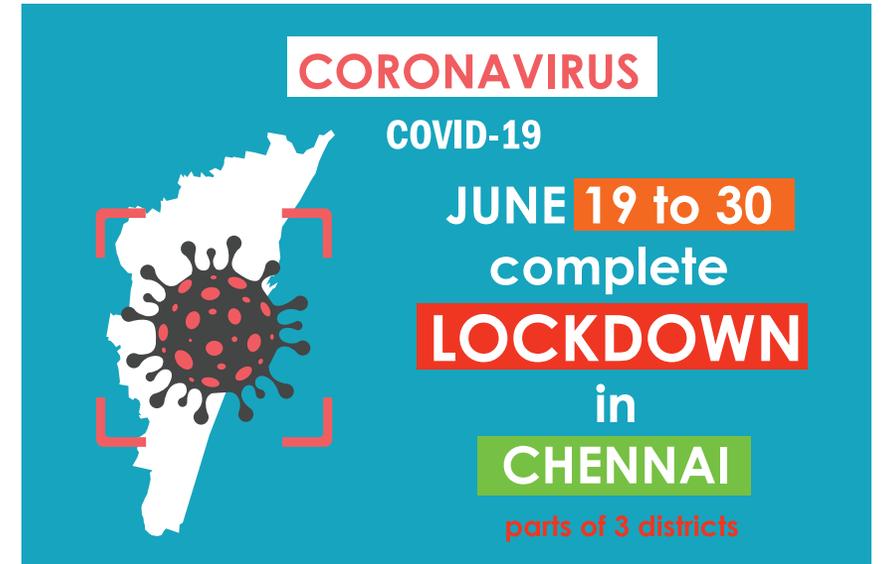
- Local lockdown in English city of Leicester



- VW cancels Turkey plant



- Byton halts production and plans restructure



...and the unknown (could get ugly)

- EV/low emission incentives may not support immediate sales recovery
- EU CO2 emission fines a risk to many OEMs
- Brexit trade negotiations highly uncertain
- USMCA official implementation July 1st
- Many positives on digital trade, customs processes, ecommerce
- Could see rising costs to meet local content and labour rules if limited flexibility showed
- US already raises tariff threats on metals
- China-India dispute leading to holds on Chinese imports, which is already impacting Indian vehicle production and investment
- China-US trade war, fallout over Hong Kong





Logistics service improving, but challenging

- Highly volatile demand and capacity planning with bullwhip risks in many regions
- Supplier liquidity better than expected but a risk – many may not survive second lockdown
- Container shipping reduced schedules and fleets, higher rates...but alliance carriers financially healthy with some capacity returning
- Air freight capacity remains limited, with small improvements
- Automotive rail freight network still being restored in North America and Europe
- Lack of transparency on service, local regulation, customs compounding issues



Model and market priority in supply chain planning and scheduling:

Build 'blue' instead of 'grey' cars

- VW to prioritise production of vehicles with end customer orders (blue) over stock orders (grey) to cut delivery time, reduce vehicle stock and improve supply accuracy
- Toyota prioritising demand and product mix for US retailers in Japanese plants over other regions
- Europe to push production and imports to gain EV incentives and meet CO2 targets
- Depends on closely integrated and dynamic planning and data exchange



