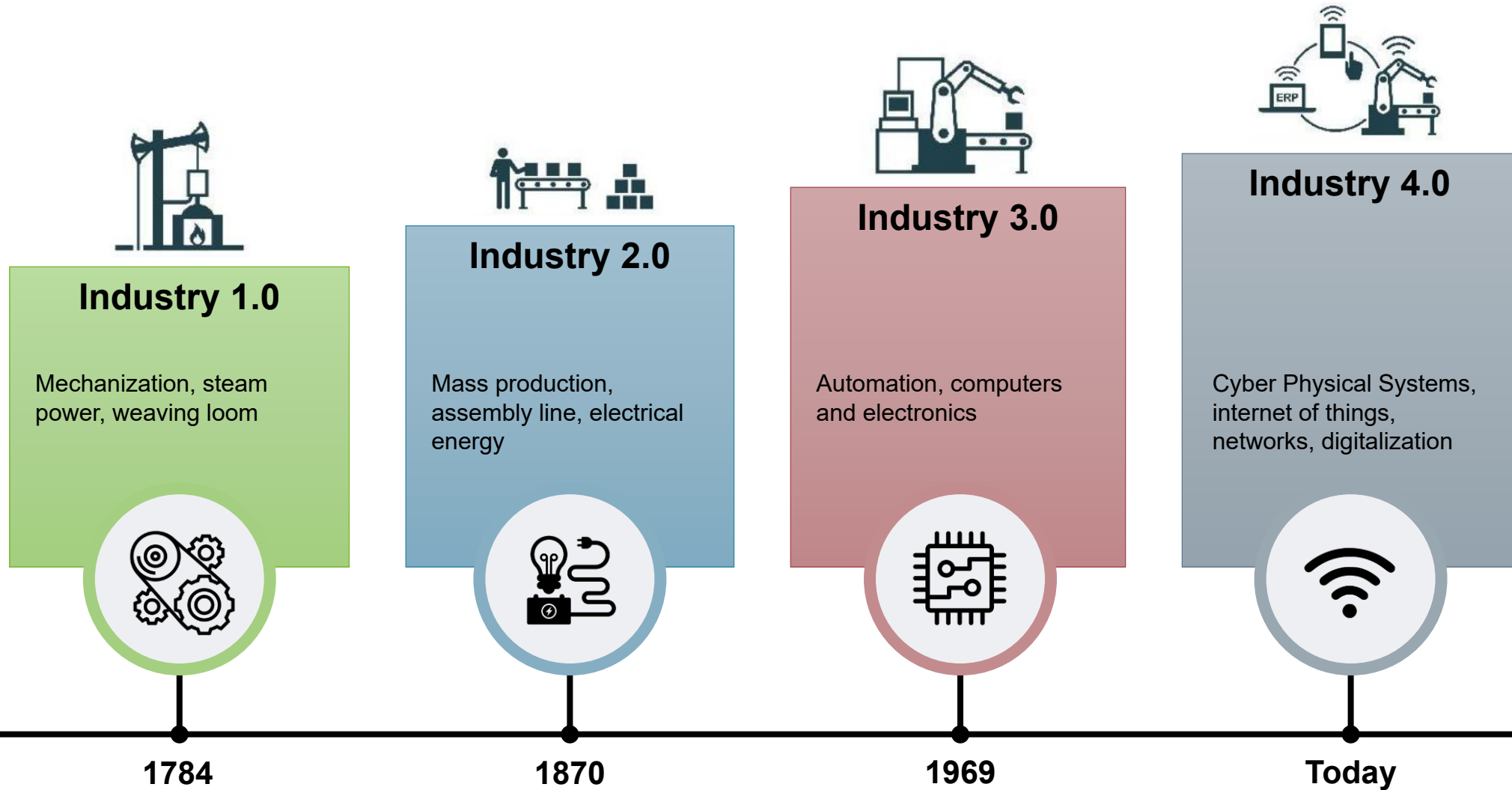




Opportunities and threats of digitalisation for the ropeway industry

Marco Zraggen
CEO Sisag AG

Industry 4.0



Digitalization



IoT-Applications



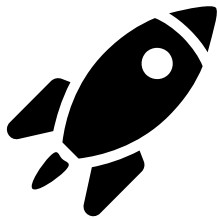
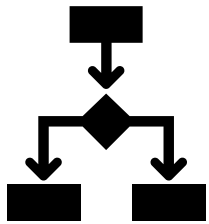
IoT-Applications

