



# BCG x TIC4.0: Benchmarking Digital and Operational Standards

C-Level Roundtable Discussion at TOC Europe in Rotterdam

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# BCG and TIC4.0 **collaboration** brings together deep strategic, digital, and operational expertise



**David Parlongue**

Managing Director and Partner  
Boston Consulting Group

- BCG is a leading strategic consultancy in wide variety of industry and functional practices
- Deep experience in Marine Ports, working with some of the largest terminal operators, port authorities, and investors



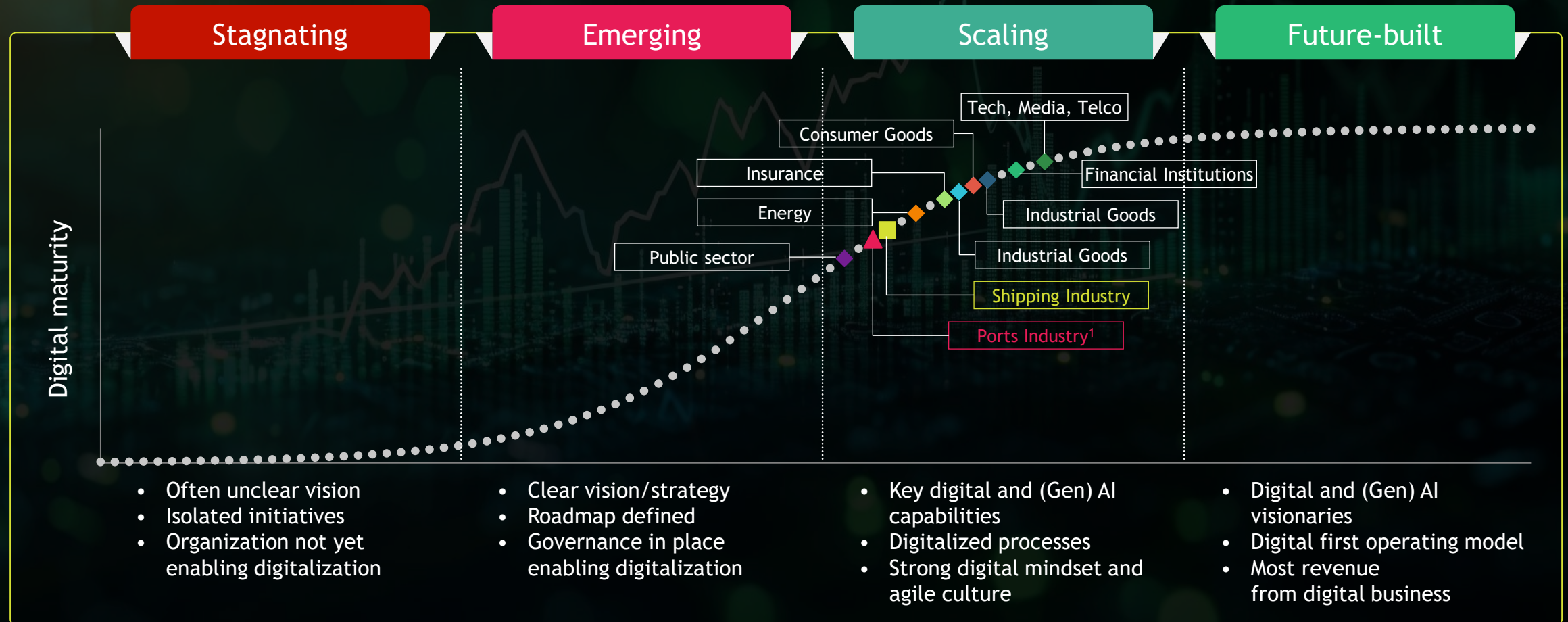
**Boris Wenzel**

President  
TIC4.0



- TIC4.0 is the international not-for-profit association dedicated to the elaboration and promotion of digital standards for the cargo handling industry
  - TIC4.0 regroups 58 global terminal operators and suppliers of equipment, technology and solutions for the terminal industry

# BCGs Digital Acceleration Index sees lack of coverage and advancement in the Ports and Shipping industry



1. Estimated position  
Source: BCG Digital Acceleration Index (DAI)



# Driving the **Future of Port Operations**: The first port industry digitalization benchmarking initiative

Collaboration to raise  
**awareness on the current  
state** of terminal industry  
**automation** and **digitalization**

Prepare to discuss with us!



