



Department of Information Technology

Government Polytechnic for Girls, Surat

SEP-2023: Vol.- 5 Issue 3

Encode IT

E-Newsletter

Vision:

To be a pre-eminent information technology programme that empowers girls to meet the dynamic demands of Industry & society.

Mission:

- To provide quality education with best resources to achieve academic excellence.
- To create favorable environment that inculcate self-learning, soft skill and adaptability to latest technology.
- To develop competent professionals having highest ethical values and commitment towards the society.

Message from Head of Department

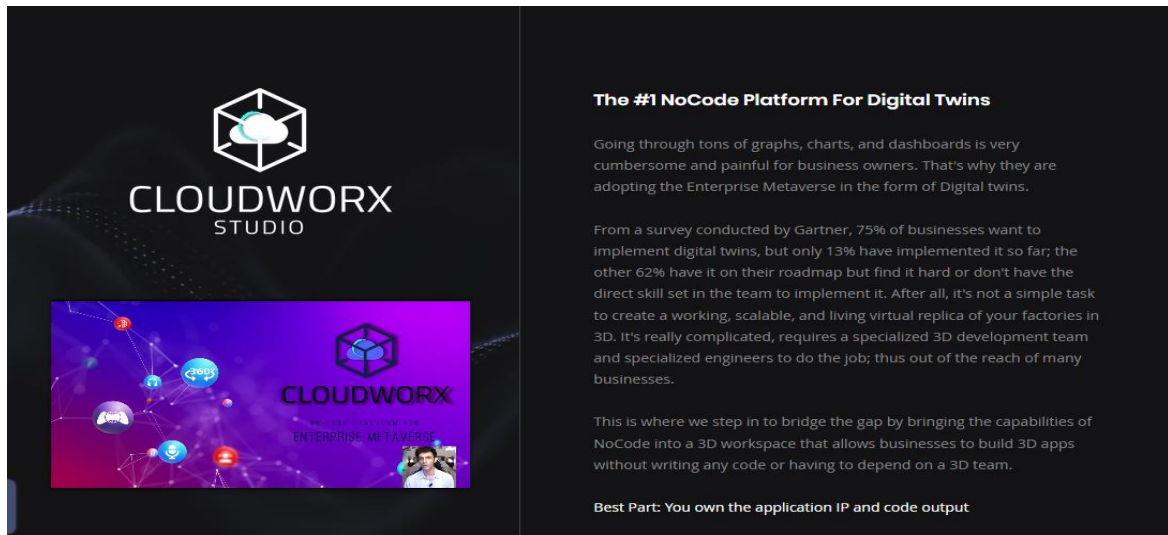
Dear students, colleagues and alumni

I am very happy that our Information Technology department is releasing 3rd issue of volume: 5, quarterly e-news letter "Encode IT" where we are sharing some of the important news over the past three months. I take this opportunity to thank our staff editorial team for their great effort to make this news letter. I also invite the readers of 'Encode IT' for their contribution and suggestions for the forthcoming issues.

As we navigate the digital age, ethical considerations and responsible use of technology are paramount. Our department is committed to instilling ethical values in our students, emphasizing the importance of using technology for the betterment of society and promoting inclusivity and diversity in the IT field. I invite all students to take full advantage of the resources available to them and actively participate in the myriad opportunities for growth and development that the department offers. Together, let us create a vibrant and innovative community that fosters learning, collaboration, and success.



Mrs. Jigna J Desai
Head of Department,
Information
Technology
Department



Mr. Rajesh I. Pradhan
Lecturer,
Department of
Information
Technology

Cloudworx AI: The No-Code Platform for the Enterprise Metaverse

Imagine a world where anyone can build applications for the Enterprise Metaverse without writing any code. A world where businesses of all sizes can benefit from the power of the metaverse without having to invest in a team of expensive developers.

That's the world that Cloudworx AI is creating.

Cloudworx AI is a technology company that develops a no-code platform for building applications for the Enterprise Metaverse. Their product, Cloudworx Studio, allows users to create digital twins of real-world assets, such as factories, buildings, and machines, without writing any code.

