


COSTECH ANNUAL

# SMARTCITY

HACKATHON & WORKSHOP

 **22<sup>nd</sup> - 23<sup>rd</sup>, July 2026**

 **64c Toyin Street, Opebi-Allen,  
Greenpeg Engineering HQ,  
Ikeja, Lagos, Nigeria**



CONFERENCE THEME:

## AI Shaping the Next Era of AEC

Beyond BIM.

Powered by: **greenpeg**



Partners & Customers



# Beyond BIM.

## AI Shaping the Next Era of AEC



### Why this Conference

The built environment is entering a new era, one powered not just by design, but by intelligence.

Artificial Intelligence is no longer a future concept within Architecture, Engineering and Construction. It is actively transforming how we conceptualize structures, optimize performance, predict risk, deliver projects, and manage cities in real time.

**Beyond BIM** is Costech's flagship Smartcity Conference theme for 2026, a convergence of industry leaders, policymakers, digital innovators, architects, engineers, contractors, and technology strategists exploring how AI is redefining the entire AEC value chain.

From generative design and predictive construction analytics to digital twins, intelligent infrastructure, and data-driven urban systems, this conference examines how computation is reshaping the physical world.

This is not a discussion about tools. It is a conversation about transformation.

As cities evolve into intelligent ecosystems, the question is no longer if AI will shape the built environment but how prepared we are to lead that change.

CONFERENCE PASS 

Day 1 Conference

**FREE**  
Registration is compulsory

Workshop only

**₹ 100,000**

Conference/  
Hackathon

# Costech Smart City Conference

## Journey So Far

Since its inception in 2020, the Costech Annual Smart City Conference has been a pivotal platform for exploring and addressing the dynamic challenges and opportunities associated with urbanization in Nigeria and beyond.

Over the years, this conference has brought together experts, innovators, and leaders from various industries to share insights, foster collaborations, and drive forward-thinking solutions for smart city development.

## Event Background

**2020**



The inaugural virtual event introduced broad smart city concepts, setting a strong foundation for future conferences.

Focused on urban safety with the theme "Opportunities and Challenges for Safety and Security in Nigerian Cities," highlighting strategies for secure, sustainable cities.



**2021**

**2022**



Explored "Smart Transportation & Security," emphasizing the link between efficient transportation and urban safety.

Addressed AI's role in construction, showcasing how it enhances infrastructure development and sustainability.



**2023**

**2024**



Centered on "Digital Built & Future Cities," featuring AI in urban planning, digital twins, and the Smart City Student Design Competition.

Centered on "Digital Built & Future Cities," featuring AI in urban planning, digital twins, and the Smart City Student Design Competition.



**2025**

**2026**



Centered on "Digital Built & Future Cities," featuring AI in urban planning, digital twins, and the Smart City Student Design Competition.

Each edition underscores collaboration, innovation, and knowledge-sharing, driving smart, sustainable urban development. The 2026 conference will explore the next frontier of digital transformation in AEC and define what it truly means to design cities that think.

# Year 2026 and its Objectives



## Innovate

The conference will provide a platform for you (experts, policymakers, and stakeholders) to discuss innovative strategies and technologies to address pressing urban challenges.

## Empower

Interactive workshop sessions will offer participants hands-on experience with tools, technologies, and methodologies for building smart and sustainable cities. These sessions are designed to empower attendees with practical skills and actionable knowledge.

## Collaborate

A dedicated exhibition space will allow you (innovators, startups, and organizations) to showcase their solutions addressing critical urban issues. It will serve as a hub for networking, inspiration, and potential collaborations to drive impactful change

## Be Involved in Smart City



## Webinars and PreConference Trainings

A series of webinars will be organized to build up to the workshop sessions, offering insights into the conference themes. These webinars will serve as an introduction to the practical skills and technologies that will be explored in the workshops, allowing participants to prepare for hands-on activities and deepen their understanding of smart city solutions.

## Hackathon 2026

### Join the Costech Smart Infrastructure Hackathon 2026!

Are you a developer, engineer, urban planner, or innovator passionate about solving Lagos infrastructure problems? Costech Computers invites you to the Smart Infrastructure Hackathon at the 2026 Smart City Event

<https://forms.gle/kKMy3E8dkfP77G9m8>

## Costech Internship Program

Costech will offer internship opportunities for students, allowing them to work on real-world smart city projects. This hands-on experience will provide valuable insights into the challenges and solutions that will be discussed at the conference, while also giving students the chance to apply their knowledge in a practical environment.

