

TOPIC

HOW START-UPS CAN CONTRIBUTE TO GROW CIVIL ENGINEERING



WHAT IS CIVIL ENGINEERING ?

- It is about designing and building things like roads, bridges and buildings. It is important for creating and maintain our infrastructure.



1. WHAT ARE START-UPS ?

START-UPS ARE NEW AND INNOVATIVE COMPANIES. THEY OFTEN BRING FRESH IDEAS AND NEW TECHNOLOGIES.



WHY START-UPS ARE REQUIRED IN CIVIL ENGINEERING ?

- Innovation & Smart Infrastructure
- Job Creation
- Cost Reduction
- Risk and Safety Management
- Automation
- Many Others Things (energy efficient, waste reduction collaboration tools etc.)



MAKING CONSTRUCTION GREENER

- Some Start-Ups like Biomason (US), Rain Bank and Gotham Greens (New York) focus on using eco friendly materials and methods which make construction less harmful and acceptable for environment.



NEW TECHNOLOGIES FROM START-UPS

- Start-Ups creates new technologies like **Icon, Winsun, X-tree and Dynamite** Etc. Through which we can use new cool technologies like 3d printing and drones which helps in making building projects faster and accurate.



IMPROVING SAFETY

- **Start-Ups like *buildersafe, Pillar Technology and Safe AI* are developing new ways to keep construction sites safer like wearable tech that monitors worker health. They monitor temp, loads worker health and environment condition through apps or robotics.**
- ***It helps in preventing accidents and keep worker safe.***

Top 10 Civil Engineering Trends in 2024



1187

Startups & emerging companies analyzed

Data provided by **StartUs** insights | November 2023

BETTER PROJECT MANAGEMENT

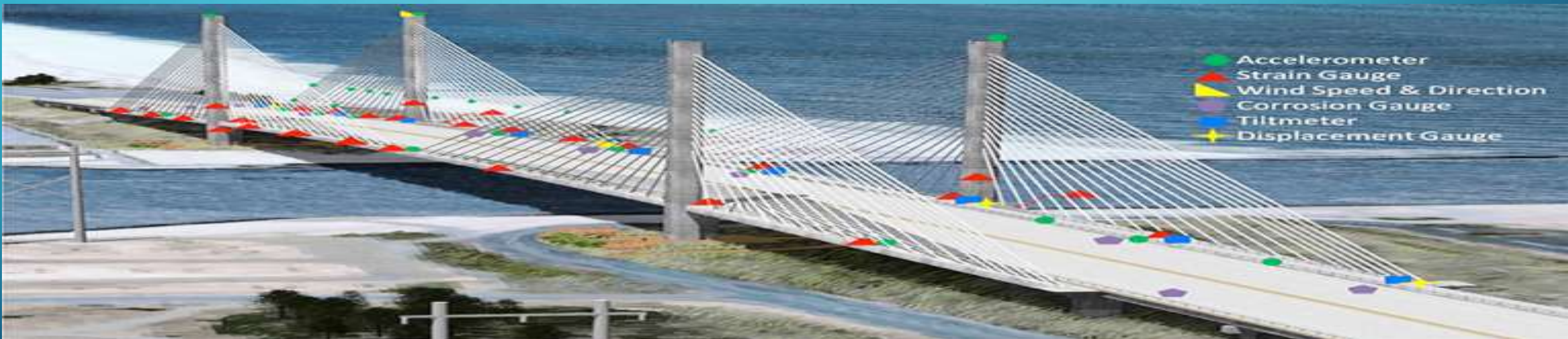
- New apps and tools from Start-ups help manage construction projects more effectively.
- Tools can track progress, manage costs and improve teamwork.
- Some apps like buildtrend, pro-core and co-construct Etc.



SMART INFRASTRUCTURE

Some Start-ups like Icon (US), Uneath (Southern California) and Haas alert (Chicago ; US) are creating smart infrastructure that can communicate and monitor itself.

Example like bridges that can alert engineers if there is problem.



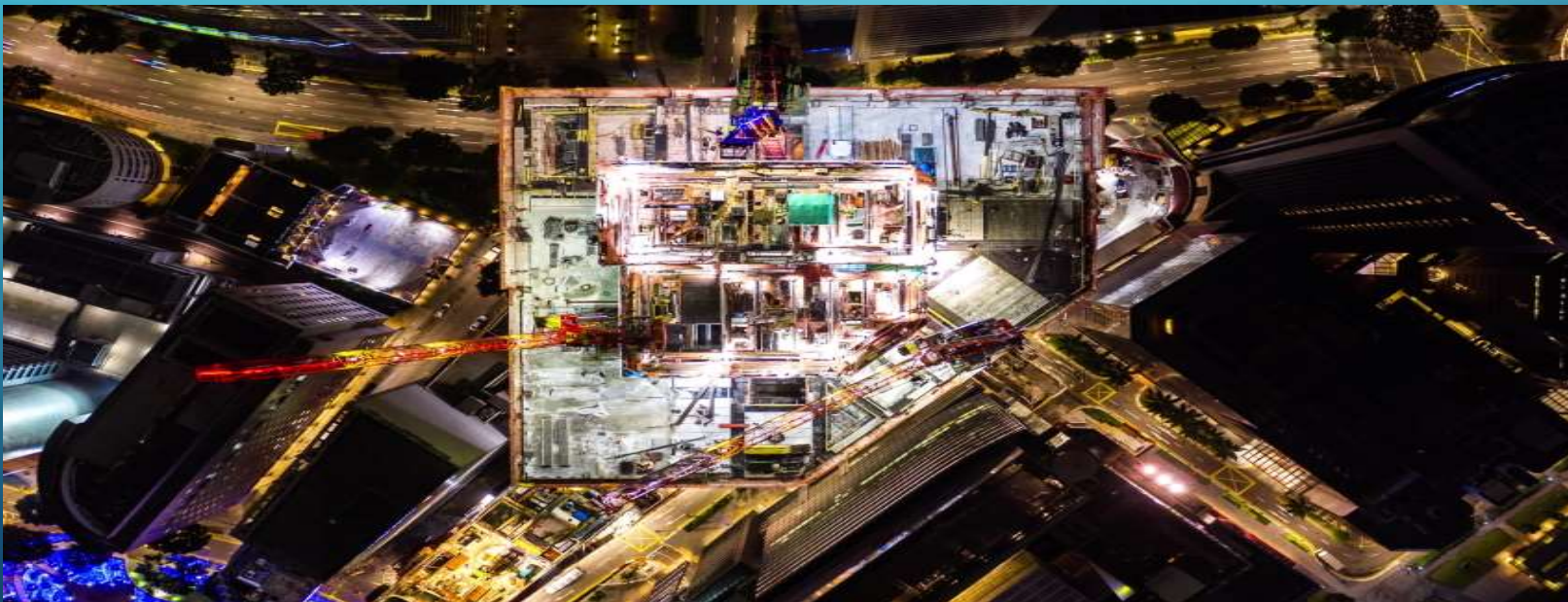
CHALLENGES FOR START-UPS

- Start-ups face challenges like finding funding and dealing with regulation.
- Overcoming these challenges is key to the success.



CONCLUSION

- Start-ups are transforming civil engineering with innovative ideas and technologies.
- They make construction faster, greener, safer and smarter. Supporting these new ideas is crucial for the future growth and improvement of our infrastructure.



The background is a blue gradient. In the corners, there are decorative white lines resembling circuit traces or a network diagram, with small circles at the endpoints.

THANK YOU

NAME-VIKAS

CRN-2314086