CAPGEMINI EMPOWERS TEAMS, FUELS COLLABORATION WITH HP ZCENTRAL

Working together with HP, the global engineering and R&D consulting business designed a solution to increase project efficiency and time to market

AIDING THE DEVELOPMENT OF INNOVATIVE TECHNOLOGIES AND PRODUCTS IS CENTRAL TO CAPGEMINI'S MISSION.

Capgemini Engineering operation teams in Italy were looking to empower teams to collaborate, share information, and solve problems in real time, while offering safe and efficient access to customers and employees alike. Capgemini collaborated with the HP technologists to ultimately find a solution with HP ZCentral that increased work efficiency, decreased project cycles, and ramped up time to market. The partnership is poised for expansive growth in the future.

Capgemini is a major player in innovation through its mechanical engineering expertise, from artificial intelligence, digital transformation, and virtual reality to Internet of Things technology, autonomous driving, and industry 4.0, which marries physical production and operations with smart digital technology, machine learning, and big data.

Capgemini

INDUSTRY:
Engineering and R&D Services

OBJECTIVE:
Develop a scalable, modular solution for mechanical engineering projects that enables workflow integration and data management

APPROACH:
Efficiently maximize software performance for each user, support seamless remote usage, and centralize the workstation environment with HP Z workstations—ZBook, Z2, Z4, Z6, Z8. Working together with HP, Capgemini designed a solution to increase project efficiency and time to market.

Teams at Capgemini work on projects from the start of production to manufacturing, using virtual analysis, virtual reality, and computer-aided design (CAD) as well as other cutting-edge technologies. Speed, accuracy, and efficiency are of utmost importance for each project as it sails through each phase of development.
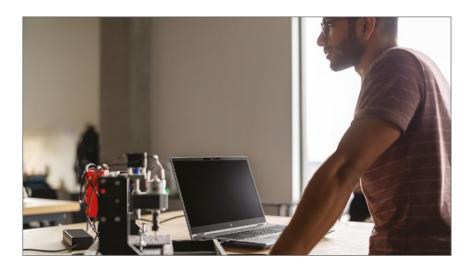
"In order to reduce time to market and development costs, it means we need to test and check project data and power calculations from everywhere and in a very short time, and in a flexible, efficient way," says Andrea Schiliró, Delivery Manager at Capgemini.

For example, during the development of a new car, a team could create a mechanical model in Italy and change the design in real time at a customer's office elsewhere. "In the meantime, we verify the durability during the task in customer laboratories and verify the manufacturing process in the factory," says Schiliró. "There are many things happening at the same time." This demands quick and secure access to project data sets with the ability to modify projects in real time and fix problems that arise during development.

"The most important thing is collaboration," says Schiliró. "Because we are engineers, we need to be integrated in the customer's workflow by accelerating the process."

Partnering toward a solution

Capgemini began working with HP in 2016. Leaders brainstormed with HP technologists in Fort Collins, Colorado. "At the time, the goal was to meet every stakeholder—technical and management—in order to learn more about HP's capabilities and to share our challenges and customer feedback," says Schiliró. "It was possible to see how HP develops and manages many workstations simultaneously in its laboratories."

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Andrea Schiliró, Delivery Manager, Capgemini Engineering Italy

DATA-DRIVEN OUTCOMES:

Work efficiency: Up by 40%

Sharing information and simultaneous action capabilities: Grew 30%

Hardware cost-savings: 20%

Data security management efforts: Down by 30%

Project lead time: Dropped by 20%

Data exchange time: Reduced by 70%

Capgemini started its first project with a workstation farm the following year. HP Performance Advisor was the first tool used in order to find the right workstation setup for each application, thus everyone in the Capgemini team could connect to the customized workstations and share with no major problem, shifting the conversation to a workstation farm/data center.

"Our department is involved in product development, computer-aided design, and engineering," says Schiliró. "There are many people, many skills, many scenarios that we customize for each customer's needs. We have several drivers that guide our decision for environment definition and set up. The challenge is how can we solve different problems with a scalable and modular solution that uses Z workstations as a basic element."

Next, Capgemini moved to HP ZCentral Remote Boost, a high-performance, media-rich remote desktop connection software. It forms the base unit of Capgemini's workstation environment.

"It is a very powerful remote interface that includes a lot of features like collaboration to push forward routine work, reduces time to make decisions, and its graphic capability is a key point for Capgemini in general," says Schiliró. "HP ZCentral Remote Boost is more efficient than any remote system environment because we've seen that it is scalable," he says. "It's also usable with very low bandwidth network and that is useful because we have many different environments of various conditions."