Digital twins are virtual replicas of real-world assets that are powered by real-time data. This data can be used to monitor and manage assets remotely, optimize processes, and predict maintenance needs.

Cloudworx Studio is a powerful tool that can help businesses of all sizes to benefit from the Enterprise Metaverse. It is easy to use and scalable to meet the needs of growing businesses.

What is Cloudworx and what can it do?

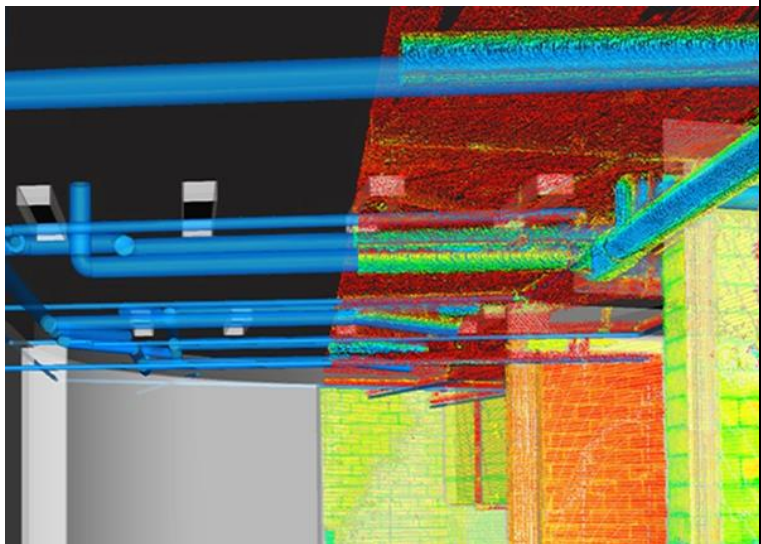
Cloudworx is a no-code platform for building applications for the Enterprise Metaverse. It is a web-based IDE that lets users build applications and workflows for 3D content without writing any code.

Cloudworx is focused on building applications for the Enterprise Metaverse in the form of digital twins. Digital twins are virtual replicas of real-world assets, such as factories, buildings, and machines. They are powered by real-time data from sensors, equipment, processes, and interactions.

Cloudworx Studio allows users to import their 3D models, create animations, interactions, workflows, and alerts on them; and link them with real-time IoT sensors data to build digital twins in a no-code fashion.

Some of the things that can be done with Cloudworx include:

- Building digital twins of factories for production planning, optimization, and predictive maintenance.
- Building digital twins of buildings for energy management, space planning, and facility management.
- Building digital twins of machines for remote monitoring, diagnostics, and repair.
- Building digital twins of products for design review, collaboration, and marketing.



Cloudworx's latest features

Improved support for digital twins:

- Cloudworx Studio now includes a number of new features that make it easier to build and manage digital twins.
- For example, users can now create and manage digital twins of entire factories, buildings, and other complex assets. Cloudworx Studio also includes new features for connecting digital twins to real-time data sources, such as IoT sensors.

Enhanced collaboration features:

- Cloudworx Studio now includes a number of new features that make it easier to collaborate with others on digital twins.
- For example, users can now share digital twins with others and give them permission to view, edit, and manage the digital twins. Cloudworx Studio also includes new features for version control and tracking changes to digital twins.

New pre-built templates and components:

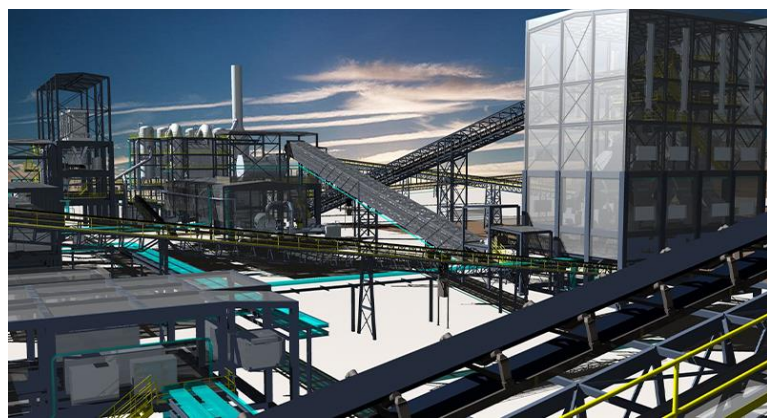
- Cloudworx Studio now includes a number of new pre-built templates and components that users can use to get started quickly with building digital twins.
- For example, there are new templates for digital twins of factories, buildings, and machines.
- There are also new components for things like sensors, actuators, and control systems.

Improved performance and scalability:

- Cloudworx Studio has been optimized for performance and scalability, so that it can handle even the most complex digital twins.

In addition to these new features, Cloudworx Studio also includes a number of other features that make it a powerful platform for building digital twins, such as:

- A drag-and-drop interface that makes it easy to create and manage digital twins, even for users with no coding experience.
- A wide range of supported 3D file formats.
- A powerful scripting engine that allows users to create custom functionality for their digital twins.
- The ability to connect digital twins to a variety of data sources, such as IoT sensors, ERP systems, and PLM systems.



Cloudworx version 2023.0.1

- Improved support for digital twins, including the ability to create and manage digital twins of entire factories, buildings, and other complex assets.

- Enhanced collaboration features, such as the ability to share digital twins with others and give them permission to view, edit, and manage the digital twins.
- New pre-built templates and components for things like digital twins of factories, buildings, and machines, as well as sensors, actuators, and control systems.
- Improved performance and scalability.
- In addition to these new features, Cloudworx 2023.0.1 also includes a number of other bug fixes and improvements.



Here are some of the specific benefits of upgrading to Cloudworx 2023.0.1:

- Improved efficiency and productivity:** The new features and improvements in Cloudworx 2023.0.1 can help you to build and manage digital twins more efficiently and productively. For example, the new pre-built templates and components can save you a lot of time when creating new digital twins.
- Enhanced collaboration:** The new collaboration features in Cloudworx 2023.0.1 can help you to work more effectively with others on digital twins. For example, you can now easily share digital twins with others and give them permission to view, edit, and manage the digital twins.
- Improved performance and scalability:** Cloudworx 2023.0.1 has been optimized for performance and scalability, so that it can handle even the most complex digital twins. This is important for businesses that are using digital twins to manage large and complex assets.

How can you sign up for Cloudworx?

To sign up for Cloudworx, you can visit their website and click on the "Sign Up" button. You will then be asked to create an account by providing your name, email address, and creating a password.

Once you have created an account, you will be able to log in to Cloudworx Studio and start building digital twins.

Here are the steps on how to sign up for Cloudworx:

- Go to the Cloudworx website at <https://www.cloudworx.ai/>.
- Click on the "Sign Up" button in the top right corner of the page.
- Enter your name, email address, and create a password.
- Click on the "Create Account" button.
- You will receive an email from Cloudworx to verify your email address. Click on the link in the email to verify your email address.
- Once your email address is verified, you can log in to Cloudworx Studio and start building digital twins!

Cloudworx offers a free trial, so you can try out the platform before you commit to a paid subscription.

How does Cloudworx work?

Cloudworx is a cloud-based platform that allows users to build digital twins of real-world assets without writing any code. Digital twins are virtual replicas of real-world assets that are powered by real-time data. This data can be used to monitor and manage assets remotely, optimize processes, and predict maintenance needs.

Cloudworx works by providing users with a drag-and-drop interface and a variety of pre-built templates and components that can be used to create digital twins quickly and easily. Cloudworx also supports a wide range of 3D file formats, so

users can import their existing 3D models into the platform.

Once a digital twin has been created, users can connect it to real-time data sources, such as IoT sensors, ERP systems, and PLM systems. This data can then be used to power the digital twin and provide users with insights into the performance and condition of the real-world asset.

