

**ACOUSTIC STRATEGIES AND USER SATISFACTION IN THE DESIGN
OF A CONVENTION CENTRE IN SANGOTEDO, LAGOS.**

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JULY, 2024

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BY

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**A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE
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THE AWARD OF THE DEGREE OF MASTERS OF SCIENCE (M.Sc) IN
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COLLEGE OF SCIENCE AND TECHNOLOGY COVENANT UNIVERSITY,
OTA, OGUN STATE, NIGERIA**

JULY, 2024

ACCEPTANCE

This is to attest that this dissertation is accepted in partial fulfilment of the requirements for the award of the degree of Masters of Science (M.Sc) in the Department of Architecture, College of Science and Technology, Covenant University, Ota, Ogun State, Nigeria and has been accepted by the School of Postgraduate Studies, Covenant University, Ota, Ogun State, Nigeria.

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DECLARATION

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ADELE, NGOZI STEPHANNIE

Signature and Date

CERTIFICATION

I, certify that this thesis titled “Acoustic Strategies and User Satisfaction in The Design of a Convention Centre in Sangotedo, Lagos.”, is an original work carried out by Adele, Ngozi Stephannie (17CA022907), in the Department of Architecture, College of Science and Technology, Covenant University, Ota, Nigeria, under the supervision of Prof. Adedapo A. Oluwatayo. I have examined and found this work acceptable as part of the requirement for the award of the degree of Master of Science (M.Sc) in Architecture.

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DEDICATION

I dedicate this thesis to God. His limitless grace and unwavering support have given me the strength, inspiration, and determination to embark on and complete this academic journey. I am also grateful to my family for their love, support, and encouragement.

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ABSTRACT

Convention centres serve as hubs for a wide range of events, including seminars, lectures, and exhibitions, attracting individuals from around the globe. These centres cater to a large number of people per given time and rely on optimum acoustics to be able to effectively carry out their primary function, thus understanding the intricate relationship between acoustics and user satisfaction in these spaces is essential. To achieve this, the research investigated the influence of acoustic strategies on user satisfaction in convention centres in Lagos State, Nigeria. This was with a view to identify those strategies that promote user satisfaction and implement them in the design of a convention centre in Lagos, Nigeria. A mixed-method approach was adopted in the course of this research. An extensive literature review, building observations and surveys with questionnaires were carried out to gather data. The study found that a variety of acoustic design strategies were implemented in existing convention centres and these specific acoustic strategies significantly impact user satisfaction. These strategies include ceilings baffles and banners, vegetation as a noise barrier, furniture with fabric upholstery, and the incorporation of insulation and absorption materials like cotton fibre, foam glass, and foam plastic. The aforementioned strategies were not always integrated into the initial design phase. Additionally, the strategies were not consistently applied throughout the facilities. This research offers valuable insights for design professionals and convention centre stakeholders seeking to enhance the acoustic environment within these facilities. By understanding the relationship between acoustics and user satisfaction, the stakeholders involved can make informed decisions that enhance the satisfaction of users and have better performing convention centres.

Keywords: Acoustics, Acoustic design, User Satisfaction, Acoustic Satisfaction, Convention Centre