# BCGxTIC4.0 created 3- section survey to benchmark digital maturity in ports in detail

## FRAMEWORK



### 6-Pillar Terminal Survey<sup>1</sup>

Benchmark of digital maturity in 4 core operational pillars

- Additional coverage of 2 enabler pillars
- 142 questions total



### CEO Survey

Supporting framework with strategic questions for CEOs, covering:

- Awareness of TIC4.0 and its standards
- 8 questions total

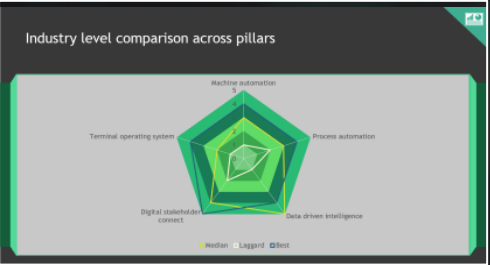


### CIO/CTO Survey

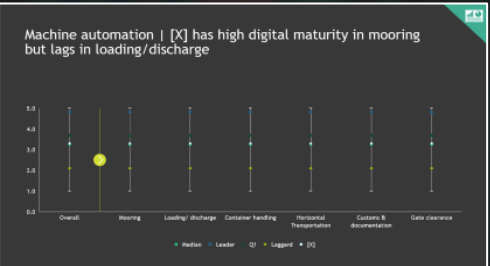
Capture subjective & heterogeneity between respondents, covering:

- Adherence of TIC4.0 standards
- 17 questions total

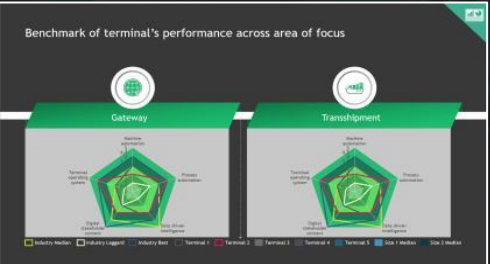
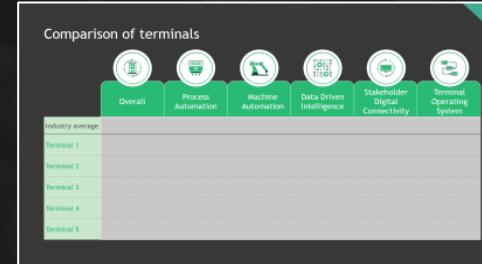
### Summary & Industry review



### Industry Benchmarking



### Terminal assessment



### Exclusive TIC4.0 version



1. To be answered by each participating terminal from every terminal operator. Typical involvement of Head of Operations/Technical department/IT, as well as terminal CEO/managers to complete the survey



# Let's open up the discussion

1 Status of Digital Transformation in the Industry



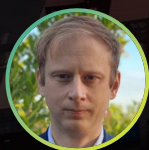
2 Digitalization in ports: Unlocking New Opportunities and Paradigms for Port Terminals



3 Data Standardisation and Interoperability in Port/Terminal Systems



4 The Future of Work in Ports and Terminals



**David Parlongue**  
Managing Director and Partner  
Boston Consulting Group



**Robert Yildirim**  
Chairman & CEO  
Yilport



**Jack Craig**  
VP, Head of Technical  
APM Terminals



**Maksim Mihic**  
Global Executive VP  
DP World



**Harry Nguyen**  
CEO and Founder  
Realtime Business Solutions



**David Moosbrugger**  
General Manager, CTO  
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**Boris Wenzel**  
President  
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