

ErgoLet: The Solution to the Adversity of Senior Citizens and Persons with Disabilities in Accessing the Conventional Public Utility Toilet Bowl in Metro Manila

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Abstract

The accessibility and usability of public toilet bowls have been difficult for people with disabilities and senior citizens. Since our body is regularly releasing fluid and we do not know when we need it, convenient access to the public toilet bowl is essential to making the lives of people with limited mobility easier when going to the public toilet. The study attempts to provide a solution to the uncomfortable public restroom experience from the perspective of senior citizens and persons with disabilities, which can cause strain, sprain, or injury due to their unique needs caused by their condition or age as they grow older. Therefore, this research aims to examine the availability of public restrooms for people with disabilities and the elderly in Metro Manila by providing them with access to a generally more efficient utility toilet bowl. To accurately draw the results based on the interview with the senior citizens and persons with disabilities (PWD), the researchers will interpret the results in Google Forms using the pie chart and tabular presentation. The researchers must precisely discover the fundamental obstacle that physically challenged humans encounter when using public restrooms and propose the probable remedy to this problem due to the meticulous observation, introspection, and data gathering that the researchers conducted.

Keywords

ErgoLet, Persons with Disabilities, Senior Citizens, Musculoskeletal Disorder, Anthropometric

Biography

Mac Friedrich Dantes, Third Year Industrial Engineering Student at the Technological Institute of the Philippines Quezon City. Alumni of Ina ng Buhay Catholic School, where he graduated his Upper Secondary School and also Alumni of the Damong Maliit Elementary school where he finished primary school. Concluded his work Immersion during the SHS year at the Rex Printing Company and was assigned to the Inventory Planning Section of the company's Supply Chain Management. He is currently a member of Sports Guild for S.Y. 2022-2023 in the Organization of Industrial Engineering Students also known as ORIENTS established in 1996.

Antonio Mari C. Garcia is 3rd Year student taking up a Bachelor of Science in Industrial Engineering at the Technological Institute of the Philippines - Quezon City. He has been one of the President's Listers for four consecutive semesters. He is a former Division of Pasig City - Youth for Environment in Schools Organization

Vice President and the Philippine Institute of Industrial Engineering - National Student Chapter as the Director for Communications. In 2021, he became an exchange student at Sakura Science X J.F. Oberlin University in Japan. Currently, he holds a position in the Industrial Engineering Department Student Council as President, marking his eighth consecutive year as part of the student council starting when he was in Grade 8. Furthermore, he is the Vice Chairman of the TIP-QC College of Engineering and Architecture. He is also a member of the Organization of Industrial Engineering Students as one of the Academics Guild. Moreover, he joined various competitions such as Scrabble Tournament, Case Study Competition, and Quiz Bee, where he made the podium. Lastly, he is a Lean Six Sigma - White Belter and Department of Labor and Employment - Safety Officer I.

Carlo Gonzales, Third Year Industrial Engineering Student at the Technological Institute of the Philippines Quezon City. Also alumnus of the said school, where he graduated his Senior High School. He is also currently a certified lean six sigma white belt (2021). He is currently a member of Sports Guild for S.Y. 2022-2023 in the Organization of Industrial Engineering Students also known as ORIENTS established in 1996.

John Matthew G. Halog, a Third Year Industrial Engineering Student at the Technological Institute of the Philippines Quezon City. Also alumnus of the said school, where he graduated his Senior High School. He is also currently a certified lean six sigma white belt (2021). He is currently the Public Relations Officer of the Organization of Industrial Engineering Students also known as ORIENTS for the S.Y. 2022-2023.

Alliyah Jade B. Paguio is currently a Third Year Industrial Engineering student at the Technological Institute of the Philippines Quezon City. She is part of this school year's Six Sigma Mentees of the Industrial Engineering Department. Aside from this, she became a member of the Communications Committee of the College of Engineering and Architecture Council. Along with this, she also participates in the Dance Guild of the Organization of Industrial Engineering Students of Technological Institute of the Philippines Quezon City, also known as ORIENTS.

Marinell M. Santos is currently a Third Year Third Year Industrial Engineering student at the Technological Institute of the Philippines Quezon City. She is an alumna of the said institution where she completed her Senior High School. She is a certified Lean Six Sigma White Belt (2021) and a part of the past academic year's Lean Six Sigma Mentees of the Industrial Engineering Department (TIP-QC). She is a member of the Academics Guild for S.Y. 2022-2023 in the Organization of Industrial Engineering Students also known as ORIENTS and also a member of Inhinyera Organization.