Cloudworx also offers a number of features that make it easy to collaborate with others on digital twins. For example, users can share digital twins with others and give them permission to view, edit, and manage the digital twins. Cloudworx also includes new features for version control and tracking changes to digital twins.

Overall, Cloudworx is a powerful and easy-to-use platform for building and managing digital twins. It is a good choice for businesses of all sizes that want to benefit from the power of digital twins without having to invest in a team of expensive developers.

Here are some examples of how Cloudworx can be used:

- A manufacturing company can use Cloudworx to create a digital twin of its factory to improve production efficiency and reduce costs.
- A real estate company can use Cloudworx to create a digital twin of its new office building to help potential tenants visualize the space and make leasing decisions.
- A machine maintenance company can use Cloudworx to create a digital twin of its equipment to enable remote monitoring and diagnostics.
- A product design company can use Cloudworx to create a digital twin of its product to simulate performance and identify potential problems before the product is built.

Cloudworx is a versatile platform that can be used in a variety of industries and applications. It is a powerful tool that can help businesses to improve their operations, reduce costs, and make better decisions.

Competitors of Cloudworx:

- **Siemens Xcelerator** is a suite of digital twins, simulation, and engineering software that helps companies of all sizes to design, build, and operate products and assets.
- **Ansys Twin Builder** is a software platform that helps companies to create and manage digital twins of their products and assets.
- **Dassault Systèmes 3DEXperience** is a suite of digital twins, simulation, and engineering software that helps companies to design, build, and operate products and assets.
- **Bentley iTwin** is a software platform that helps companies to create and manage digital twins of their infrastructure assets.
- **PTC ThingWorx** is a software platform that helps companies to build and manage digital twins of their products and assets.

These are just a few of the many competitors of Cloudworx. Each platform has its own unique strengths and weaknesses, so it is important to choose the platform that is right for your specific needs.

When choosing a digital twin platform, it is important to consider the following factors:

- **Features and functionality:** What features and functionality does the platform offer? Does it support the specific types of digital twins that you need to create?
- **Ease of use:** How easy is the platform to use? Do you need to have any coding experience to use the platform?
- **Scalability:** Can the platform scale to meet your growing needs?
- **Price:** How much does the platform cost? Is there a free trial or freemium plan available?

It is also important to read reviews of different digital twin platforms before making a decision. This can help you to get a better understanding of the pros and cons of each platform.

Fututre of Cloudworx:

Cloudworx AI has a bright future. The company is well-positioned to benefit from the growing demand for digital twins. Digital twins are being used in a wide variety of industries, and as the technology continues to mature and become more affordable, Cloudworx AI is poised to become a leader in the no-code digital twin market.

Here are some of the factors that will contribute to Cloudworx AI's success in the future:

- **The growing demand for digital twins:** Digital twins are being used in a wide variety of industries, including manufacturing, healthcare, energy, and transportation. As the technology continues to mature and become more affordable, the demand for digital twins is expected to grow significantly.
- **Cloudworx AI's no-code platform:** Cloudworx AI's no-code platform makes it easy for businesses of all sizes to create and manage digital twins without having to invest in a team of expensive developers. This is a major advantage over other digital twin platforms, which require users to have some coding experience.
- **Cloudworx AI's focus on innovation:** Cloudworx AI is a rapidly growing company with a strong focus on innovation. The company is constantly adding new features and functionality to its platform, and it is also working on developing new applications for digital twins.



Here are some of the potential future directions for Cloudworx AI:

- **Expansion into new markets:** Cloudworx AI is currently focused on the manufacturing, healthcare, energy, and transportation industries. However, the company has the potential to expand into other markets, such as construction, retail, and government.
- **Development of new applications for digital twins:** Cloudworx AI is currently focused on using digital twins for monitoring and managing assets. However, the company has the potential to develop new applications for digital twins, such as product design, process optimization, and training.
- **Partnership with other companies:** Cloudworx AI could partner with other companies to develop new products and services related to digital twins. For example, the company could partner with IoT sensor companies to develop new sensors that can be used to collect data for digital twins.

