







Affiliation: President, Blue Holon INCOSE Director for Strategic Integration



## Leading for a Sustainable Future

**Biography.** For over 30 years, David has helped organizations around the world increase their systems engineering proficiency while simultaneously working to advance the state of the art. He works with government and commercial organizations as they assess, adopt, and deploy new methods and tools to enhance their engineering enterprise.

Throughout his career, David has played a key technical and leadership role in advancing and expanding the practice of systems engineering. David founded and led Vitech where he developed innovative, industry-leading methods and software (CORE™ and GENESYS™) to engineer next-generation systems.

David is a frequent presenter at industry events worldwide delivering keynotes and workshops spanning the foundations of systems engineering, practical model-based systems engineering, digital engineering, and the future of engineering systems. His experiences and efforts led him to co-author the book A Primer for Model-Based Systems Engineering to spread the fundamental concepts of this key approach to modern challenges.

An INCOSE Fellow and Expert Systems Engineering Professional, David was the 2014/2015 President of INCOSE. David currently serves as INCOSE's Director for Strategic Integration and as a coach in INCOSE's Technical Leadership Institute. David holds a bachelor's degree in Engineering Science and Mechanics as well as a master's degree in Systems Engineering from Virginia Tech.

**Abstract:** Complexity is a dominant theme of the 21st century as we bemoan that the world around grows ever more complex. We create much of this complexity ourselves as we leverage new technologies in pursuit of larger, more audacious undertakings. At the same time, some of what we observe as new complexity was always present. We simply were not aware of it.

Our interrelationship with the world around us falls into the category of complexity that has always been present but is only now entering (or re-entering) our consciousness. In pursuit of our more audacious goals, we often neglect or intentionally deprioritize sustainability. Today we recognize that this is not a mindset we can continue.

As systems engineers, what can we do to create a better tomorrow for ourselves and future generations? The answer is far more than we might think. Leveraging our principles and positions, we can have a unique and positive impact as we address the question of sustainability. We can lead through influence, identifying and exploiting specific intervention points as we look upstream, downstream, and outward at the product, enterprise, and societal levels. We can embrace the challenge before us, leveraging our strengths in combination with those around us, to lead for a sustainable future.