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Post-occupancy Evaluation of Building Facilities in a University Community Using an Electronic Platform

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Abstract

The study examined the prospects of carrying out a post-occupancy evaluation of building facilities in a university community using an electronic platform. The SRS showed the user classes and characteristics, software architecture, functionality, the coding language used and external interfaces. The Web pages were designed using HTML, while the database management system was developed using MySQL. C-Sharp programming language was used to control the post-occupancy system. The three main users identified in this study; the building user, the maintenance manager/facility manager and the management team can access the system to evaluate the building facilities. In conclusion, the study developed a post-occupancy evaluation

system for a university community to effectively manage the state of its building facilities. By using the proposed system, the study aims to increase the speed of maintenance works, improve the state of building facilities in schools of higher learning and ensure accountability in the building maintenance process.

Keywords

- **Building facilities**
- **Electronic platform**
- **Higher institution**
- **Post-occupancy**
- **Web-based system**

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References

1. Ibem EO, Opoko AP, Adeboye AB, Amole D (2013) Performance evaluation of residential buildings in public housing estates in Ogun State, Nigeria: users' satisfaction perspective. *Front Architectural Res* 2:178–190
-

[CrossRef](#) [Google Scholar](#)

2. Emuze F, Mashili H, Botha B (2013) Post-occupancy evaluation of office buildings in a Johannesburg country club estate. *Acta Structilia* 20(1):89–110
-

[Google Scholar](#)

3. Meir IA, Garb Y, Jiao D, Cicelsky A (2009) Post-occupancy evaluation: an inevitable step toward sustainability. *Adv Build Energy Res* 3:189–220
-

[CrossRef](#) [Google Scholar](#)

4. Commission for Architecture and the Built Environment, CABE (2005) Design with distinction: the value of good buildings design in higher education. Available from www.cabe.org.uk
-

5. Preiser WF (2001) Feedback, feedforward and control: post-occupancy evaluation to the rescue. *Build Res Inf* 29(6):456–459
-

[CrossRef](#) **[Google Scholar](#)**

6. Fatoye EO, Odusami KT Occupants' satisfaction approach to housing performance evaluation: the case of Nigeria. In: Proceedings of the RICS COBRA research conference, University of Cape Town. Available from <http://www.rics.org/cobra>
 7. Ahmadi RT, Saiki D, Ellis C (2016) Post occupancy evaluation an academic building: lessons to learn. *J Appl Sci Arts* 1(2):1–16 (2016) (Article 4)
-

[Google Scholar](#)

8. Hassanain M, Mudhei A (2006) Post-occupancy evaluation of academic and research library facilities. *Struct Surv* 24(3):230–239
-

[CrossRef](#) **[Google Scholar](#)**

9. Preiser WFE (1995) Post-occupancy evaluation: how to make buildings work better. *Facilities* 13(11):19–28
-

[CrossRef](#) **[Google Scholar](#)**

10. Pati D, Pati S (2013) Methodological issues in conducting post-occupancy evaluations to support design decisions. *Health Environ Res Des J* 6:157–163
-

[Google Scholar](#)

11. Preiser WFE, Vischer J (2005) *Assessing building performance*. Butterworth-Heinemann, Oxford
-

[Google Scholar](#)

12. Ibem EO, Aduwo EB, Uwakonye O (2012) Adequacy of incremental construction strategy for housing low-income urban residents in Ogun State, Nigeria. *Built Environ Proj Asset Manag* 2(2):182–194

[CrossRef Google Scholar](#)

13. Leaman A (2003) Post-occupancy evaluation, prepared for gaia research CPD seminars on sustainable construction. Available from <https://www.usablebuildings.co.uk/UsableBuildings/Unprotected/AdrianLeamanPost-OccupancyEvaluation.pdf>
14. Göçer Ö, Hua Y, Göçer K (2015) Completing the missing link in building design process: enhancing post-occupancy evaluation method for effective feedback for building performance. *Build Environ* 89:14–27
-

[CrossRef Google Scholar](#)

15. Riley M, Kokkarinen N, Pitt M (2010) Assessing post occupancy evaluation in higher education facilities. *J Facil Manag* 8(3):202–213
-

[CrossRef Google Scholar](#)

16. Afolabi A, Afolabi I, Eshofonie E, Akinbo F (2019) e-maintenance framework for strategic asset management in tertiary institutions. In: Misra S et al (eds) ICCSA 2019, LNCS 11623, Chapter 22, Springer Nature, pp 1–12
-

[Google Scholar](#)

17. Afolabi A, Afolabi I, Eshofonie E, Akinbo F (2019) Improving employability skills through a web-based work integrated learning database for construction students. In: Misra S et al (eds) ICCSA 2019, LNCS 11623, Chapter 31, Springer Nature, pp 1–11
-

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