Opportunities

- Better / more well-founded decisions
- Increased availability
- Preservation of know-how
- Saving on operating personnel

Threats

- Cybercrime
- Data breaches
- Data transparency for third parties
- System dependency



Passenger operation without operating personnel



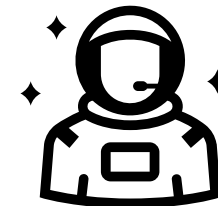
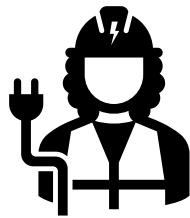
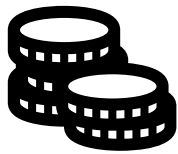
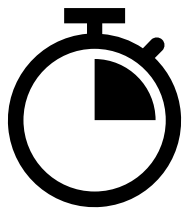
Passenger operation without operating personnel

Opportunities

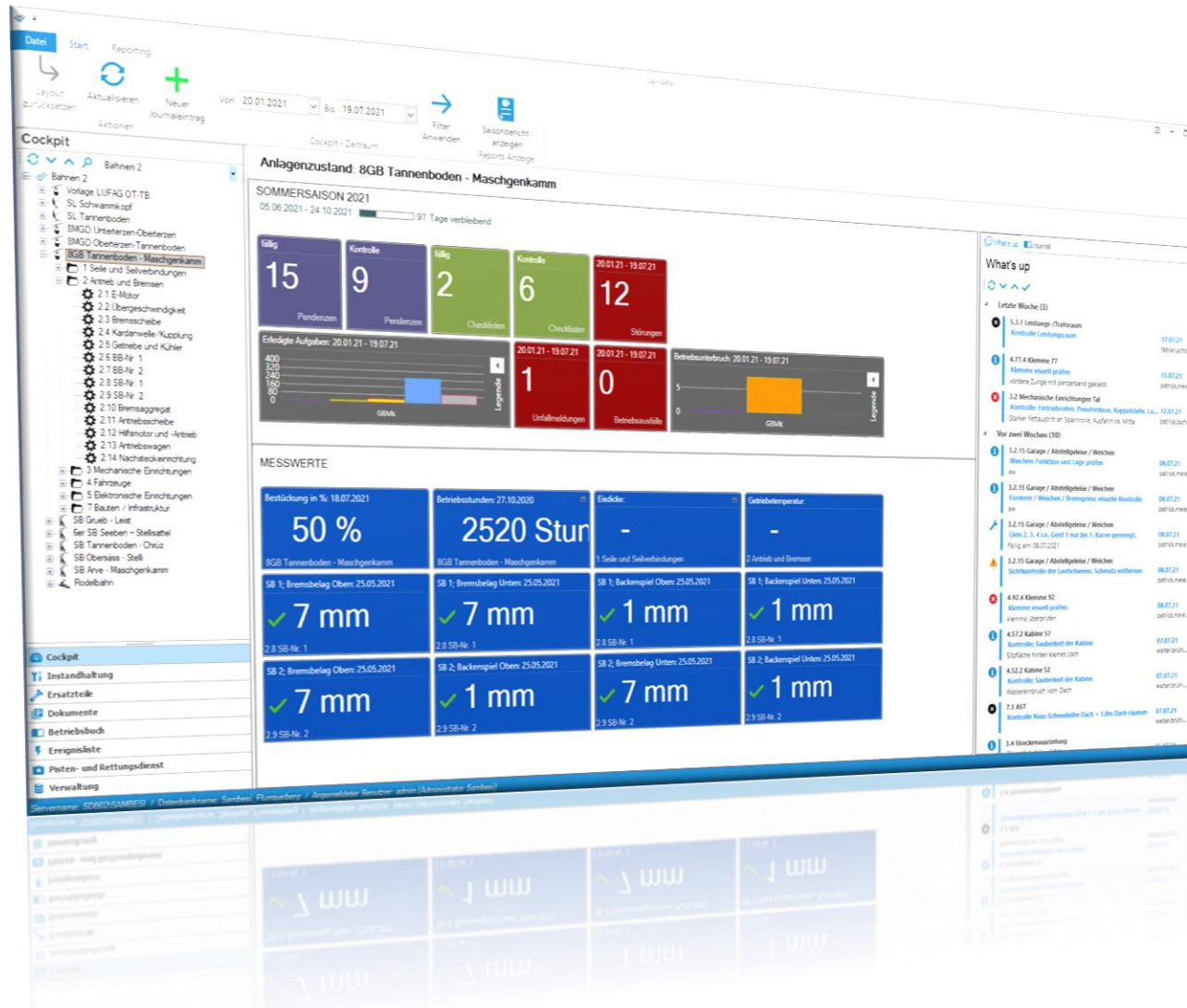
- Extended operating times
- Reduction in operating costs
- Demand-based operation
- Reduction in staff shortages