Overall, Cloudworx AI is a company with a bright future. The company has a strong team, a no-code platform, and a focus on innovation. Cloudworx AI is well-positioned to become a leader in the no-code digital twin market.



Cloudworx and Shark Tank India:

Cloudworx AI, a technology company that develops a no-code platform for building digital twins, pitched to the sharks on Shark Tank India Season 2. The company's founders, Yuvraj Tomar and Anvi

Tewari, sought an investment of INR 5 crores for 10% equity in their company.

The sharks were impressed by Cloudworx AI's technology and its potential applications. However, they were concerned about the company's valuation and the competitive landscape. In the end, none of the sharks made an investment offer to Cloudworx AI.

Despite the lack of an investment from the sharks, Cloudworx AI's appearance on Shark Tank India

was a positive experience for the company. The exposure on the show helped to raise awareness of Cloudworx AI and its technology. The company has since raised over \$2 million in funding and is growing rapidly.

Cloudworx AI's appearance on Shark Tank India is a reminder that the Enterprise Metaverse is a growing market with a lot of potential. The company's no-code platform for building digital twins is a valuable tool that can help businesses of all sizes to benefit from the Enterprise Metaverse.



Happy Teacher's Day



"Teachers: Lighting the path to knowledge, one student at a time. Happy Teachers' Day!"

Toppers of 4th Semester



Department of Information Technology

Congratulations!!!

TOPPERS OF 4TH SEMESTER



JHA ANJALI
SPI : 9.89



GONDALIYA URVI
SPI : 9.74



DAMASIYA RIDDHI
SPI : 9.63



DOBARIYA DHRUTI
SPI : 9.63

Congratulations to all the students for achieving wonderful results. In
The Fourth Semester Examination...
Keep up the good work!!!



Department of Information Technology

Congratulations!!!

TOPPERS OF 6TH SEMESTER

1



SHAH FORAM
SPI : 10.00

2



PATEL DHRUVI
SPI : 9.82

2



SAVALIYA SNEHA
SPI : 9.82

3



PATEL HEER
SPI : 9.79

Congratulations to all the Sixth semester students for achieving wonderful results...

Wish you all the very best for your future endeavors!!!

End Semester Exam: Summer -2023 (Top 3 students)

Sr.no.	Enrollment No.	Name Of Student	Rank	Semester	SPI
1	206150316053	Shah Foram	1	6	10.00
2	206150316043	Patel Dhruvi	2	6	9.82
3	206150316059	Savaliya Sneha	2	6	9.82
4	206150316069	Patel Heer	3	6	9.79

Sr.no.	Enrollment No.	Name Of Student	Rank	Semester	SPI
1	216150316005	Jha Anjali	1	4	9.89
2	216150316049	Urvi Gondaliya	2	4	9.74
3	216150316010	Damasiya Riddhi	3	4	9.63
4	216150316021	Dobariya Dhruti	3	4	9.63

Puzzles

1. The Cryptarithm Puzzle: Decode the mathematical puzzle $\text{SEND} + \text{MORE} = \text{MONEY}$, where each letter represents a unique digit (0-9)
2. Two trains are 250 miles apart and traveling toward each other. Train A is moving at 60 mph, and Train B is moving at 90 mph. How long will it take for them to collide?
3. Find three different positive integers such that when they are squared, the sum of any two of them is a perfect square.

Previous Newsletter's Puzzles Answers

Q1: 3 hours

Q2: Bob is currently 25 years old and Alice is currently 55 years old

Q3: Time is approximately 3:16:36

ENGINEERING SIMULATES THE
MIND. KIDS GET BORED EASILY.
THEY HAVE GOT TO GET
OUT AND GET THEIR HANDS
DIRTY: MAKE THINGS, DISMANTLE
THINGS, FIX THINGS.
WHEN THE SCHOOLS CAN OFFER
THAT, YOU'LL HAVE AN ENGINEER
FOR LIFE.



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