**Importance of Professional Associations**

The importance of professional associations like the Institute of Electrical and Electronics Engineers (IEEE) and Engineers Ireland are invaluable for a practicing and professional engineer. They not only promote engineering to outside community but also help establish and maintain a set of standards for professional engineering and engineering education, as well as standards of ethics and conduct, ensure that qualified candidates are granted their professional titles, act as an authoritative voice for the engineering profession as well as providing opportunities for engineers who are still in a stage of career development1.

As a governing body over engineering, both in the world and in Ireland, professional associations provide a base for healthy competition including excellence awards (IEEE Milestones in Electrical Engineering and Computing) and peer reviewing, which improves the quality of products and services developed in the area of electrical and electronic engineering and computing. As a result we have seen a technological movement in our field that has progressed at a far more rapid rate than any other sector. This has allowed electrical and electronic engineers, as well as those involved in computer development, to enter the lives and homes of almost everyone in the planet. Inventions such as the internet, mobile phones, computers and so much more have progressed exponentially due to the standards and visions of the entire engineering community as a whole.

The IEEE alone has more than 430,000 members internationally making it the largest the largest professional association in the world2. With all these people combined the wealth of knowledge and ideas for innovative new technologies is indescribable and affords engineers to push the boundaries of what we as a people believe possible. They create an environment where members collaborate on world‐changing technologies – from computing and sustainable energy systems, to aerospace, communications, robotics, healthcare, and more3.

As bodies which also deal largely in the peer reviewing and publication of new technologies, engineers are given the opportunity to both assist and provide positive criticism which can later be used to assist in further development. The IEEE alone publishes nearly a third of the world’s technical literature in electrical engineering, computer science, and electronics. This includes approximately 170 transactions, journals, and magazines published annually. In cooperation with John Wiley and Sons, Inc., IEEE also produces technical books, monographs, guides, and textbooks4. These textbooks are then used to impart knowledge onto a new generation of engineers providing a platform of knowledge from which innovation can grow. They also provide a reputable and trusted bank of information which can then be referenced and cited in further technological papers.

Professional associations also provide financial aid for some companies and/or individuals who are in need of financial assistance. Grant schemes are commonplace and give those who otherwise would not have been able to a foothold in an ever-growing ever-changing environment. They also provide capital for workshops which can then be used which assist in the spreading and sharing of information throughout the technological sector5.

Furthermore they provide a wealth of experience and know how, as well as a number of different assistance options for those running businesses in the sector. Be that management or personal development courses, professional accreditation, or patenting. Professional associations provide the means for businesses and individuals alike to improve themselves and in doing so the standards of engineering in the world today.

Professional associations also help spread a vision for the future. In the IEEE and Engineer’s Ireland’s case, a vision were technology continues to assist in the everyday lives of the people around us as well as ignite wonder and provide deeper meaning to physical phenomena.

As detailed above professional associations like the IEEE and Engineers Ireland are invaluable to a practicing engineer in the world today and unquestionably have assisted in shaping the world around us immeasurably.

**CITATIONS, REFERENCES AND READING MATERIAL**

1. <http://www.engineersireland.ie/About.aspx>
2. <https://www.ieee.org/about/today/at_a_glance.html>
3. <https://www.ieee.org/about/index.html>
4. <https://www.ieee.org/about/today/at_a_glance.html>
5. <https://www.ieee.org/about/today/at_a_glance.html>