PHM Education and Professional Development

Panel Session 10

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- EHM Capability Development for Corporate, Regional, & Unmanned Applications

Challenges

1. Develop competency strengths and expertise with continuously engaged professionals

2. Leverage practical, industry experience to complement theory based education

3. Recognize implementation challenges in educational projects

Challenge 1

- Problem: Lack of continuity in developing and engaging experts weakens the potential competency strength
- Implication: Engagement is subject to current role, resulting in frequent turnover and loss of potential competency strengths
- Solution: Engage students and early professionals and provide opportunities for a continuous path of professional development from student to early professional to expert

Challenge 2

- Problem: Academia provides excellent education on theoretical aspects of engineering giving students a good grounding, but needs to move with the times, e.g. Big Data, IoT, practical use of analytical techniques
- Implication: The leap from academic study to Industry exploitation can be great (known as technology “valley of death”)
- Solution: Engage Industry experts to provide lecture material on practical aspects of EHM implementation, lessons learned, etc. to complement theory

Challenge 3

- Problem: Academic research is often carried out without significant constraints, e.g. processing power, data frequency, and other resources.
- Implication: Key barriers to implementation exist, e.g. certification, processing, data access, business case, etc.
- Solution: Utilise Industry experts with experience in EHM system implementation to peer review academic studies. This can be achieved through partnering between Industry and Academia.