

## KEY OUTCOMES: Creating Opportunities for future Generations

### Introduction:

At our Leadership 2025 workshop, we began by considering some of the challenges and advantages of life in 2025, ie how might engineering leadership influence and be influenced by the business and social environments of the time? While we recognised that we cannot predict the future with any degree of certainty, it was useful to speculate on possibilities to inform our thinking during the evening.

### Key Leadership Themes and Requirements in 2025 – Our Approach:

Following this brief introduction to life in 2025, we first considered in our small groups the following questions:

1. **What might be the attributes of successful leadership in 2025?**
2. **What are the characteristics of the business and social environments where engineering leadership will be exercised in 2025?**
3. **What skills and competencies would a leader in 2025 require?**

We then grouped the wide range of ideas and thoughts that were generated into themes to assist us to make sense of the complexity. The themes that emerged are summarised below and outlined in more detail in the Attachment. The raw data generated from these processes and further detail on the workshop approach is accessible in the CELM Chapter Section of the Queensland Division website. Please contact Kathryn Norton at Engineers Australia (telephone 07 3832 3749 or email knorton@engineersaustralia.org.au) for further information.

### Outcomes - Key Competencies for Leadership in 2025:

1. **Capacity to make things happen in a changing and complex business world**
  - Consider political, technical, economic, cultural and social complexities
2. **Consultative, compassionate approach and the ability to draw the best out in others**
  - Relationship skills
  - Ability to understand people and guide the achievement of good outcomes
  - Capacity to develop a business culture that values performance and integrity

### 3. **Fundamental technical skills**

- Traditional leadership and management skills
- Understanding the political, technical, economic, cultural and social complexities and incorporating these considerations in business decision making

### 4. **Work/lifestyle balance**

- Addressing work/lifestyle balance issues
- Embracing diversity

### 5. **Vision, focus and execution**

- Capacity for strategic thinking, developing strategy and executing chosen strategy well
- Ability to get things done
- Capacity to see big picture trends in a complex/diverse world

### 6. **Holistic approach**

- Capacity to integrate and optimise strategies, systems, processes, technologies, relationships, structures

### Outcomes – Key Features of the Business and Social Environment in 2025:

#### 1. **Global challenges and increasing complexity**

- Global organisations transcending political boundaries with a localising presence
- Social and environmental impact a critical factor in business decision making

#### 2. **Information and knowledge management**

- Knowledge capture and management crucial
- Continual learning
- No secrets – actions cannot be hidden

#### 3. **Rapid pace of change**

- Rapid decision making

#### 4. **Fuzzy fluid structures**

- Distributed networks
- Whole of systems thinking

### Outcomes - Key Personal Attributes required for successful Leadership in 2025:

- Ability to understand and respect self and others
- Proactive and open to innovation
- Insightful
- Inspirational and passionate
- Courteous and civil
- Capacity to influence with integrity

## KEY OUTCOMES: Creating Opportunities for future Generations

### Outcomes - Practical Measures for Addressing these Requirements

In our small groups, we then considered the practical measures that might be taken to develop excellence in engineering leadership and management performance in the coming decades. A summary of the key thoughts and suggestions follows and is provided in more detail in the Attachment.

#### 1. Engineers Australia and the wider engineering community- new roles and initiatives:

- Publicly recognise excellence in engineering leadership and management
- Take the lead in futures thinking and implementing new ideas
- Lobby for sustainable outcomes in regulatory environments

#### 2. Engineers Australia and the wider engineering community: values, ethics, integrity:

- Create a culture that values people both within and without the organisation
- Foster transparency and communication
- Incorporate community needs and values in decision making

#### 3. Developing role and behavioural models:

- Spread good leadership attributes through "lead-by-example"

#### 4. Recruitment practices:

- Recruit based on social aptitude not just technical aptitude
- Consider wider capabilities: individuals, employees, profession, society
- Assess people for leadership potential – support career choices (management and technical)

#### 5. Tertiary engineering education:

- Incorporate introduction to self-awareness and people management/development modules
- Incorporate basic business skills modules

#### 6. Ongoing career development:

- Provide structured career development (including in non-engineering fields) and succession planning
- Recognise the need for and nature of ongoing professional development, including essential leadership and management requirements and planned exposure to various experiences
- Provide focussed workshops on specific topics where skills can be learnt and behaviours practised
- Foster mentoring, rotation and exchange

#### 7. Personal skills building:

- Develop an understanding of character structures - working out and working to what inspires each individual
- Become self-aware
- Develop confidence and personal style

**DETAILED OUTCOMES:**  
Creating Opportunities for future Generations



**LEADERSHIP 2025**

- SKILLS + COMPETENCIES
- LEADER
- ENVIRONMENT

## DETAILED OUTCOMES: Creating Opportunities for future Generations

### Detailed Outcomes - Key Competencies for Leadership in 2025:

#### 1. Capacity to make things happen in a changing and complex business world

- Consider political, technical, economic, cultural and social complexities
- Capacity to engage successfully with differing audiences and stakeholders
- Capacity to work with and within the community and with differing audiences and stakeholders
- Capacity to market and sell capability and value to clients
- Client focus

#### 2. Consultative, compassionate approach and the ability to draw the best out in others

- Relationship skills
- Ability to understand people and guide the achievement of good outcomes
- Capacity to recognise and utilise potentials, diversity and synergies in people and teams
- Capacity to create a nurturing environment where people can develop continuously (both staff and wider teams in which the business participates)
- Capacity to develop a business culture that values performance and integrity

