

Siemens CEO: Digital enterprise connects technology with real world



Is it possible to connect the digital world with the real world? **Alejandro Preinfalk**, CEO of Siemens Energy Central America and the Caribbean says that it is, which can be summed up in a concept called 'digital enterprise.'

He answered this question during a talk at [INCmtty 2022](#), the largest **entrepreneurship festival** in **Latin America**, which is organized by [Tec de Monterrey](#).

Some of the benefits of the digital enterprise are that it seeks to create **better products**, with fewer human errors, improved production, and which are more sustainable.



Digital enterprise: connecting the digital world with the real world

Preinfalk explained that the digital enterprise requires two steps. Firstly, the **creation of a digital twin** and then a **digital production model**.

Alejandro explained the concept through the example of a **self-driving car** which Siemens manufactured using this process.

-The concept of the digital twin

An indispensable part of the digital enterprise is the digital twin. It's an **avatar which simulates all the conditions of the product that you want to create or improve**.

In the case of the self-driving car, they emulated each and every one of its systems.

"The same software is used in Formula 1 to adapt the cars driven by Sergio 'Checo' Pérez to different tracks," he says.

This avatar exists within the **industrial metaverse**, meaning that it avoids the human errors associated with prototyping.

It can be tested in the digital world by simulating all the conditions of the real world.

The objective with the car was to **reduce its weight by 30%**. However, not only was weight reduced in the final generative design, but also materials and cost.

“The same software is used in Formula 1 to adapt the cars driven by Sergio ‘Checo’ Pérez to different tracks.”

- Digital production models

The **digital industry process** also includes production, meaning that the plant that creates the product in the real world is replicated in the metaverse.

This step also avoids many material and operational errors.

“We call it smart manufacturing, and it’s very important because it’s all about being sustainable.”

Alejandro believes that this step allows **startups** to produce more with less and make efficient use of all resources.

For example, Siemens supported a tequila manufacturer that was able to reduce the energy they used by 14% and gas consumption by 40% through this process.

*“If you replicate the factory, you can **monitor your carbon footprint**. This will be important information for the future; allowing us to take more informed and sustainable decisions,”* he explains.



Data: the “oil” of today

This executive pointed out that data is the **“oil” of today**.

*“The **digital industry** is built on data and that’s why it’s important that we begin working on both its integrity and protection from now on,” he said.*

As an example, he said that the amount of **information generated by one plant** on an average day is **more than 10 times that of the Netflix movie catalog**: more than 2,200 terabytes of data.

In the future, data will enable industries to make **smarter and more sustainable** choices.

More about INCmtty 2022 on its tenth anniversary

INCmtty, the **largest entrepreneurial festival in Latin America** which is organized by [Tec de Monterrey](#), has celebrated its 10th anniversary.

*“During these 10 years, **INCmtty** has planted a seed of character and entrepreneurial spirit in many people. I’m sure that it’ll continue to transform lives,”* said Rogelio de los Santos, President of INCmtty.

The festival, **which lasts 3 days, includes more than 200 networking moments**, offers **investment opportunities**, and includes the participation of **more than 100 international speakers**.

This year, **the festival returns in-person** and will take place from **November 15 to 17 at Cintermex**, in Monterrey.

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