INFORMATION TECHNOLOGY

DiBETSA 2024 – A pioneering vision for the future of the built environment



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he event, a celebration of digital ingenuity, offered more than just recognition to exemplary projects and innovations. It was a grand platform for showcasing transformative technologies and engaging dialogues about the future of our built environments. The vibrant atmosphere resonated with anticipation and excitement as the industry gathered to witness the transformative power of digital applications.

A GALACTIC GATHERING OF MINDS AND MACHINES

One of the key highlights of DiBETSA 2024 was the insightful keynote speech by Richard Matchett, the digital lead at Zutari. With his presentation titled The Digital Built Environment Technologies Showcase and Awards (DiBETSA 2024) launched with resounding success on 20 November 2024 at the Johannesburg Business School. This groundbreaking event made an indelible mark in the digital transformation landscape of the construction and built environment sectors. By uniting visionary leaders, cutting-edge technologies, and industry experts, DiBETSA 2024 offered a glimpse into a future where innovation, sustainability, and collaboration are at the forefront.

"Imagine if...", Matchett laid out a visionary framework, encouraging attendees to rethink asset management through a harmonious alignment of purpose, people and policy, processes, information, and systems. His perspectives on cognitive computing as a driver for future work ecosystems set a contemplative and inspiring tone for the event. Matchett also stressed the importance of change management, particularly in emerging economies, emphasising the need for quality information as the backbone of AI-driven decision making.

Following Matchett, Ricardo Lopes from Delta Scan captivated the audience with his discourse on infrastructure management via digital intelligence. His talk, titled "Going beyond the 3D model," addressed the adoption curve of technology users and advocated for embracing digital inspections to mitigate infrastructure-related risks. Lopes illustrated the dichotomy between current manual practices and the

L to R: Ricardo Lopes (Delta Scan), Loria Malindzisa (FEM), Dr Coralie van Reenen (CSIR) and Richard Matchett (Zutari) engaging with the audience

potential of digitally-enabled solutions to address issues such as health and safety risks and costly plant shutdowns. Through his discussion, Lopes redefined how digital intelligence could reshape our world, making it safer and more efficient.

A dynamic panel discussion brought together experts, including Matchett, Lopes, Loria Malindzisa from FEM, and Dr Coralie Van Reenen from the CSIR. The panel explored the implications of digital transformation on infrastructure development, highlighting strategies to accelerate adoption and maximise benefits across the sector.

A SHOWCASE OF INNOVATION: THE EXHIBITION SPACE

DiBETSA 2024's vibrant exhibition floor was a testament to the industry's innovative spirit. A diverse range of exhibitors showcased technologies that push boundaries in the built environment. CYPE led the charge with their advanced architectural and engineering software solutions. Meanwhile, Baker Baynes and Modena demonstrated leadership in design and technology integration. Oracle impressed with their sophisticated project management tools, and Delta Scan showcased precision in high-tech scanning technologies.

The co-organisers, CARINBE, highlighted their latest research projects, offering valuable insights into applied



facilitating the panel discussion

innovations in the built environment. Turner & Townsend showcased their global project management expertise, and Sensor Security Systems, along with Ideco and Mascot Security, emphasised advancements in securing infrastructure against emerging threats.

The emphasis on building information modelling (BIM) was prominent, with BIM Community Africa and Catenda/ Agile presenting collaborative software solutions pivotal for the future of project management.

Sustainability was another crucial theme at the event. Exhibitors like Ariston SA showcased energy-efficient solutions, while Binmak introduced innovative cost and risk management tools. Gammatec impressed with their specialised equipment expertise, AvenirHoldings showcased their EPCM expertise in the built environment,

and the UJ VR Lab captivated imaginations with its immersive virtual reality demonstrations. Further emphasising the importance of professional standards and accreditations, the South African Council for the Project and Construction Management Professions (SACPCMP) and PHD Powerhouse demonstrated how critical certifications are in the ever-evolving industry, while Bentley Systems brought their renowned infrastructure design and project delivery solutions to the fore.

