

Financial and Budgeting Plan

Evaluation of financial performance for
the new aquarium attraction in
Swansea

BMTP5019

Dr Ernest Balutie Wavei

Karina Cretu

2404425

Executive Summary

The proposed aquarium in Swansea aims to boost tourism and economic growth. While it offers strong revenue potential and wider economic benefits, high costs and financial risks require careful planning. Its success depends on accurate demand forecasting, cost control, and maintaining consistent visitor numbers to achieve long-term sustainability.

Table of Contents

Executive Summary	1
Introduction	2
Main Findings	4
Cost structure.....	4
Break-even analysis.....	5
Economic impact and income potential	5
Conclusion	6
Recommendation	6
References.....	7

Introduction

The planned aquarium attraction in Swansea is meant to boost the city's tourism industry and economic growth. The attraction is expected to be located within the waterfront development and positioned as a significant tourist destination that combines immersive digital experiences, education and conservation (Labour, 2022). The aquarium could furthermore benefit from Swansea's tourism investments due to the wide appeal to families, schools and international tourists. This kind of development is particularly important in Swansea due to the city's coastal identity and the necessity for year- round indoor attractions that lessen seasonal fluctuations in tourist.

According to Swansea.Gov.UK (2026) tourism contributes approximately £658 million annually to the local economy with over 5,400 jobs supported (Swansea, 2024). This shows a demand for new tourist attractions. Furthermore, since Swansea Arena attracts many visitors, the introduction of this new attraction in proximity will enhance the city's image as a tourist destination and contribute to the local economy (Labour, 2022). This suggests that the aquarium attraction is significantly important since it may expand visitor stays, broaden the tourism selection and increase overall spending.

Despite their wide appeal, aquariums are linked to substantial initial capital investment and continuing operating expenses, which poses a financial risk if visitor numbers fall short of expected numbers. A prime example of this would be the National Marine Aquarium which recorded financial losses of around £3 million over a five-year period because of fewer visitors than anticipated (Morris, 2019).

However, thorough planning, demand forecasting and budget management are essential to its financial success, therefore a financial performance evaluation is crucial (Key, 2025). By focusing on cost-revenue analysis and overall financial viability, this report evaluates the expected Swansea aquarium's financial performance. It evaluates whether the project can achieve long-term sustainability using important academic ideas such as demand forecasting, cost structure theory and break-even analysis. Through an analysis of cost structures, prospective revenue and related financial risks, the report assesses the project's viability and make a well-informed suggestion for the decision makers.

Main Findings

Cost structure

Understanding the precise makeup and effects of different cost components on total expenditures and revenues is necessary to assess an aquarium attraction's financial performance through an application of cost structure theory. Cost structure emphasises the breakdown of costs, have the potential to affect payment methods and perceptions of equity. This suggests that open communication of cost components associated with service experiences may enhance financial performance for service providers, including attractions like aquariums (Stangl, Kastner and Natter, 2025). This suggests that an aquarium might profit from identifying and distributing cost components, like aquatic species maintenance, facility operations, and educational programming, that correspond with visitor evaluations.

In cost management for aquariums, it is crucial to address the various dimensions of costs, including direct operational and opportunity costs. Insights from food supply chain optimization highlight the need to integrate components such as procurement and transportation while considering factors like seasonality (Popa et al., 2025). For aquariums, effective cost management can involve sourcing aquatic life, preserving water quality, and planning events to maximise visitor flow and resource utilisation.

The introduction of non-native species, which presents management and ecological issues, is the primary source of economic costs related to the aquarium industry. Because of higher managerial expenses, these costs are typically higher in developed regions (Zheng et al., 2025). These management, ecological, and regulatory costs must be considered in the financial evaluations of aquarium attractions that source species from around the world. To manage the financial performance for the aquarium it is relevant to track spending in addition to performance indicators to find cost-efficiency and support spending strategies (Guerrero-Pineda et al., 2025)

The high fixed cost structure of aquarium projects is one of their main features. Construction, specialised tank systems, filtration technology, and infrastructure development are examples

of fixed costs. Fixed costs are expenses that remain constant regardless of production or sales volume changes, staying stable within a business's capacity limits (Mark, 2023). These expenses pose a substantial financial risk because they are incurred before the attraction's opening and are mostly irreversible. This is consistent with cost structure theory, which highlights that companies with large, fixed expenses need to consistently produce income to survive (Ajamieh, 2026).

Aquariums have significant continuing operating costs in addition to capital expenditures. These include energy use, staffing, maintenance, and animal care. Because water quality and temperature must be maintained, energy costs would be especially high. According to research in the UK, rising energy costs make operational budgeting even more uncertain (ONS, 2025).