Harnessing the power of HP ZCentral

Still Capgemini needed more. It required a centralized workstation infrastructure with an efficient management tool that enabled the possibilities to act as IT administrator or as a client remotely. HP ZCentral Connect would allow Capgemini to connect users to the first available workstation, rather than assigning a machine to a user. It could map hardware to actual needs and manage the workstation power management remotely. "It guarantees an efficient, available working environment," says Schiliró. "It is a very easy way to set up a flexible environment in a short time."

Today, Schiliró's department has a pool of more than 100 workstations that use HP ZCentral Connect, a management solution that allows Capgemini to organize remote workstations for many users. Capgemini is able to centralize its high-compute performance, enabling power users to tackle complex projects from anywhere. It integrates with existing hardware like servers and other high-computing platforms. Given the nature of its projects, Capgemini has to comply with strict security requirements. ZCentral enables that compliance, letting users work without worries of cybersecurity attacks. Schiliró says ZCentral is not just a superior technical choice, it is an economical option. It has proven to be cost effective, especially for Capgemini's small to midsize clients who form 80 percent of its customer base.

While outcomes are based on the type of project, on average, Capgemini has seen work efficiency increase by 40 percent. The time taken

CUSTOMER AT A GLANCE

Capgemini

HARDWARE:
- HP ZBook
- HP Z2
- HP Z4
- HP Z6
- HP Z8

APPLICATION:
Harness the power of ZCentral solutions for mechanical engineering projects that enable workflow integration and data management

SOFTWARE:
- HP ZCentral Connect
- HP ZCentral Remote Boost
- HP Performance Advisor

> "ZCENTRAL SOLUTION IS MORE EFFICIENT THAN ANY REMOTE SYSTEM ENVIRONMENT BECAUSE WE'VE SEEN THAT IT IS SCALABLE... IT IS POSSIBLE TO ALSO CENTRALIZE THE DATA, WORK TOGETHER ON THE SAME FILE, REDUCE THE SPACE, REDUCE THE RISK, AND REDUCE DUPLICATION OF FILES."
>
> Andrea Schiliró, Delivery Manager, Capgemini Engineering Italy

for data exchange between Capgemini's engineers and customers has dropped by 70 percent. ZCentral and ZCentral Remote Boost have allowed for sharing information and simultaneous action activities that jumped 30 percent. Cost savings on the hardware front have been 20 percent. Schiliró says they use fewer workstations for more people.

Typically, Capgemini uses a high-performing workstation that is tailored for computing. With its ZCentral solution, which also enables on-demand workstation power, Capgemini users can access a high-performance machine as needed. "This is practically impossible when you have a workstation under your desk," says Schiliró. "In this case, it is simple because we can use ZCentral Remote Boost and change the connection; then use a simple workstation as storage in order to share the data that is practically the same on all workstations."

Management of data security has reduced by 30 percent. Projects are moving faster, trimming 20 percent in lead time. "We typically work on the same file and have more than one copy of the same file," says Schiliró. "This is the reason why we needed more space to store all the data and why the historic timeline files used to be very difficult to trace."

With ZCentral it is possible to also centralize the data, work together on the same file, reduce the space, reduce the risk, and reduce duplication of files." The ability to support seamless remote usage came in handy during the COVID-19 outbreak and resulting lockdown. Schiliró's team was able to transition smoothly. "Without ZCentral, I don't think it would have been possible to face a pandemic with no impact on our everyday work and our customers' needs," he adds.

Capgemini's collaboration with HP technologists continues to grow both companies strive to know the people behind the science, solving challenges together. Capgemini's work with HP over the years led to the company becoming an early tester of the HP ZCentral 4R unit, positioning it to take advantage of other innovative HP technologies.

"We're planning to expand our work everywhere as a global service and think bigger about innovative ways to work. This will include virtual reality, artificial intelligence, and GPU computing in project workflow," says Schiliró. "We hope to expand our partnership with HP in order to face future challenges together and push our bandwidth."

About Capgemini

Capgemini is a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of 270,000 team members in nearly 50 countries. With its strong 50-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering and platforms. The Group reported in 2020 global revenues of €16 billion.

About HP

For decades, Z by HP has been the trusted hardware partner for many of the leading artists, data scientists, architects, engineers, product designers, and top companies in the world. Z offers high performance laptops, desktops, displays, and solutions engineered to drive the most demanding professional workflows. The devices are highly reliable and undergo 360,000 hours of testing on every component—down to the screws to ensure they can withstand 24/7 workloads. Z works closely with independent software vendors (ISVs) to test and certify the latest software to deliver peak performance for key professional applications.

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