# Organising committee



**Olamide Ogunlola**

Director, Costech  
Host



**Talitha Nkwo**

Application Engineer -  
Infrastructure, Costech  
Organising Team Lead



**Aderinola Adefemi**

Director, Costech  
Host



**Tessy Olushola**

Marketing Manager, Costech  
Moderator



**Ibrahim Lasisi**

Content Creation Mngr., Costech  
Event Branding



**Oluwashina Luke-Metibaiye**

Sales Manager  
Organizing Member

## Conference Chairman



**Dr. Zulfikar Adamu**

Associate Professor of Strategic  
IT in Construction

Keynote Speech:

**Digital Twins and Real-time  
Asset and Operations Intelligence**

Smart monitoring systems and connected  
urban ecosystems.



Special Guest of Honor

**Engr. Ali Alimasuya  
Rabi, FNSE, FAEng, MFR**

President of the  
Nigerian Society of Engineers (NSE)



Special Guest of Honor

**Arc. Sani I. Saulawa**

President of the  
Nigerian Institute of Architects (NIA)



Special Guest of Honor

**Arc. (Sir) Dipo Ajayi**

President of the  
Architects Registration Council  
of Nigeria (ARCON)



Special Guest of Honor

**Bolaji Adekunle**

MD/CEO, Greenpeg

## Day 1 - Speakers



### Engr. Emmanuel O. Ejika MNSE PMP

Co-founder & CEO, Arkad Nexus Ltd.  
MD, Gridlink Power and Energy Systems Ltd.

#### Topic:

Smart Tools, Weak Execution:  
Fixing AEC's AI Gap with the  
LTE Execution Triangle



### Dr. Joy Oyiza Obadoba

Founder, Urbanplanes Planning Consult and Advocacy Ltd.  
Lecturer, Federal Polytechnic, Idah

#### Topic:

Inclusive Smart Housing for All:  
Shared Living, culturally-Aware  
Solutions for Low-Income  
Communities.



### Yassir Elyaqouby

Consultant, Bentley Systems

#### Keynote Speech:

Building the Digital  
Foundation of Smart and  
Resilient Cities



### Engr. Akintayo Akintola FNSE, FNIMech, SAE

Managing Director,  
CharlieDebby Consult, Lagos

#### Topic:

AI and Men's Interaction



### Dr. Peter Routledge

Director and Co-founder,  
WhiteFrog

#### Keynote Speech:

AI-enabled Design Optimization for  
Waste Efficiency (AI-DoWEP)

Smart monitoring systems and connected  
urban ecosystems.



### Arc. Tobechukwu Oparaji

Assistant Director, Federal Capital  
Development Authority (FCDA), Abuja

#### Topic:

Visual Monitoring & Construction  
Documentation in Modern  
Construction Project

## Hackathon Judges



### Dr. Zulfikar Adamu

Associate Professor of Strategic  
IT in Construction



### Kehinde Ayobade

Founder, KS Digital Innovations



### Taiwo Ayorinde

Co-Founder, Contech Nigeria

# Day 2 - Workshop Tracks



**Afternoon Break-out Session**

**Day 2 - 8:00AM - 10:00 AM**

## Digital Twins and Real-time Asset and Operations Intelligence - Dr. Zulfikar Adamu

Smart monitoring systems and connected urban ecosystems.

### What you'll learn:

- Developed Digital Transformation Roadmap: Walk away with a customized digital transformation roadmap tailored to your organization's needs.
- Actionable Activities and Tasks: Identify and structure key activities and their associated tasks and subtasks within your digital transformation journey.
- Optimized Processes: Understand how to analyze and optimize tasks for better efficiency and alignment with business goals.
- Enhanced Skills: Foster important skills in leadership, governance, technology, and resource management for successful digital transformation.
- Collaborative Learning: Benefit from shared experiences and strategies from peers, and apply these insights to improve your own roadmap.



**Afternoon Break-out Session**

**Day2 - 10:00 AM- 12:00 PM**

## Engineering the SmartCity: Faster, Smarter Structural Workflows with BIM Automation - Kehinde Ayobade, KS Digital Innovations

Explore how BIM automation is transforming structural engineering with faster, data-driven workflows and improved project accuracy.

