

Pipeline Research Council International

Implementing Research Technologies in the Field: Challenges and Success Stories

PHMSA R&D Forum

[Gary Hines](#)

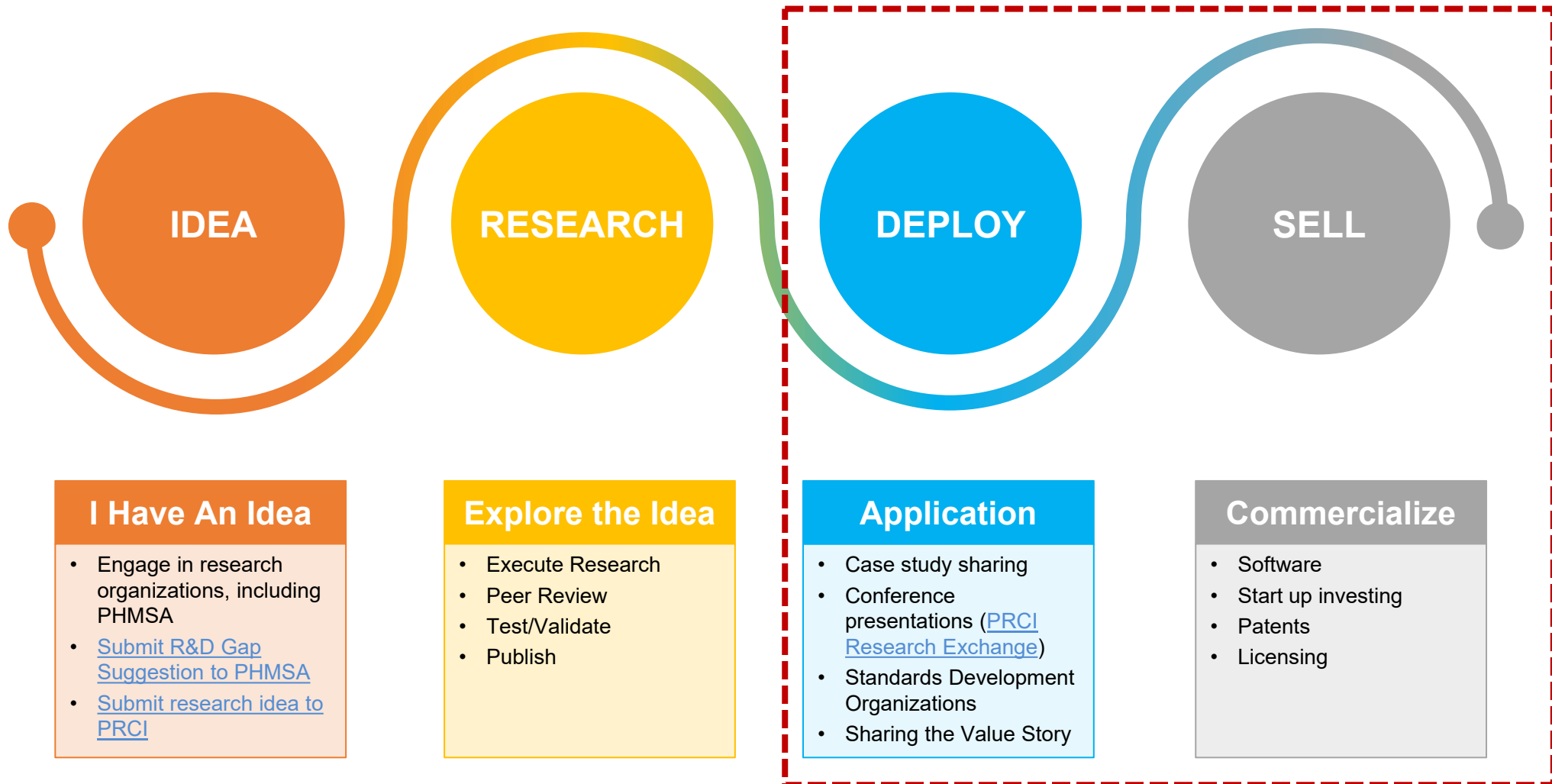
*Vice President, Operations - PRCI
The Westin Crystal City, Arlington, Virginia
31 October 2023*



LEADING PIPELINE RESEARCH

Research Maturity Model – Enhancing Deployment

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A Case Study – Software Deployment