Threats

- Extraordinary events, wind and weather
- Job profiles are changing
- No longer able to look after guests
- Dependence on systems



Paperless documentation



Paperless documentation

Opportunities

- Standardize process
- Traceability and verifiability are improved
- Know-how about a system is retained
- Fact- and data-based communication

Threats

- Dependence on systems
- Eyes and ears on the ground are lost (system knowledge)
- Academization displaces common sense

Manufacturer



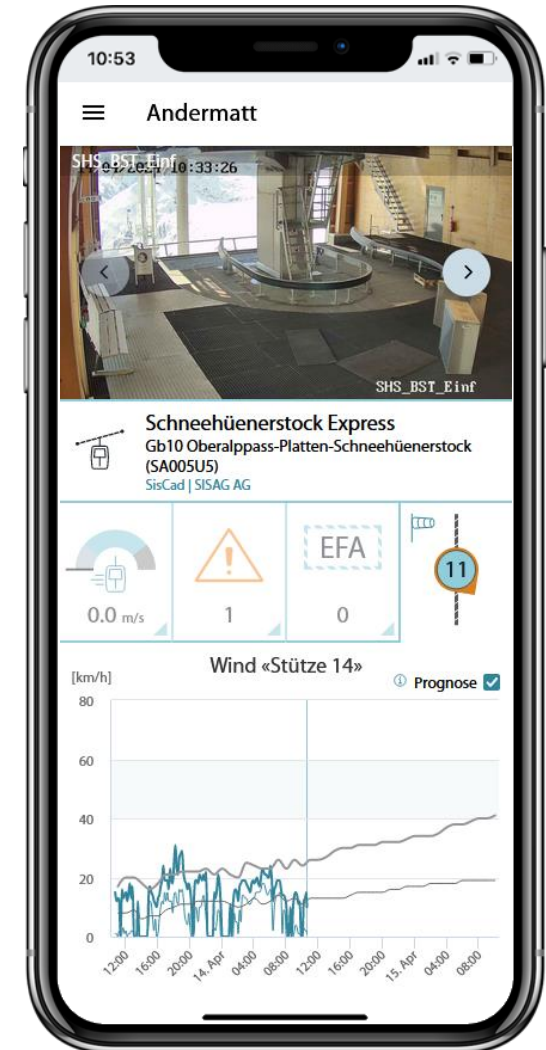
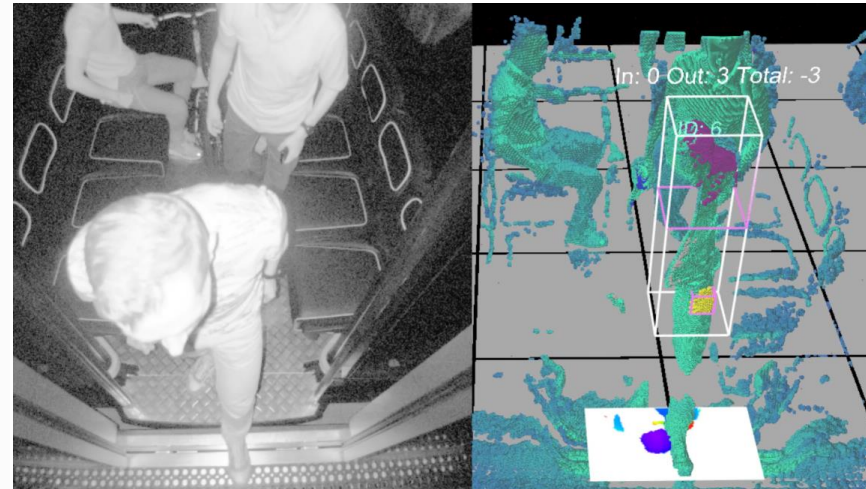
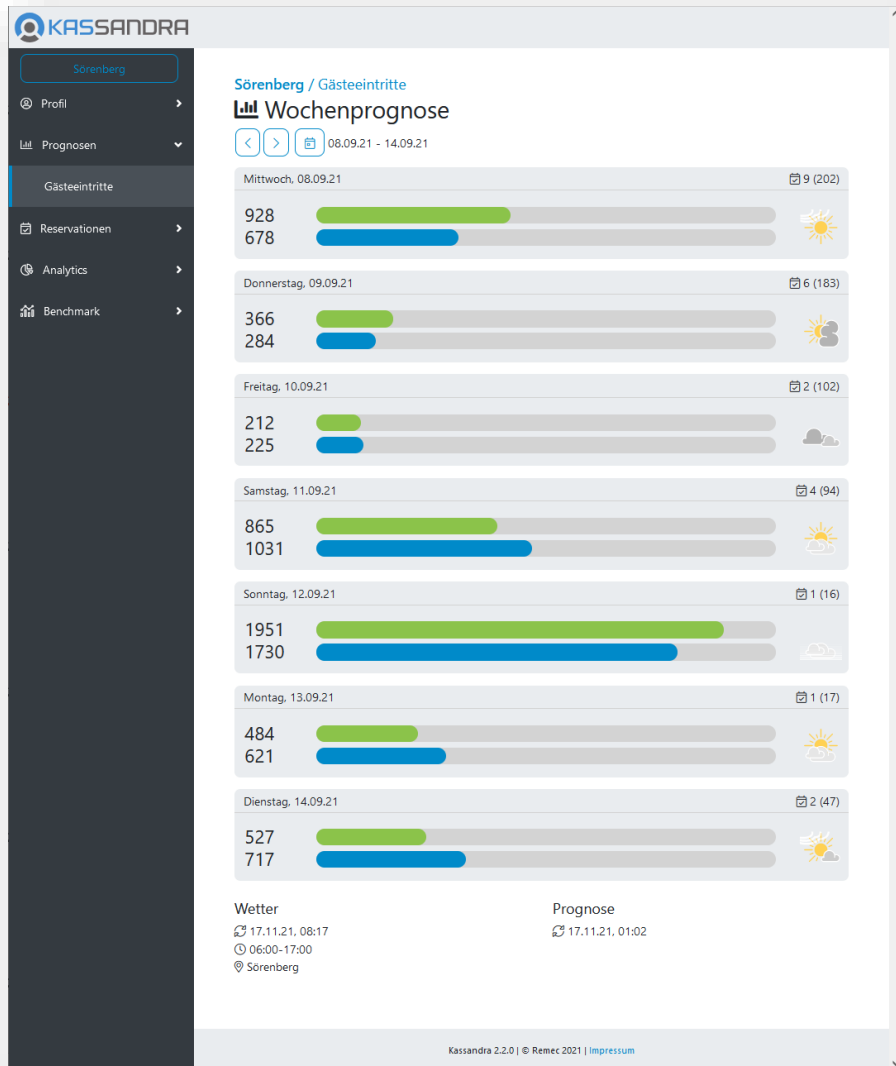
Operator



