State of the Industry: The Future of Engineering Technology

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New technology is transforming the engineering landscape, creating new opportunities for innovation every day. Rapid advancements and the growing engineering workforce have the potential to disrupt industries and improve quality of life.

Below, we provide a rundown of the latest trends in CAD software and 3D design, as well as insights on the future of engineering and engineering technology.

Advancements in 3D Design

The global market for 3D printers and services is expected to grow to \$16.2 billion by 2018. Almost two thirds of industrial manufacturers in the automotive, aerospace, healthcare, sport and retail space already exploring the latest in 3D design.

3D technology will continue to advance through new developments in printing methods, design software and materials. 3D printers will be designed to streamline production and print more diverse materials in the same cycle. Engineers should expect to see improvements in the following three areas:

- **Performance**. 3D printers will be faster, autonomous, user-friendly and more reliable.
- **Versatility**. Printers will be able to incorporate several materials, such as plastic, metal, ceramic, wood or biological material, within a single build cycle.
- **Final product complexity**. Engineers will be able to manufacture fully functional systems that can incorporate modules such as batteries and sensors.

Developments in CAD Software

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0. Sep 2015 bin -> usr/bin
19. Sep 09:31 boot
21. Sep 15:50 dev
19. Sep 09:32 etc
21. Sep 15:52 home
1 30. Sep 2015 lib -> usr/lib
34 23. Jul 10:01 lost+found
36 1. Aug 22:45 mnt
36 21. Sep 2015 opt
4096 12. Sep 08:15 proc
560 21. Sep 08:15 proc
560 21. Sep 15:50 run
4096 30. Sep 2015 sbin -> usr/bin
8 21. Sep 15:45
8 21. Sep 15:45
9 21. Sep 15:45
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CAD software is continuously updated to enhance comfort and the design experience for engineers. According to Orbis Research, rapid advancements in CAD will propel the market to a compound annual growth rate (CAGR) of 10.16 percent from 2017 to 2021, and cloud-based CAD will grow by approximately 160 percent within the next three to five years.

As collaboration evolves, cloud computing will continue to shape the future of CAD software, improving collaboration and productivity. The cloud offers a

streamlined solution to increase mobility and efficiency while reducing time and costs. More engineers are expected shift to cloud-based solutions to store and instantly access files across design teams for increased mobility.

Related Read: 3 Ways Onshape is Disrupting CAD for the Better

Additionally, in efforts to drive down up-front costs, more companies are turning to short-term licensing. CAD software companies, such as Onshape and SOLIDWORKS, have responded to the trend by offering monthly licenses to engineers. The pay-as-you-go model offers allows short-term users to reap the benefits of the latest CAD technology.

Employment Outlook

Career opportunities in engineering look promising for the future. According to the United States Department of Labor, approximately 249,908 new jobs will be available for engineers by 2023, with the greatest demand for civil and mechanical engineers. However, as employment continues to increase, so will the competition for jobs. Today's qualified engineers are expected to work faster and more efficiently while keeping pace with the latest industry trends.

To remain competitive, engineers must keep up with the latest in CAD software and engineering technology. Additionally, engineers must possess soft skills to rise above the competition.

Related Reads: 6 Soft Skills Engineers Need to Succeed in 2017

<u>4 Ways New Engineers Can Compete with</u> <u>Experienced Professionals</u>

The <u>SpaceMouse Enterprise Kit</u> is an excellent tool for engineers looking to keep up with latest technology trends and remain competitive. The kit grants users a real-time understanding of engineering design and, with two-hand navigation, users can design faster and with more precision.

Also included in the kit is the CadMouse for enhanced comfort and the SpaceMouse Enterprise for superior design capabilities, the twin-port USB hub for flexible connectivity, CadMouse Pad, and 3DxWare 10 Software driver. Engineers equipped with the right tools will be better prepared to innovate and keep pace in the agile industry.

Start Creating with the SpaceMouse Enterprise Kit