

# Everything you Wanted to Know about Technical Leadership but were Afraid to Ask

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**Keywords.** technical leadership;journey;vision;strategic thinking;diversity;institute for technical leadership;TLI

**Topics.** 3.5. Technical Leadership;

**Abstract.** Let's be honest.

If the "How to Become a Technical Leader" guide existed, we would all already own copies and be following it. But it doesn't.

We do, however, have each other and our shared experiences.

What technical leadership questions are keeping you up at night?

- How do I create and hold a leadership vision?
- Where does strategic thinking come into play as a technical leader?
- How do I balance diversity and inclusion?
- How do I develop capacity for change?
- What challenges are ahead what which approaches to try?

Come to this panel, ask those questions, hear the valuable insights that only come with experience and having been through the struggle, and learn some ways to navigate and influence the way forward from others who have found the way!

(What works and what fails epically – there are bound to be good stories).

And who knows, maybe you'll meet a fellow INCOSE member who shares in your struggle that can help you or better yet you can embark on the journey together.

(A little networking never hurt anyone.)

A panel covering three continents, four industries, and decades of technical leadership at your disposal for a candid dialog. All phases of leadership journeys are welcome!

INCOSE's Institute for Technical Leadership will provide questions to get the discussion going.

## Biography

### Kerry Lunney (Thales Australia)

Ms Kerry Lunney has extensive experience developing and delivering large system solutions, including design, software development, infrastructure implementation, hardware deployments, integration, sell-off, training and on-going support. She has worked in various industries including ICT, Gaming, Financial, Transport, Aerospace and Defence, in Australia, Asia and USA. The systems delivered include combat systems, mission systems, communication systems, road and rail ITSs, flight simulators, security systems, vehicle electronic systems, gaming systems and ICT foundation systems. Kerry is Country Engineering Director and Chief Engineer in Thales Australia. In this role she provides technical leadership and governance on bids and projects, delivers technical training programs, and participates on a number of Technical Boards and Communities of Thales. Recent roles include Chief Systems Engineer, Solutions Architect and Design Authority. Kerry is a member of IEEE, a Fellow Member of Engineers Australia with the status of Engineering Executive and Chartered Professional Engineer, and holds the Expert Systems Engineering Professional (ESEP) qualification from the International Council on Systems Engineering (INCOSE). In addition to her "day job", Kerry is the INCOSE President-Elect. She has also been a past-INCOSE Sector Director for Asia-Oceania, a past-National President of the Systems Engineering Society of Australia (SESA), the Australian Chapter of INCOSE, and has held various roles on conference and events committees and University program advisory boards throughout her career.

### Position Paper

Making the jump from engineer to expert to executive

As an engineer, you've had to develop highly specialised technical skills and make critical decisions within a niche area of knowledge. However, as a leader, your scope of strategic input will widen, becoming responsible for a wide range of people and projects. So how do you transition from an engineer to technical expert into a strategic leader? Questions such as –

- How do you create shared values

- How to manage your time effectively
- How do you create trust and delegate responsibility

are typically not taught in engineering programs and may be invested in during your working career.

The journey you may undertake in your career will take detours and you will travel along new paths not envisaged from the onset. I will endeavour to walk you through some of the highs and lows of my career path to date outlining what worked, what I experienced and the “gotchas” to be aware of. My journey has included working on very diverse programs, living in Australia, India, Sri Lanka, Thailand, New Zealand and USA, not to mention many other locations where I had short postings across the world.

I can honestly say the jumps from engineer to expert to executive did at times feel like I was traversing hurdles in a maze, but my compass still remained true! However I recognise that change we are experiencing as part of the 4th industrial revolution will require change in leadership to be truly effective. As such my compass will still remain true but my journey will continue. As part of this panel I will discuss possible impacts and variations in leadership styles, techniques and priorities to lead going forward.

#### **Stueti Gupta (BlueKei Solutions)**

Stueti is an experienced Systems and Architecture lead as well as has been manager for off-highway equipment automation teams. She has led systems engineering research projects and co-led Systems Engineering competency development at the technology center during her tenure at John Deere India, largely around Model Based Systems Engineering. She has some publications in this area, one of which received the best paper award at an international conference. Stueti studied at BITS Pilani, and completed her second masters from Cornell University, USA. She also received formal certification in Systems Design and Management from Massachusetts Institute of Technology, USA. She is actively involved in the International Council on Systems Engineering and is also the President of India Chapter. Stueti has held various leadership roles in Society of Women Engineers locally in India as well as in global initiatives.

#### **Position Paper**

It is often said that being a frontline manager is like walking on fire. Well it is. Let's say you might be visualizing a successful career as an individual contributor and probably a technical one. And then suddenly you are asked to lead teams. Several aspects come in light the moment you step into manager shoes. One end of the spectrum is meeting team or function KPIs, managing stakeholder requirements, continue to be technically involved and other end of spectrum is making people / team successful or resolving conflicts and others such become prime important. It gets overwhelming but transition to a leader role can be managed and enabled if we engage and expose ourselves to community leadership roles such as those in INCOSE, SWE or other professional organizations. The leadership roles teach you to achieve goals that you have set, manage teams while no one is reporting to you, keep people motivated and engaged and connect with the higher purpose. Many of these aspects are transferable skills you can bring to your day job.

For me leadership is all about

- Creating a career capital which provides you the direction to grow
- Building and leveraging your network to continuously learn through conversations or mentoring
- Develop and support others on the way

Building and investing in the support system around you, whether within family or extended family, at work or among friends, to make it all work for you

#### **Courtney Wright (V1 Decisions, LLC)**

Courtney Wright is an INCOSE Certified Systems Engineering Professional with twenty years of systems engineering experience. She has a bachelor's degree in Mechanical Engineering from the University of Virginia and a master's degree in Operations Research from Georgia Institute of Technology. After working as a contractor for the US Air Force, NASA, and the Federal Aviation Administration, she joined INCOSE as the Program Manager for the Certification Program.

#### **Position Paper**

I've always been a good manager. Since childhood, teachers have recognized my skills at alphabetizing, following rules, and speaking politely. This set the groundwork for being a leader. I prefer to lead by steering, rather than dictating, even when I have the authority that I'm allowed to dictate. I think this comes in part from being a woman in engineering – I was always noticed and almost always given a chance to speak, leaving it up to me to make the most of that attention. The other big part of my leadership development is that I've rarely been in situations where I'm significantly smarter than those around me. I heard a study described on public radio, so it may have been a joke, but the summary was that those people who are most attractive in high school are less successful in life, because they did not have to develop a personality or academic skills in order to have positive experiences. Similarly, I think it's a disadvantage to developing soft skills for someone to be the smartest or most powerful person in their environment. I've walked away from situations where I was easily at the top in those ways, preferring challenges.