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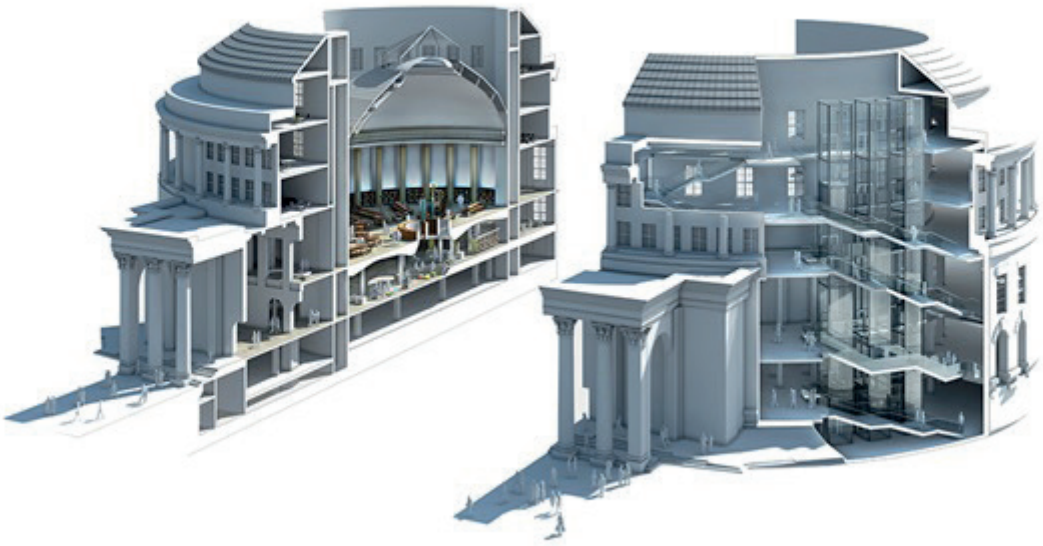

Post Occupancy Evaluation Report
Manchester Central Library Case Study

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Executive Summary

Research results show that the design solution achieved for Manchester Central Library (MCL) is regarded as inspirational, atmospheric and attractive. The music library, in particular, is regarded as an innovative space and very successful. Overall, MCL is regarded by users and staff as successful for studying and playing music.

An analysis and evaluation of Post Occupancy Evaluation (POE) as applied to a refurbishment of MCL, completed in 2014, is appended. Data was collected using mixed methods which included survey questionnaires, long term building management data, project design data and environmental analysis model output. Methods of analysis include gap analysis, comparative analysis and regression analysis.

Results of the data analysed for the report show that the design solution, as constructed, does meet the design performance specifications for internal ambient temperature for the period of the survey (October and November). However, users perceived the indoor environment to be cold during winter months. This is confirmed by regression analysis of long term data which indicates that the indoor temperature may drop to levels below a comfortable zone of 18°C and that the specified levels of relative humidity in specific spaces are not achieved.

This report also proposes a POE Toolkit as a guide for the preparation and use of a POE that is project specific for construction stakeholders. A POE was used to identify in use performance results as compared to design intent, and develop lessons learned for stakeholders to integrate and improve future delivery of construction projects.

This report identifies the following key findings for future project delivery:
Devise robust approaches for working with external statutory and regulatory bodies to resolve decisions that limit achieving the client brief.

Improve the environmental modelling process and workflows to refine the results of virtual environmental modelling. This is to address the gap identified between the IES software (2010) environmental analytical model results for indoor temperature and relative humidity at Stage C in the design process and actual building performance measured using sensors, post occupancy.

Enhance the briefing process so to confirm programme demand when presented by clients. The estimated number of visitors after completion was inferior to what has been achieved, thus causing (minor) issues related to accessibility to amenities such as power sockets.

For this project, the client required comfort facilities on the first floor, however the heritage body did not approve the inclusion of comfort facilities in this space.

Additional areas for future research:
Devise and implement mitigation measures for noise and echo generated by visitors to MCL, particularly in the reading room.

Improved wayfinding measures to the provided comfort facilities to manage concerns regarding the adequacy of the space to meet significantly increased occupancy levels, particularly during exam times.

Limitations affecting this report include the duration of data collection, an increased data collection period would offer additional detail regarding the influence of occupancy on indoor temperature and relative humidity levels. It should also be noted that users tend to be static when using the space in the inner ring for long periods of time. There are two dominant use profiles, 1-3 hours and 3-6 hours, and these achieve a high frequency with repeated visits. Therefore, this suggests that users perceive the enjoyment and benefits of the space outweigh any perceived use issues.

Full study available from info@ryderarchitecture.com on request.