Discover smarter ways to design, analyze, and deliver resilient structures for the cities of tomorrow.

### What you'll learn:

- Understand how to export and visualize Revit models in web-based IFC viewers (e.g., Speckle) with a dedicated revit plugin
- Integrate Power BI with Revit and IFC data for interactive dashboards and analytics.
- Connect project data to smart building platforms for monitoring building performance, housing metrics, and sustainability KPIs.
- Enable better project coordination through real-time insights from model-linked data sources.



**Afternoon Break-out Session**

**Day 2 - 12:00 PM - 2:00 PM**

## Human + Machine Collaboration - Joseph Effiong, Costech

The future workforce and ethical AI integration in AEC workflow.

### What you'll learn:

- Utilizing Revit Cloud Worksharing for simultaneous multi-user access to central models
- Techniques for design collaboration, including sharing and tracking changes in Revit models
- Performing model coordination and conducting clash detection to resolve conflicts early
- Creating, assigning, and managing issue tracking for streamlined problem resolution

# Day 2 - Workshop Tracks



**Afternoon Break-out Session**

**Day 2 - 2:00 PM - 4:00 PM**

## Architecture as Cinema: Using AI Storytelling to Transform Real Estate Visualization - **Gabriel Oyekunle**

Founder, Craftsphile Studio

### What you'll learn:

Modern real estate visualization is evolving beyond photorealistic renders into cinematic experiences driven by Artificial Intelligence. Today, AI tools can transform architectural projects into emotionally engaging visual narratives that communicate atmosphere, lifestyle, culture and brand identity long before construction begins.

This session explores how AI-powered storytelling tools are reshaping architectural visualization through cinematic workflows, intelligent scene generation, automated animation and immersive visual communication. Using real-world archviz examples, the presentation demonstrates how architects, developers and visualization artists can use AI to create compelling project narratives that improve stakeholder engagement, investor confidence and market positioning.

The session also discusses the balance between automation and creativity, emphasizing the importance of human direction, cultural identity and design intent in AI-assisted visualization.



**Afternoon Break-out Session**

**Day2 - 4:00 PM - 6:00 PM**

## BIM Office Management - **Olamide Ogunlola, Costech**

The BIM Office Management module focuses on the implementation process, the current reality around BIM usage, including standards around the world, the new roles at office and project levels, and the collaboration workflows. It gives an overview of the supporting material around BIM workflows, such as the BIM Execution Plan (BEP) and the Design Responsibility Matrix. It also gives an insight into the legal challenges that may arise for a practice that has undertaken BIM projects.

### What you'll learn:

- Understand how to export and visualize Revit models in web-based IFC viewers (e.g., Speckle) with a dedicated revit plugin
- Integrate Power BI with Revit and IFC data for interactive dashboards and analytics.
- Connect project data to smart building platforms for monitoring building performance, housing metrics, and sustainability KPIs.
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# Day 2 - Workshop Tracks



**Afternoon Break-out Session**

**Day2 - 12:00 PM - 2:00 PM**

## **Solving the Key Challenges for Efficient and Resilient Water Infrastructure Slavco Velickov, Global Water Industry Director, Bentley Systems, Inc.**

Water utilities supported by engineering consultants face challenging internal business issues, including how to boost the return on assets, improve capital planning, and reduce operating costs. They also must determine how to increase operational efficiency, meet growing population demands, manage water resources impacted by climate change and meet long-term sustainability goals. But perhaps most importantly, to build a sustainable water future, utilities must anticipate and manage what is going to happen and why.

### **What you'll learn:**

During this interactive water workshop, we will review key projects that demonstrate how utilities are building resilience by leveraging digital solutions to solve top operational challenges, such as non-revenue water (water loss), energy efficiency, reduce risk by identifying potential impacts and developing adaptation plans, and ensure the delivery of safe and reliable water to customers.

Key Bentley products and solutions that will be featured: WaterSight operational digital twin, OpenFlows Water and OpenFlows Sewer.