AWARDS: CELEBRATING EXCELLENCE AND VISION

The DiBETSA 2024 Awards were a key highlight, celebrating unrivalled excellence in digital transformation across the built environment. Significant attention was given to the 47 project submissions from Sub-Saharan Africa, covering a broad

Category	Winner	Project description
Project Information Exchange, Management & Hand Over	Mocimboa de Praia Rehabilitation and Reconstruction	Rebuilt vital infrastructure in Mozambique using Catenda Hub to streamline workflows, improve data access, and ensure timely project completion
Construction Health & Safety	Teraco JB5 Project	Enhanced construction site safety and project management in Johannesburg with Autodesk technologies
Project Communication & Collaboration	Ansara Architects Project	Designed a multi-national, sustainable 5-star hotel in Cameroon through seamless BIM integration
Project Planning, Monitoring & Control	Main Reef Water Tower Project	Utilised 4D planning tools to integrate a 3D model with construction schedules for improved efficiency and coordination
Quality Project Data Capture	Koruson 2 Cluster Project	Adopted mCollect for real-time, offline data capture for a renewable energy project, improving responsiveness and data management
Design Efficiency, Effectiveness & Sustainability	SSEM Structural Steel	Designed a cost-effective steel floor extension amid spatial and logistical challenges using Cype Software
Project Reporting, Decision Making & Approvals	Jaggersfontein Collapse for Search and Rescue	Leveraged drones and digital tools for rapid mapping and forensic analysis post- tailings dam collapse
Capacity Development	Carolina Water Treatment Plant Project	Implemented an online monitoring system for pumps, enhancing preventive maintenance and sustainable operations
Procurement	Vodacom Fire Project	Utilised an innovative e-tender platform for efficient, sustainable procurement practices in construction
Best Exhibitor	AvenirHoldings	Celebrated for exceptional exhibition presentation and impact, as voted by event participants.

Table 1 DiBETSA 2024 Award winners



spectrum from civil engineering projects to large-scale infrastructure initiatives.

Each award category underscored notable achievements in leveraging digital solutions to redefine industry norms. From enhancing safety and efficiency to promoting sustainability, the winning projects demonstrated the ingenuity and diversity of innovation in the region.

The awards ceremony was punctuated with applause and excitement, honouring each winner's contribution to advancing digital solutions and sustainable practices.

THE SPIRIT OF COLLABORATION: **CONTRIBUTORS AND SUPPORTERS**

DiBETSA 2024 could not have achieved its considerable success without the unwavering support of several key sponsors. The Development Bank of Southern Africa (DBSA), CYPE, FEM, and Sensor Security played integral roles in the event's execution. Their commitment to fostering innovation and collaboration in the digital transformation of the built environment underpinned the event's vision. "Together, we've created a dynamic space for innovation that redefines the future

of our industry," noted a representative from DBSA.

An immense thanks is also owed to the organisers who harmoniously engineered this event - the SAICE Project Management and Construction Division (PMCD), SACPCMP, the University of Johannesburg's Faculty of Art, Design, and Architecture, Johannesburg Business School, and the Centre for Applied Research and Innovation in the Built Environment. Their collaboration was crucial in ensuring every element fell into place seamlessly.

A VISION FOR THE FUTURE: DIBETSA 2025

As the applause echoed and the last exhibits were taken down, the anticipation for the next instalment of DiBETSA began to bloom. Set for Wednesday 15 October 2025, DiBETSA 2025 aims to build on the achievements of this inaugural event, promising even richer dialogues and developments in the arena of digital transformation.

The upcoming awards will provide an expansive platform for innovators

to showcase transformative projects, fostering an environment conducive to knowledge sharing and collaboration across the sector. As the conversation evolves around sustainability, technological advances, and the adoption of digital solutions, DiBETSA 2025 is poised to inspire new ideas and partnerships that will continue to revolutionise the built environment landscape.

DiBETSA 2024 not only celebrated the achievements of its participants but also strengthened the foundation for future endeavours in the industry. By highlighting success stories, fostering connections, and emphasising the importance of digital transformation, the event showcased a collective commitment to advancing a sustainable, integrated, and technologically sophisticated future for the built environment.

With the momentum gained from this remarkable debut, the stage is set for a future electrified by collaboration, innovation, and the smart integration of digital technologies that will ensure our built environments are resilient, efficient, and prepared to face the challenges of tomorrow.



SAICE PMCD Chairperson Andile Mndzebele delivering a vote of thanks



closing remarks and outlook for DiBETSA