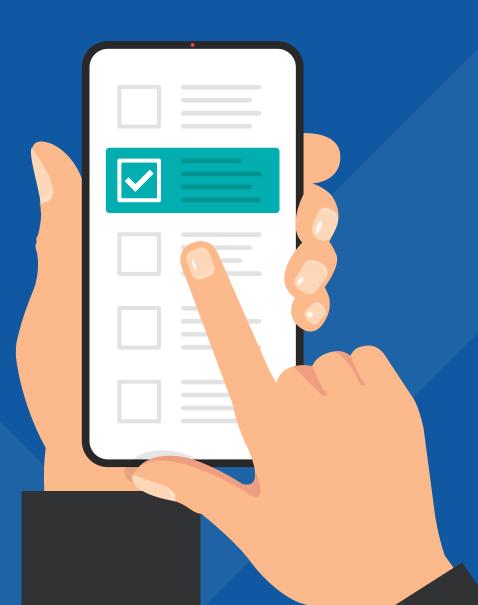
BY THE NUMBERS:

ENGINEERS AT WORK, APART AND TOGETHER

A survey of engineers during the first weeks of the widespread stay-at-home orders shows how – and how well – things are going.



BY JEFFREY WINTERS

ASME Market Intelligence conducted a survey in early April 2020 of nearly 3,000 engineers to learn how engineers are faring in the face of large-scale stay-at-home orders. The engineers worked in a wide variety of situations, from the industry to academia, but their responses shared a lot of common ground.

For instance, 80 percent anticipated that their organization's operations were going to change due to the coronavirus outbreak, with reduction in travel, postponement of projects, and loss of customers being the top impacts.

Most companies had expanded work-at-home options, which was needed since 70 percent said they were required to stat at home. Around 70 percent of professors and students reported conducting classes online in early April, and that figure would grow as many schools were still suspended at that time.

The engineers surveyed expected a great deal of their work lives to change. Most saw a marked increase in the use of online conferences and training, while one-third of the engineers in industry anticipated significant changes in their company's supply chain.

HOW IS YOUR COMPANY CURRENTLY AFFECTED BY COVID-19? (ENGINEERS IN INDUSTRY ONLY)

Reduction or elimination of travel budget	52%
Postponement/loss of projects	52%
Reduction of business from customers	47%
Loss of revenues	44%
Slowdown in production	35%
Supply-chain disruption	34%
Reduction of professional development budge	20%

We used to do a lot of interactions face-to-face with customers. Mentoring, training, sales activities, software deployment, and installations. This has reduced, and what is still proceeding is now all online.

WHAT IS YOUR COMPANY DOING AS PART OF ITS RESPONSE TO COVID-19? (ENGINEERS IN INDUSTRY ONLY)

Providing or expanding work-at-home options 78%						
Requiring staff to stay at home 70%						
Issuing information on COVID-19 to staff 63%						
Preparing a business contingency plan	.4 %					
Reducing work hours for staff/subcontractors	31%					
Increasing web-based training for staff	29%					

Just-in-time delivery is not good enough for some products that could be impacted by supply chain problems. 99

IN WHAT WAYS DO YOU ANTICIPATE THAT COVID-19 WILL CHANGE ENGINEERING WORK AND STUDY?

	TOTAL	GOVERNMENT	INDUSTRY	STUDENTS	PROFESSORS & ACADEMICS
More online conferences	71%	82%	74%	69%	70%
Increased use of online training	63%	69%	57%	68%	77%
Large changes in supply-chain operations	37%	22%	33%	40%	37%
Increased investment in bioengineering	27%	22%	17%	39%	33%
Increased adoption of industrial automation	22%	18%	16%	30%	26%
Increase adoption of additive manufacturing	19%	15%	13%	27%	28%

We will come out on the other side of this with the entire world's workforce trained in remote and distributed work. Who knows

how industry will take advantage of this in the future? 99

