

ARTICLE Boost your data center build time

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The global colocation data center market is expected to double to more than \$62 billion from 2017 to 2022. Pam Cannon, ABB's Head of Marketing for Global Data Center Solutions, discusses the latest solutions and strategies to boost the build time of new colocation centers.



To remain competitive in this fast paced and highly competitive market, data center operators need to ensure they have enough quality colocation space to service new customers. However, opening new centers that will remain partially filled for a time is ineffective in terms of resources.

Here's a look at ABB's four most effective strategies to speed up data center builds by up to 50%



Pay-as-you-grow strategy

Pay-as-you-grow ensures you grow both sustainably and profitably by installing capacity little and often. Rather than making sizeable upfront capital investments that build too much capacity for initial demand, data center operators can make sure they only spend as more customers come onboard by installing new capacity in line with demand. This optimizes cash flow and secures revenue quickly, as the individual installations are smaller, thus faster, to deploy.

For example, ABB worked with US-based data center operator, GIGA, to design a system that would initially support 60MW of IT load and can be scaled to expand in increments of 2MW. The expansion project was completed in less than six months, allowing them to onboard customers as they continued to build capacity.

Modular solutions

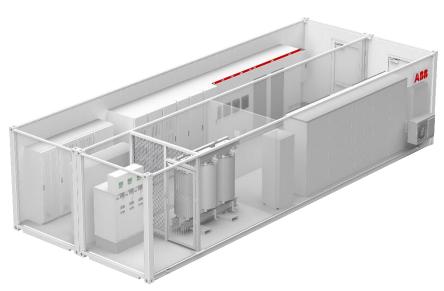
Modular, prefabricated solutions not only enable a pay-as-you-grow strategy, but also helps speed to deployment so that operators can meet crucial project deadlines and generate revenue faster.

eHouses, for example, are industry-proven, prefabricated solutions that can be quickly

transported and installed on site, reducing risk of project delays. Already factory-tested to meet all necessary data regulations, eHouses can be shipped and packaged in one order, simplifying communications and logistics to a single point of contact to streamline processes and save on onsite manpower.

Another benefit of prefabricated solutions is that they improve reliability and optimize the speed of data center build and maintenance. Since the solutions are pre-tested beforehand, onsite engineers and installers are helped with a 'plug-and-play' approach – site connection, testing, and commissioning are all much faster, reducing risk of schedule delays and cost overruns. Some even provide a tax advantage since they can be depreciated as equipment rather than building.

Overall, compared to traditional build methods, the build time from engineering to construction can be reduced by up to 30% when using modular, prefabricated solutions. Going another step and using predesigned eHouses and skids could reduce that time by a further 20%.



Pre-engineered Modular Data Center Solutions



Digitalization

Not only does digitalization give operators the benefit of remote condition monitoring of equipment, but it can also speed up deployment time and profitability.

Digital switchgears, for example, replace hundreds of copper wires with a single fiber optic bus cable. In this way, digitalization can reduce wiring by up to 90%, significantly decreasing installation time. Similarly, the sensor technology of digital switchgears enables operators to alter system parameters via software rather than needing to make hardware changes in traditional builds. These can be done later in the production cycle and reduce expensive and time-costly hardware changes.

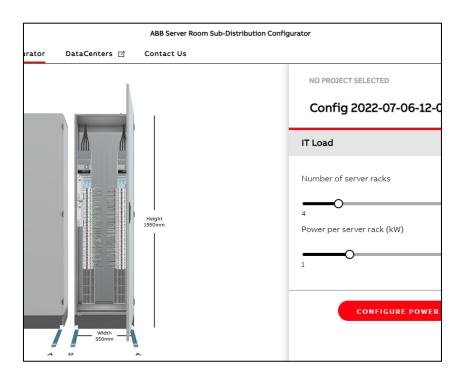
Users of digital switchgears can also make adjustments via built-in device settings or download software updates remotely whenever necessary, providing for safer and more reliable and energy-efficient equipment.

Online tools

Modern online web applications and tools can cut data center deployment times compared with conventional methods for configuring low voltage technology. In many cases, these online applications can help shorten the time to manufacture to weeks rather than months.

Configurators provide savings on time and cost by eliminating potential errors in product specification. Through innovative web apps with 3D visual interfaces, data center operators can easily retrieve specific product information, including images, technical specifications, and product availability before placing an order, reducing chances of project delays.

The use of online tools also simplifies product orders, as production, assembly, packaging, and delivery can be done in one accurate and streamlined process. These tools are somewhat like an online store, but instead of going through numerous online listings to find the right price and specification, it does the work for you.



Server Room Sub-Distribution Configurator