# Partners and Sponsors

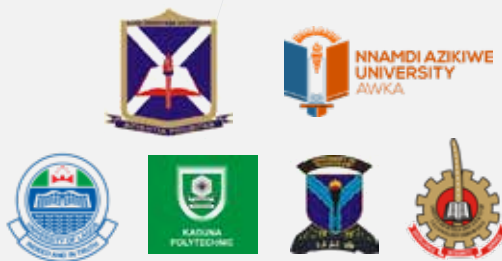
## SMART CITY PARTNER



## Powered by



## Customers and Partners



## Partnership with Educational Institution

# Why you should be part of The Smart City Event 2026

The Costech Smartcity Conference 2026 provides a dynamic platform for professional bodies across Nigeria to contribute meaningfully to the national conversation on the future of our built environment. Under this year's theme, **"Beyond BIM: AI Shaping the Next Era of AEC,"** the conference brings together industry leaders, policymakers, and innovators to explore how intelligent technologies are transforming urban development.

By participating, your organization will have the opportunity to shape critical discussions around emerging priorities such as AI-driven infrastructure, resilient urban systems, sustainable energy integration, and data-enabled city planning. This platform enables professional bodies to share expertise, influence forward-thinking policies, and contribute to building smarter and more responsive cities across Nigeria.

The conference also offers a powerful opportunity to showcase your organization's impact through exhibitions, case studies, and project demonstrations, highlighting groundbreaking initiatives and innovative solutions that are advancing the built environment.

Beyond visibility, the event fosters meaningful collaboration with industry stakeholders, government representatives, and technology leaders, creating opportunities for partnerships that can accelerate sustainable urban transformation.





# AI HACKATHON AT COSTECH SMART CITY CONFERENCE

Theme:

**SOLVING LAGOS INFRASTRUCTURE PROBLEMS**

Host: Costech Computers Ltd.

Event: Costech Annual Smartcity Hackathon & Workshop



64c Toyin Street, Opebi-Allen,  
Greenpeg Engineering HQ, Ikeja, Lagos, Nigeria

# PROGRAM OVERVIEW

In the era of Smart Infrastructure, Digital Governance, and Urban Automation, awareness is not enough.

Conferences spark ideas.  
Workshops build knowledge.  
Hackathons build execution power.

At the Costech Smart City Event, our Structured AI Hackathon is designed to move beyond theory into real-world solution building for modern cities and enterprises.

## WHY AI HACKATHONS MATTER FOR SMART CITIES

### Applied Intelligence, Not Passive Learning

When teams design:

AI-powered urban service dashboards

Predictive maintenance systems for public assets

Smart traffic analytics models

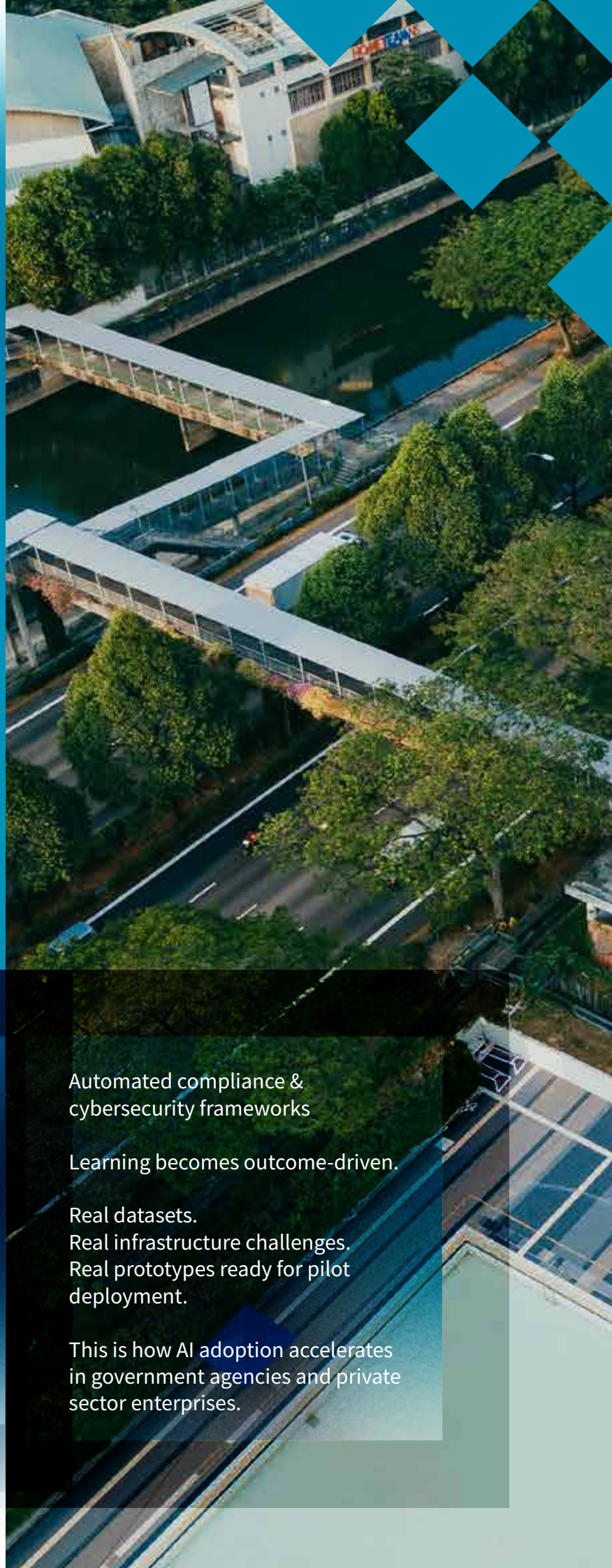
AI-driven infrastructure risk monitoring tools