#### 3. Fundamental technical skills

- Traditional leadership and management skills
- Understanding emerging business and social trends and addressing their impact
- Understanding changing business and social environmental contexts
- Understanding the political, technical, economic, cultural and social complexities and incorporating these considerations in business decision making

#### 4. Work/lifestyle balance

- Addressing work/lifestyle balance issues
- Embracing diversity
- Understanding and addressing the wider needs of staff and their dependants

#### 5. Vision, focus and execution

- Capacity for strategic thinking, developing strategy and executing chosen strategy well
- Ability to get things done
- Capacity to see big picture trends in a complex/diverse world
- Capacity to manage big picture requirements and detail simultaneously
- Capacity to communicate vision, business focus and execution requirements effectively to various audiences

#### 6. Holistic approach

- Capacity to integrate and optimise strategies, systems, processes, technologies, relationships, structures
- Capacity to conduct business in an ethical manner in partnership with the community

### Detailed Outcomes – Key Features of the Business and Social Environment in 2025:

#### 1. Global challenges and increasing complexity

- Global organisations transcending political boundaries and localising presence
- Global environment could be comprised of local business cells retaining human contact
- Social and environmental impact a critical factor in business decision making
- More self-regulation, perhaps less government

#### 2. Information and knowledge management

- Knowledge capture and management is crucial
- Continual learning
- Boundary-less environment that ensures information is readily accessible (“push” and “pull” features)
- User friendly decision support systems
- No secrets – public access to business information and what was previously accepted as IP – actions cannot be hidden

#### 3. Rapid pace of change

- Rapid decision making
- Decisiveness

## DETAILED OUTCOMES: Creating Opportunities for future Generations

### 4. Fuzzy fluid structures

- Distributed networks
- Whole of systems thinking
- Strategic alliances
- Virtual teams
- Multi-disciplinary teams
- Team of leaders
- Thinking partners and thought leaders
- Technologies to encourage peace, joy, harmony, productivity and constructive relationships

### Detailed Outcomes - Key Personal Attributes required for successful Leadership in 2025:

- Ability to understand and respect self and others
- Proactive and open to innovation
- Insightful
- Inspirational and passionate
- Courteous and civil
- Responsible and accountable
- Versatile and flexible
- Credible
- Comfort with “touchy feely” approaches
- Capacity to embrace and lead change
- Capacity to harness expertise, experience and technology
- Ability to exercise value judgements
- Capacity to influence with integrity
- Capacity to communicate strategy and big picture concepts in a simple effective way

### Detailed Outcomes – Practical Measures for Addressing these Requirements

#### 1. Engineers Australia and the wider engineering community- new roles and initiatives:

- Implement a competency based award for Chartered Engineering Executive through Engineers Australia
- Publicly recognise excellence in engineering leadership and management
- Take the lead in futures thinking and implementing new ideas
- Institute leadership mentoring
- Take the lead in embracing diversity and work/lifestyle balance management
- Lobby for sustainable outcomes in regulatory environments
- Establish communities of practice

#### 2. Engineers Australia and the wider engineering community: values, ethics, integrity:

- Reward good leadership
- Give meaning to work
- Create a culture that values people both within and without the organisation
- Senior management to model the desired behaviours
- Encourage balance between work, family and persona commitments
- Maintain person to person contact
- Foster transparency and communication
- Incorporate community needs and values in decision making
- Integrate engineering developments within community

#### 3. Developing role and behavioural models:

- Spread good leadership attributes through “lead-by-example”
- Ensure good leaders are available for other leaders to absorb new behaviours “by osmosis”

#### 4. Recruitment practices:

- Recruit based on social aptitude not just technical aptitude
- Encourage job mobility
- Broaden the base of recruitment
- Consider wider capabilities: individuals, employees, profession, society
- Assess people for leadership potential – support career choices (management and technical)
- Recognise that diversity and a wide skills folio can be advantageous

#### 5. Tertiary engineering education:

- Incorporate introduction to self-awareness and people management/development modules
- Add value to touchy feely stuff for students – seeing and understanding
- Incorporate basic business skills modules
- Incorporate community service

## DETAILED OUTCOMES: Creating Opportunities for future Generations

### 6. Ongoing career development:

- Regular performance feedback and appraisal accepted as routine
- Provide structured career development (including in non-engineering fields) and succession planning
- Recognise the need for and nature of ongoing professional development, including essential leadership and management requirements and planned exposure to various experiences
- Consider career competencies – technical, social, legal, financial, relational, business, marketing (achieved by training, learning, mentoring, experience, targeted applications), including in:
  - Strategic thinking/processes
  - Understanding complexity
  - Understanding the value of having the ability to see the big picture in a diverse and complex world
  - Maintaining focus on the “global game” while managing local needs
  - Determining competitive advantage
  - Client relationships development
  - Support systems design and decision making
  - Strategy and integration
  - Simplifying problems and solutions (ability to make judgements/decisions with limited information)
  - Language skills in recognition of multi-cultural trends
  - Communications skills including multimedia
  - Community service
  - Expertise of other disciplines
  - Innovation and creativity
  - Systems thinking
  - Marketing and selling skills
- Define the optimum working week in productivity and sustainable terms
- Provide focussed workshops on specific topics where skills can be learnt and behaviours practised
- Allow staff more exposure to world big picture trends (travel)
- Foster mentoring
- Foster rotation and exchange
- Provide exposure to leaders from other disciplines, including by participation in fora of other professions and involving other professions in our fora to challenge engineering ‘groupthink’

### 7. Personal skills building:

- Understand character structures - working out and working to what inspires each individual
- Become self-aware
- Develop confidence and personal style
- Embrace change as a means of developing awareness of complexity