Authority



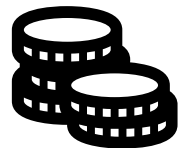
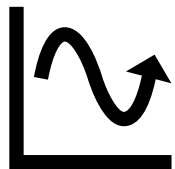
AI - Artificial intelligence



AI - Artificial intelligence

Opportunities

- Dynamic pricing, predictive maintenance, assistance systems for troubleshooting
- Rational, quick decisions detached from emotions
- Increased operational reliability
- Optimization of personnel costs



Threats

- Rules for AI, labeling
- Abuse, blind trust
- Social and sustainable responsibility
- Process know-how is lost



Summary

Opportunities

- Better basis for decision-making
- Maintain know-how
- Optimize operating costs
- Increase availability
- Guarantee safety
- Extend operating times
- Improve staff shortages
- Improve internal/external communication

Threats

- Cybersecurity
- Data protection
- System dependency
- Increasing demands on business organization
- Change in job profiles
- Reduction in guest care
- Loss of process knowledge
- Blind trust in technology

Strengths



Weaknesses



Summary

Question for ChatGPT:

"What are the opportunities and threats of digitalization in the ropeway industry?"

Answer from ChatGPT:

- Opportunities:
 - Improved efficiency
 - Customer experience
 - Data analysis
- Threats:
 - Cybersecurity
 - Dependence on technology
 - Dealing with change





Sisag AG, Switzerland - Marco Zgraggen

marco.zgraggen@sisag.ch

**Thank you for
your attention!**