Automated compliance & cybersecurity frameworks

Learning becomes outcome-driven.

Real datasets.  
Real infrastructure challenges.  
Real prototypes ready for pilot deployment.

This is how AI adoption accelerates in government agencies and private sector enterprises.



# WHY AI HACKATHONS MATTER FOR SMART CITIES

## Live Talent Identification & Capability Mapping

In just 48 hours, you can clearly identify:

Strategic solution architects

Data & AI model builders

Prompt engineering specialists

DevOps automation leaders

Cybersecurity resilience experts

Product-focused innovators

A structured hackathon becomes a live innovation lab and high-performance talent assessment platform, far more insightful than traditional evaluation models.

## Breaking Silos Across the Smart City Ecosystem

When Urban Planners, Engineers, ICT teams, Security experts, L&D leaders, and Policy stakeholders collaborate:

Enterprise AI capability expands

Innovation becomes embedded culture

Solution-to-deployment timelines reduce

Accountability shifts from theory to execution

Smart cities are not built by outsourcing thinking. They are built by activating internal intelligence.

## What the Costech AI Hackathon Delivers

- AI-first innovation culture
- Practical digital transformation pathways
- Rapid prototyping of urban tech solutions
- Solutions aligned to infrastructure & governance priorities
- Talent discovery for public and private sector projects

# WHO SHOULD PARTICIPATE?

## Organizations serious about:

Organizations serious about:

AI transformation in infrastructure

Smart city innovation

Digital governance enablement

Enterprise-wide upskilling strategy

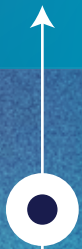
Building high-performance tech teams

The future belongs to cities and enterprises that don't just adopt AI, they design, build, and deploy with it.

Start with a structured Hackathon.

Because in today's world; execution is the new learning.

# HACKATHON FOCUS AREAS



## Smart Roads & Transportation

Traffic flow optimization, road condition mapping, smart parking



## Urban Housing & Waste Management

Digital systems for housing allocation, recyclable tracking, water leak detection



## Infrastructure Monitoring

Bridge/road sensors, construction progress monitoring, IoT for fault detection



## Flood Control & Urban Drainage

Flood early-warning systems, smart drainage sensors, mapping vulnerable zones



# COMPETITION TIMELINE

## Launch and Registration

14 DAYS  
21<sup>st</sup> MAY - 3<sup>rd</sup> JUN.  
2026

- Official launch of the hackathon
- Registration opens for participants
- Teams can start forming and brainstorming ideas

## Video Pitch Submission Deadline

10 DAYS  
4<sup>th</sup> - 13<sup>th</sup> JUN.  
2026

Teams submit a 4-minute video pitch explaining and demonstrating their app/solution:

- Specific smart city problem it solves
- How it solves the problem
- Technology stack used
- Next steps towards full-scale deployment

## Shortlisting of Final Teams

6 DAYS  
14<sup>th</sup> - 19<sup>th</sup> JUN.  
2026

- Review of submitted video pitches
- Selection of top 10 teams for the semi-finals on September 3

## Development and Preparation

30 DAYS  
20<sup>th</sup> JUN. - 19<sup>th</sup> JUL.  
2026

- Shortlisted 10 teams work on refining their projects and preparing for the semi-finals

