



In plain sight - Engineers, Engineering and Ethics

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Abstract

Engineering is everywhere and underpins so much of what we expect and need in our daily lives, yet engineers are not generally prominent in society and are perhaps not valued for the role they play.

As Dervilla reaches the later stages of her career in Arup she is reflecting on what is it to be an Engineer, what is Engineering and how do we behave ethically than enables our profession (in the widest sense) to be valued and have a strong reputation in the public eye.

She is considering the changing perceptions of engineers, with a particular focus on the changes she has seen during her career; whether they be the way we work, the tools we use or the diversity in our workplaces.

She will highlight the challenges and opportunities we face and look in particular at some of the ethical dilemmas as we need to navigate in a world where climate change remains a challenge and increasing use of technology and data requires us to adapt and change at an ever-increasing pace.

Keywords: engineer, engineering, ethics, reputation, Arup

1 Introduction

Engineering is everywhere and underpins so much of what we expect and need in our daily lives, yet engineers are not generally prominent in society today and are perhaps not valued for the role they play.

Engineering is defined as

- the branch of science and technology concerned with the design, building, and use of engines, machines, and structures and
- the action of working artfully to bring something about.

This is perhaps a bit dry and based upon the engineers I know this definition does not capture the imaginative, creative and collaborative team players that I see working across our profession.

The word engineering comes from the Latin word *ingenium* which I am informed means innate quality particularly in mental power, and that has largely been my experience of engineers. They are frequently both clever and creative shaping the world around them. They are sometimes visionary, but all have the power to turn ideas into reality.

One of the most rewarding aspects of a career in Engineering is the breadth and variety of the role we can and do play. As Engineers we have the opportunity to deal with large scale challenges as well as looking at things in detail.