SmartPORT

The Rubik's cube of logistics

Jens Meier (CEO Hamburg Port Authority)

Slush event, 21.11.2019
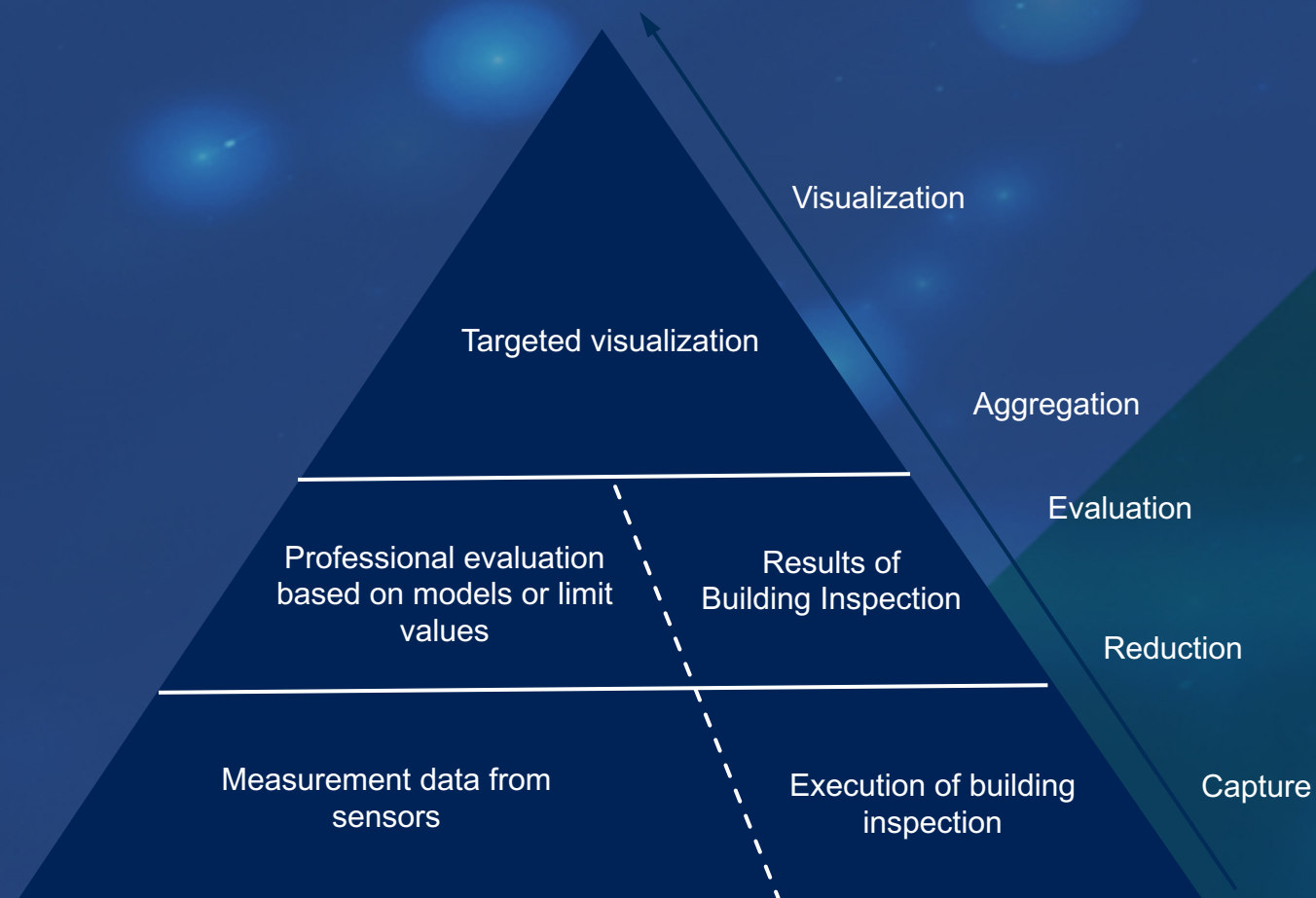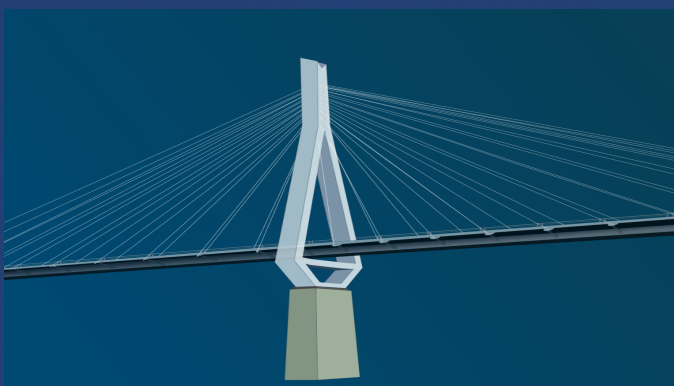
What does smartPORT mean for us?

"The Cube is, at the same time, a symbol of simplicity and complexity."
– Erno Rubik

Embracing digitization: smartBRIDGE Hamburg
A building block for a comprehensive digital port twin

HPA
Hamburg Port Authority

Geometry

State

BIM

Monitoring

➕

DIN 1076

Visualization

Targeted visualization

Aggregation

Evaluation

Professional evaluation based on models or limit values

Results of Building Inspection

Reduction

Measurement data from sensors

Execution of building inspection

Capture

3

Automation: Using autonomous drones to realize the next efficiency frontier of port maintenance and management

Applications	Benefits	Our prototypes
• Automated sounding of port water ways • More accurate and on demand data	• More accurate and on demand data • Cost saving through on precise intervention for waterways maintenance • …	**Unmanned surface vehicles (USV)**
• Automated flights for monitoring of port infrastructure (e.g. port pipeline). • Prevention and management of special events	• Cost effective maintenance • Faster identification of potential infrastructure problems • Better solutions in special events through better images	**Flying drone**

Cyber Security

There are only two types of companies: those that have been hacked, those that will be. Even that is merging into one category: those that have been hacked and will be again

- Robert Mueller -

Cyber Security
Preparing for what's next, not for what was last

HPA holistic approach of cyber security

People

– Awareness –The biggest threat is behind the screen

– Training: Skills shortage, "war for talents"

Technology

– Proactive security, situational security

– SOC

– AI Threat intelligence for attack detection

Process/ Organization

– Collaborative Security

– ChainPORT

– Cyber Alliance,Federal and international

Resilient networks: Availability, safety and security

Lessons learned

1. smartPORT is not a product but a mindset - It means re-thinking all processes and products of a Port Authority with regards to the entire supply chain.

2. Optimizing one aspect of the value chain automatically affects other aspects.

3. True efficiency gains are only realized when innovations lead to vertical and horizontal integration of supply chains.

4. It all about trustful cooperation, we need to redefine the concepts of "competitors" and "partners".

5. Cyber security is not just IT; it is shared responsibility.

There is always a bigger picture →

"Our whole life is solving puzzles."
- Erno Rubik

Thank you for your attention!

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