## Semi-Finals

1 DAY  
22<sup>nd</sup> JUL.  
2026

- Top 10 teams present their projects to the judges & audiences
- Viewers choice award
- Selection of the top 3 teams for the final presentation on September 4

## Final Presentations and Awards

1 DAY  
22<sup>nd</sup> JUL.  
2026

- Top 3 teams present their final projects to the judges and audience
- Explanation of shortlisting criteria by Judges
- Announcement of the First, Second, and Third place winners and award ceremony
- Presentation of awards by Sponsors
- Appreciation of judges

## Participation Requirements

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- You must enter as a team – the minimum team size is **2-3 people**.
- Each team member needs to submit a unique email address when registering to ensure that we can provide all participants with relevant information and updates.
- Each team must have at least 2 of the following, A geographer, Civil engineer, Architect, Programmer, Urban planner, someone in the IOT field, CAD/CAM user.

## Judging Criteria

- Impact & Relevance to Nigerian infrastructure problems
- Innovation & Originality
- Scalability
- Technical Feasibility
- Presentation & Demo Quality

## Who can participate?

- University teams (Engineering, Tech, Design)
- Early-stage startups
- Freelance developers, Civil Engineers, Architects, Geographers, etc.
- Innovators interested in civic tech or urban planning

## Prizes & Incentives

- **1st Place - ₦ 1,000,000**
- **2nd Place - ₦ 750,000**
- **3rd Place - ₦ 500,000**

## Why Attend?

(Even without participating)

- Live demonstrations with real-world examples
- Interactive Q&A sessions
- Flexible scheduling across time zones
- Practical skills you can implement immediately

## Project Submission Guidelines

To submit your project for judging, please follow these steps:

1. Record a screen recording of your project.
2. Save the recording to a Google Drive or YouTube channel.
3. Email the link to: [smartcity@costechcomputers.com.ng](mailto:smartcity@costechcomputers.com.ng)

This will enable our judges to review your project.

Join us at the forefront of transforming Nigeria's cities through innovation! The Smart Infrastructure Hackathon is not just a competition—it's a launchpad for ideas that can redefine public infrastructure across Nigeria.

Let's rethink the way we build, manage, and sustain our urban future.

**Register here:**

<https://forms.gle/kKMy3E8dkfP77G9m8>

# SMARTCITY HACKATHON TERMS AND CONDITIONS

## Competition Terms and Conditions

### Eligibility

- You must enter as a team – the minimum team size is 2-3 people.
- Each team member needs to submit a unique email address when registering to ensure that we can provide all participants with relevant information and updates
- Each team must have at least 2 of the following, A geographer, Civil engineer, Architect, Programmer, Urban planner, someone in the IOT field, CAD/CAM user.

### Originality and Intellectual property

- Submitted projects must be the original work of the participants Or at least references to the progenitor must be made.
- Any form of plagiarism or infringement of intellectual property rights will result in disqualification.
- By entering, participants grant Costech computers ltd a nonexclusive license to use, reproduce, and display their projects and designs for promotional purposes.

### Judging Criteria

- Designs will be evaluated based on three criteria categories. See the judging criteria document for a detailed overview.
- Any form of cheating, disruption, or Decisions by the appointed jury are final and cannot be appealed.

### Awards and Recognition

- The top 3 teams will receive cash prizes, or gift certificates in the equivalent value.
- All registered participants will receive a Certificate of Participation, which will be sent to the email address entered on the registration form.
- The organizers may opt to award additional recognition for noteworthy submissions.
- The winners of these awards will need to confirm acceptance within a set time period.
- The winners are expected to be announced immediately, if not, the date of announcement would be made known.

### Participation and Conduct

- Participants are expected to conduct themselves professionally and respectfully.

Unreasonable behaviour will result in disqualification.

- Costech reserves the right to modify the terms and conditions or cancel the competition at any stage.

### Privacy and Data Protection:

- Personal information collected during registration will be used for the administration of the competition.



COSTECH ANNUAL

**SMARTCITY**  
HACKATHON & WORKSHOP



CONFERENCE THEME:

**AI Shaping the Next Era of AEC**  
Beyond BIM.



SCAN ME



# AI Hackathon at Costech Smart City Conference

Theme:

**SOLVING LAGOS INFRASTRUCTURE PROBLEMS**



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### Sponsors & Customers

