Covenant University

Canaan Land, Km 10, Idiroko Road, Ota, Ogun State, Nigeria.
Tel:+234-09033550046
Website: www.covenantuniversity.edu.ng

Times Higher Education

Sub-Saharan Africa University Rankings 2023
Ranked 1st in Nigeria,1st in West Africa and 7th Best in Africa

Center for System and Information Services

The Center Leader
CApIC-ACE Covenant University,
Ota, Ogun State

Dear Sir,

Impact of World Bank-Funded Information Communication and Technological Enhancements in Covenant University through CApIC-ACE

The World Bank-funded project at Covenant University, through CApIC-ACE, includes the introduction of additional internet bandwidth, smartboards, internet access points, IT staff training, and high-performance computing (HPC) for research. These enhancements has significantly improved educational quality, boosted research capabilities, and enhanced overall institutional efficiency, as highlighted:

1. **Additional Internet Bandwidth.**
The introduction of additional 1Gbps internet bandwidth has greatly:
   i. **Enhanced Learning Experience**:
      - Providing smoother access to online resources, multimedia content, and virtual classrooms to Faculty, staff and students.
      - Improved internet distribution and connectivity have facilitated students and faculty participation in online courses, webinars, and collaborative projects.
      - Students can now use personal devices to access learning materials, discussions, and assignments from anywhere on campus than ever before.
   ii. **Increased Research Capabilities**:
      - The bandwidth enhancement has improved researchers' seemless access to large datasets, simulations, and the use of cloud-based research tools more efficiently such as Matlab and other datasets.
      - Greater feasibility for collaboration with other institutions and participation in international research networks.
   iii. **Operational Efficiency**:
      - Administrative processes, including online registration, library systems, and communication platforms, now operate more smoothly.
      - The additional bandwidth has also served as a backup of the existing internet link, thereby allowing the university to achieve reduced downtime and enhanced reliability of digital services.
2. **Internet Access Points (Aps):**
      - The deployment of 15 APs around the academic building Has greatly improved internet coverage. (wider Connectivity). Faculty staff and students can now stay connected seamlessly, improving productivity and resource access.
      - Distributed access points have alleviated network congestion, providing a stable connection even during peak usage times and congestion of students to a particular location

3. **Installation of an additional 82 inches smartboard to laboratories and Classes**
    i. **Interactive Learning**:
        The deployed smartboards have helped to introduce engaging and interactive teaching methods, making complex subjects easier to understand through multimedia presentations, real-time annotations, and collaborative activities; the faculty and students have testified to this.
    ii. **Improved Students Engagement**:
        The introduction of smartboards, with their visual and interactive elements, has helped to capture students' attention during lectures and improved their understanding and retention, as testified by faculty. This enhancement also made group activities and problem-solving sessions more dynamic and collaborative.

4. **Provision of High-Performance Computing (HPC) and computer workstations for Research**
The deployment of high-performance computing (HPC), funded by the World Bank project, has significantly impacted research and education in the following areas:

    i. **Complex Computation**:
        Faculty and students can now carry out complex computations, simulations, and data analysis that are beyond the capabilities of standard computers.
    ii. **Large-Scale Research**:
        Researchers in the university can now easily address significant problems in bioinformatics and engineering.
    iii. **Accelerated Research Output**:
        The enhanced computational power through the HPC now speeds up research, leading to more publications and breakthroughs and attracting funding and collaboration opportunities.
    iv. **Enhanced Learning Opportunities**:
        Access to the HPC has helped students gain practical experience with cutting-edge technology.

5. **Training of IT Staff**
The IT staff of the university have been trained in the deployment and management of HPC and in managing cloud services. This training has empowered IT staff to deliver professional support and proactive system management, resulting in efficient issue resolution, optimised network performance, and enhanced cybersecurity.

6. **Contribution of Employed Master's Student to the ICT Department:**
The employment of one of the trained master's students in Information and Communication Engineering not only highlights the success of the center but also brings several key contributions to the ICT department of the university.

Yours Sincerely,

6/08/2024.

Engr Matthew Boladele Akanle
Director Center for Systems and Information Services
dcsis@covenantuniversity.edu.ng
+2348038069714