DC SMARTER

Augmented Reality is the Solution to Data Center Management

ANALYSIS ON IMPACT AND BENEFITS

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As data centers become increasingly crucial to our economy and society, the need for skilled field engineers to manage and maintain them has grown. However, the field engineer shortage continues to be a problem. This article discusses how augmented reality can help to alleviate this shortage and help field engineers to become more efficient in their work.

Daily Challenges in Data Center Management

Data center field engineers ensure that a data center runs smoothly and efficiently. Aside from installing, maintaining, and repairing communications and networking equipment, they also need to monitor and troubleshoot issues with the data center's power, cooling, and security systems.

One major issue is broader coverage. As data centers have grown in size, it has become increasingly difficult and time-consuming for one engineer to cover the entire facility, especially when there are hundreds or even thousands of devices in a single data center.

As a result, problems can easily go undetected until they cause major outages or downtime.

Second major issue is to keep up to date asset inventory. Entire operational tasks and security responses rely on accuracy of well documented data center. In addition to this, in order to maintain industry standard certifications, having asset industry 100% accurate is a must.

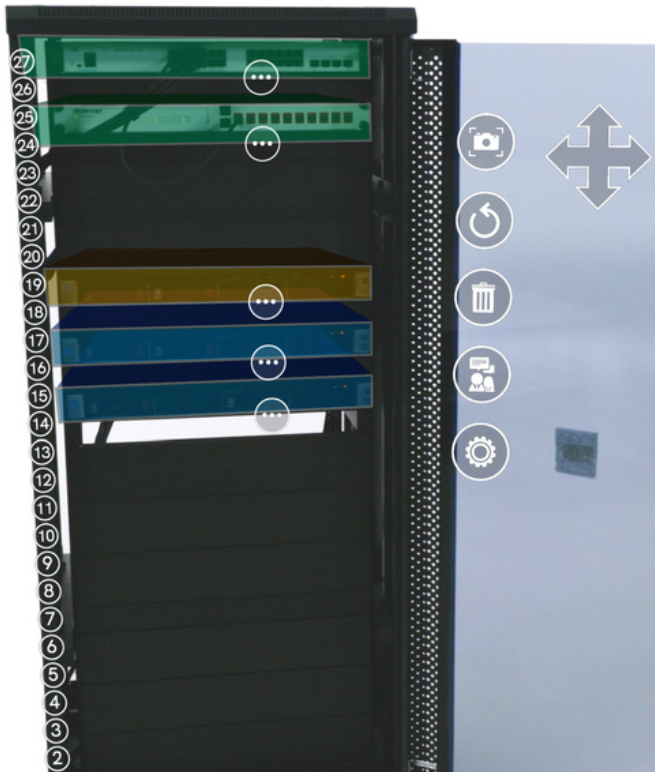
Another challenge is that data centers are often located in remote or hard-to-reach areas. This can make it difficult and costly to dispatch field engineers to the site, especially when an urgent issue needs to be addressed.

Augmented Reality as a Solution

With the ever-growing complexity of data centers, augmented reality (AR) can be an essential asset in assisting data center field engineers with their work. AR is a technology that superimposes computer-generated images on top of real-world objects, providing users with an enhanced view of the world around them.

Use of Digital Twin Technology to Overlay Data System

DC Smarter software solution, DC Vision®, uses digital twin technology to create a 3D digital copy of the entire data rack. It can be used to overlay data and information about the equipment in the rack, update data, make notes, detect any issues, and confirm that the equipment is operational without having to enter the rack physically.



Integration of API to Data Source

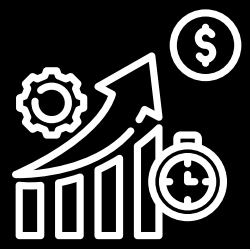
Remote hands in data center management are made possible with the help of IT Service Management tools like Attlasian Jira or ServiceNow.

With data from systems like Data Center Infrastructure Management and Building Management system makes the experience complete.

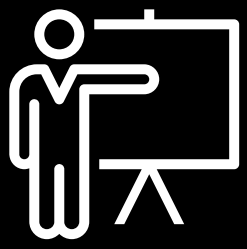
By integrating the API system with all data sources in the data center, the management software allows field engineers to access the virtual representation of the data center from anywhere in the world.

Effectiveness of Smart Hands Augmented Reality Management

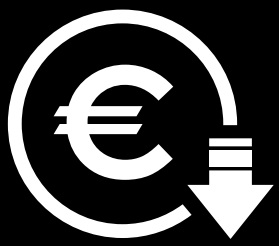
According to the latest industry reports, using AR can help to improve efficiency by up to 40% while reducing rework by up to 75%. In addition, it has been found to cut operational costs by 54% and minimize field engineer training and traveling expenses by up to 75%.



40% improved efficiency



75% reduction in training & travel



54% reduction in operational costs

Conclusion

AR technology can help data center field engineers become more efficient by using an augmented reality system that allows engineers to remotely monitor and manage the data center and provide support to on-site engineers when needed. DC Smarter revolutionizes how data center operations are managed, making it easier and more efficient for field engineers to do their job.

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