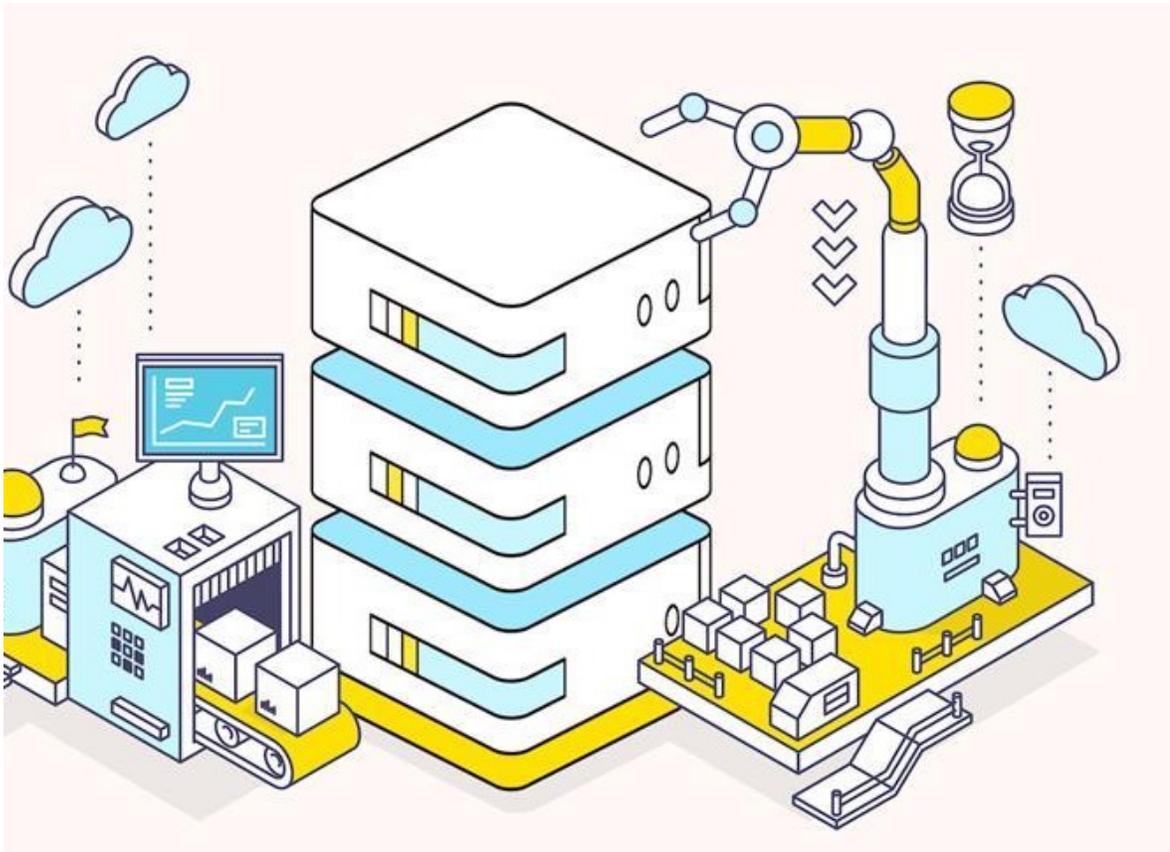
Will crisis accelerate digital transformation across the supply chain?

Production and logistics opportunities:

- Real-time visibility and IoT connectivity
- Digital freight booking and contracting
- Dynamic asset and network planning tools
- Paperless and contactless delivery processes
- Digital twins (supply routes, facility layout, network)
- Robotic process automation
- Automated handling and warehouse operations
- ...from descriptive to predictive data analytics
- ...the path to AI and self-driving supply chains



Crisis compounds challenges to connected production & logistics



- Legacy systems & IT infrastructure
- Proliferation of software systems and standards
- Bottlenecks in data interface and exchange
- Poor sharing and visibility of forecast & plans
- Cost to connect older assets and equipment
- Cybersecurity
- Lack of in-house competencies in software

Volkswagen Industrial Cloud: From Vision to Reality



Lars Bäumann
Director, Information Management
& Digitalisation
Volkswagen



Achieving transparency in automotive supply chains



Jürgen Schmelting
Head of Logistics
**Fraunhofer Institute for
Software & Systems
Engineering (ISST)**



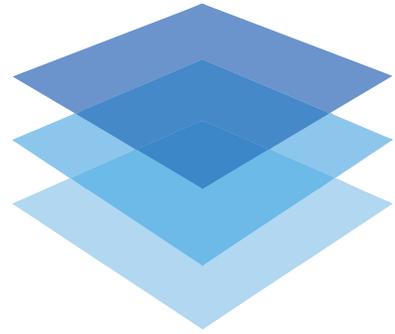
Using AI in production and logistics



Dr Wolfgang Hackenberg
CEO
Synaos



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SPRING – SUMMER

2020

01 JULY

THE LIVESTREAM HOUR:
THE RISE OF AI & ANALYTICS IN LOGISTICS

08 JULY

THE LIVESTREAM HOUR:
REBUILDING GREENER SUPPLY CHAINS

15 JULY

THE LIVESTREAM HOUR:
NORTH AMERICAN VEHICLE PORTS

PARTNERS:



22 JULY

THE LIVESTREAM HOUR:
STARTUP OEM SUPPLY CHAINS

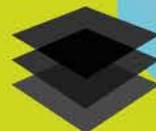
23-30 JULY

SEASON FINALE:
MULTI-PART GLOBAL SPECIAL:
ASIA, EUROPE, NORTH AMERICA

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Livestream Hour guests in the coming weeks...

- **July 8** **Payam Dehdari** Professor of Sustainable Logistics **Stuttgart Technology University**
Heike Schulze Coordinator Drive Sustainability **CSR Europe**
- **July 15** **Chris Connor** President & CEO **American Association of Port Authorities**
Dan Gosson Consultant **Inform**
- **July 22** **Marko Weisshaar** Head of Supply Chain Management **INEOS Automotive**
- **July 23-30** **Multi-part Season Finale on Lessons in the New Reality**
Matthias Braun Head of Digitisation and Concept Development, **VW Group Logistics**
Michael Tian, Head of Vehicle Logistics, **BMW Brilliance**
Plus many more industry leaders & experts to be announced soon...
- **September 15-17** **Automotive Logistics & Supply Chain Connect Virtual Conference**

Get in touch with news, ideas and comments

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