PRCI On-Bottom Stability (OBS) Software

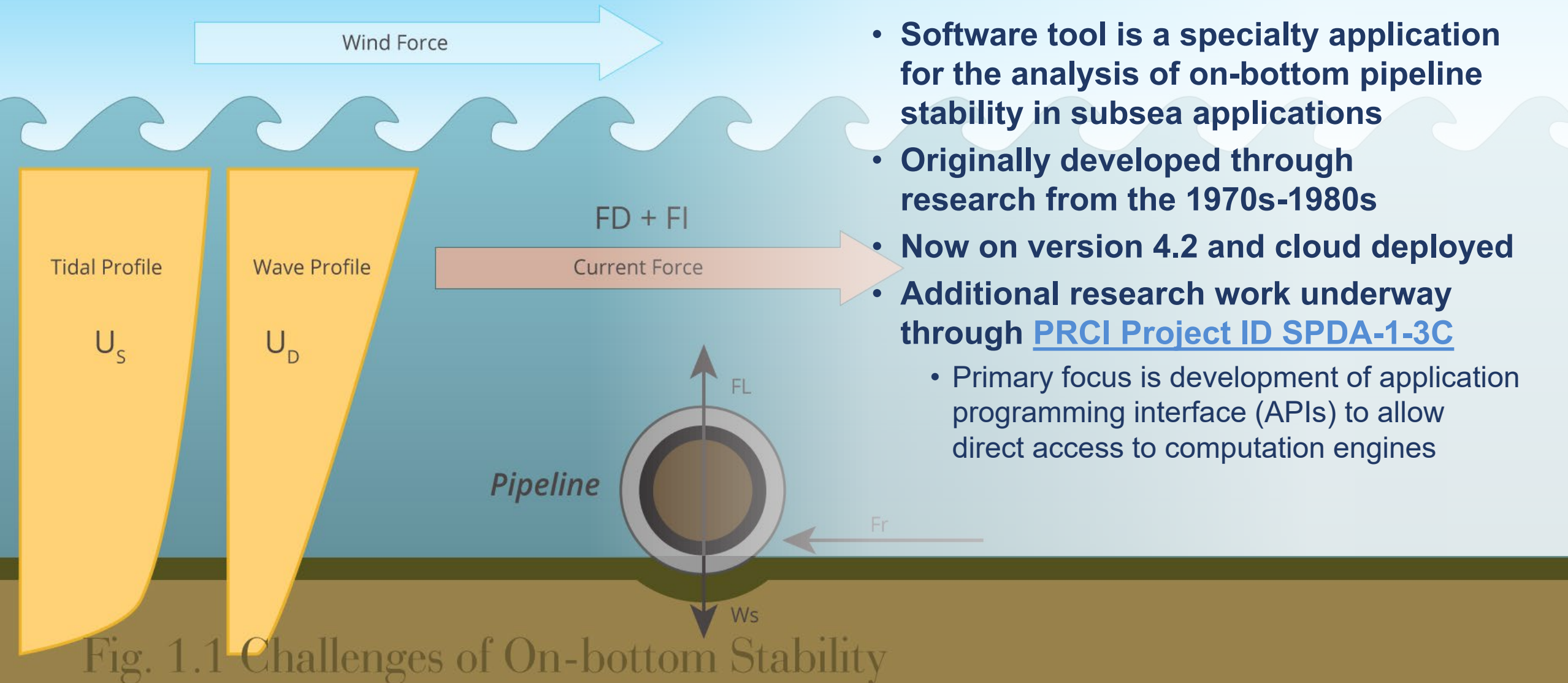


Fig. 1.1 Challenges of On-bottom Stability



A Case Study – PHMSA Co- Funded Research Work

PRCI Strategic Research Priority – *Optimize the Detection and Mitigation of Mechanical Damage*

PHMSA

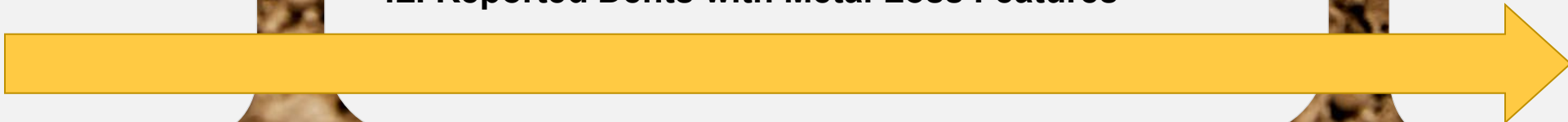
- [Improve Dent/Cracking Assessment Methods](#)
- [Improve ILI Sizing Accuracy](#)
- [Systematize 20 Years of Mechanical Damage Research](#)
- [Validate In-Line Inspection \(ILI\) Capabilities to Detect/Characterize Mechanical Damage](#)

PRCI

- Systematize 20 Years of Mechanical Damage Research
- Improve Dent/Cracking Assessment Methods
- Testing of Dents Removed from Service
- Validate In-Line Inspection (ILI) Capabilities to Detect / Characterize Mechanical Damage
- Analysis of Pipeline Operator and Prior R&D Data
- Improvement to Mechanical Damage Engineering Assessment Tools
- Fatigue Life Model for Pipelines Containing Dents and Gouges
- Development of Guidance Document for Performing ECA in Accordance with Mega Rule
- Verification of Screening Tools for Classification of ILI Reported Dents with Metal Loss Features

API

[API RP 1183:
Measuring and
Assessing Dents
in Pipelines](#)





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Additional Efforts

PRCI Content Delivery Enhancements

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Research Value

- Impact to operations, regulations, standards, safety and effectiveness

Operational Framework

- Mapping research to globally recognized competencies, align and integrate with other research

Standards Development Organization Coordination

- Standards Development Organizations deployment (API, AMPP, ASME, AGA, GERG, and others)

Enhance Research Final Reports

- Enhancements for ease of use

PRCI Connect

- Focused communities for online engagement to discuss challenges and where to find solutions

Share Moments

- Similar to safety share and focus of this PHMSA R&D Panel Discussion – incorporate in meetings



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Thank you