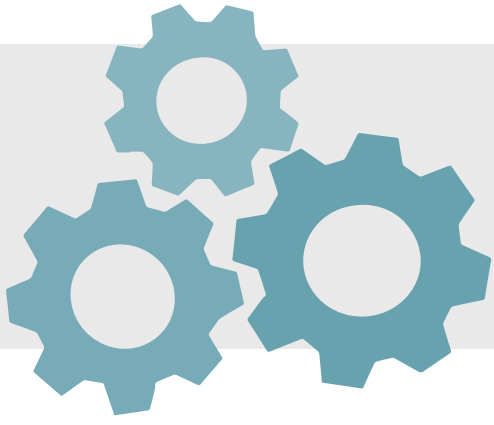


# 4 INFORMATION CHALLENGES FOR THE MODERN-DAY ENGINEER

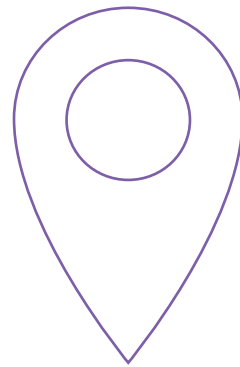


THE MODERN-DAY ENGINEER FACES  
MORE INFORMATION CHALLENGES THAN  
THEY DID DECADES AGO.

#1

## THEN

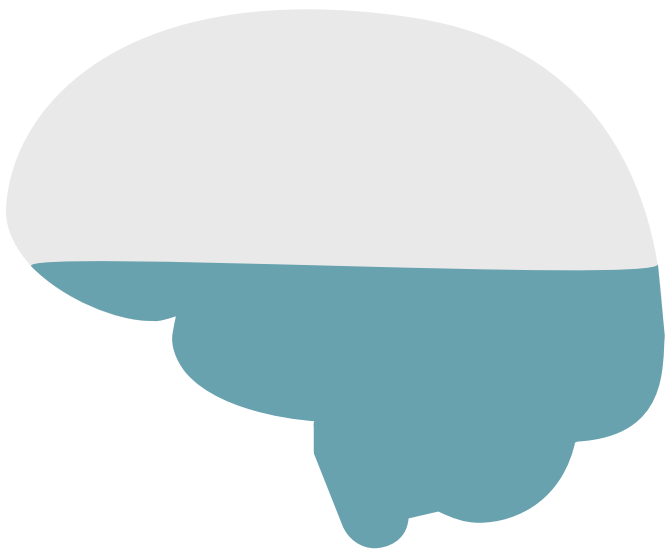
Changes in engineering followed changes in technology and the world.



## NOW

Constant changes in technology and society means engineering continually evolves and adapts.<sup>1</sup>

Scientific and engineering knowledge presently doubles every 10 years (Wright, 1999).<sup>5</sup>



#2

## BRAIN DRAIN<sup>2</sup>

THE BABY BOOMER GENERATION IS RETIRING AND TAKING THEIR CAREER KNOWLEDGE ALONG LEAVING A LARGE GAP OF KNOWLEDGE FOR ENGINEERS. In order to avoid research redundancies, engineers need to be able to source the same information their predecessors knew.

#3

### DOING MORE WITH LESS

Challenges in recruiting and hiring often leaves teams shouldering more work with less staff

**AND LESS INFORMATION.**

# 990 HOURS

the length of time it takes for a typical startup to hire 12 engineers.<sup>4</sup>

#4

### GREATER JOB COMPLEXITY

Engineers must understand new and emerging technologies in their area of focus AND have knowledge of other engineering-related subjects to have the full picture.

#### TWO TYPES OF ENGINEERING KNOWLEDGE



conceptual



procedural

(Sheppard et al. 2009).<sup>3</sup>

With so many information challenges, why not ensure engineers are provided with a constant? With access to industry publications including journals, books, conference papers and more, **Engineering Source™** meets the information needs of engineering professionals of all types.

SOURCES 1. <http://www.nap.edu/read/10999/chapter/2>  
2. [http://www.ptsstaffing.com/insights/0605\\_where\\_are\\_the\\_engineers.pdf](http://www.ptsstaffing.com/insights/0605_where_are_the_engineers.pdf)  
3. Zhou, C. (2012). Fostering creative engineers: a key to face the complexity of engineering practice. European Journal Of Engineering Education, 37(4), 343-353. doi:10.1080/03043797.2012.691872

4. <https://techcrunch.com/2013/12/21/how-to-hire-more-engineers-in-less-time-2/>  
5. National Academy of, Engineering. Educating The Engineer Of 2020 : Adapting Engineering Education To The New Century. Washington, D.C.: National Academies Press, 2005. eBook Collection (EBSCOhost). Web. 28 June 2016.