The aquarium will have a high break-even criteria due to its high fixed and operational costs, requiring a high number of visitors to turn a profit. In the initial years of operation when demand may not be fully established it can result to financial fragility (Break, 2025).

Break-even analysis

An essential method for assessing the aquarium's financial viability is break-even analysis. Based on ticket prices and variable costs per visitor, it determines the number of visitors needed to cover total costs (B.Com Institute, 2024). The break-even point is likely to be relatively high because aquarium development has a lot of fixed costs. This implies that to recover its initial expenses, the attraction must continuously draw large numbers of visitors for a significant amount of time. The aquarium can lose revenue if less visitors attend than anticipated. This has been seen in other UK attractions, where financial troubles have resulted from overestimating demand. To reduce risk, accurate demand forecasting and careful financial planning are crucial. It draws attention to how profitability is affected by shifts in demand (Tutor2u.net, 2019). There is long-term sustainability risks associated with the project. After the initial excitement wears off, aquariums may see a decline in visitors, which would eventually result in less profit. This emphasises how crucial ongoing innovation and reinvestment are to sustaining interest from visitors.

Economic impact and income potential

The aquarium has the potential to produce significant economic benefits despite the risks involved. These include both direct visitor revenue and indirect benefits from higher spending at nearby businesses including hotels, restaurants, and retail stores. Meaning initial spending encourages further economic activity in the local economy (Tutor2u.net, 2024). The aquarium could improve Swansea's overall tourism performance by drawing more guests and promoting longer stays. Additionally, the attraction might help the city achieve its goals for redevelopment and job creation (Mansfield, 2022).

Although ticket sales will be the aquarium's main source of revenue, effective attractions usually diversify their sources of income because it is unsustainable to rely only on admissions. The size needed for financial sustainability is shown by benchmarking against comparable sites like The Deep, which draws about 450,000 visitors a year (YEAR IN R E V I E W 2 0 2 5, 2025). This is consistent with demand forecasting theory, which estimates possible attendance using current tourism statistics (Zhang, Xu and Yu, 2025).

Conclusion

In conclusion, both opportunities and risks are highlighted in the Swansea aquarium project's financial report. High fixed and operating costs put a lot of financial strain on businesses, even though strong tourism demand offers a secure foundation. Accurate forecasting is crucial since break-even analysis demonstrates that consistent high visitor numbers are necessary for success. The aquarium may provide larger economic advantages, but its financial success is not guaranteed. To guarantee long-term sustainability and reduce financial risk, careful planning, cost control, and realistic estimates are crucial.

Recommendation

Aquariums are expensive fixed-cost projects that are hard to modify once the initial investment is made (Johnny, 2024). Although cost structure analysis indicates where money is spent and break-even analysis determines how many visitors are needed to pay expenditures, neither method guarantees that those visitors will show up. Demand forecasting, which is crucial for efficient tourist planning and resource allocation, reduces this uncertainty by anticipating reasonable visitor numbers based on current data (Huang and Zhang, 2024). Since tourism demand does not always match initial expectations and planned visits may not become into actual attendance. The project team should use existing Swansea tourism data, such as visitor numbers, seasonal trends, and demographics, benchmark against similar UK attractions like The Deep, and conduct market research through surveys to improve financial performance (FasterCapital, 2025).

Additionally, the danger of overestimating demand can be decreased by going through worst-case scenarios (Garro, 2025). Accurate demand forecasting allows the aquarium to determine suitable ticket pricing, grow the project successfully, and prevent overinvestment, which helps quicken break-even (Nakagawa, Abe and Isobe, 2024). By enabling decision-makers to predict variations in visitor numbers brought on by seasonality, competition, and economic conditions, thorough demand forecasting promotes improved strategic planning. This makes it feasible to allocate resources and budget more effectively, ensuring that marketing initiatives, operational capacity, and workforce levels are in line with demand expectations (Das, 2025). Accurate demand forecasting incorporated into the planning process boosts the aquarium project in Swansea's chances of long-term sustainability and financial resilience.

References

1. Ajamieh, A.A. (2026). *Cost Structure Analysis: The Complete Guide*. [online] Mozon Technology – Mozon Technology, a Jordanian software company with expertise since 2002, provides innovative and integrated software solutions for businesses. Available at: <https://mazon-tech.com/en/blog/cost-structure-analysis/> [Accessed 4 May 2026].
2. B.com Institute. (2024). *Break-even Analysis: Determining Project Viability - B.com Institute*. [online] Available at: <https://bcom.institute/fundamentals-of-financial-management/break-even-analysis-project-viability/> [Accessed 4 May 2026].
3. Break (2025). *Break Even Analysis: How to Find Your Break Even Point and Increase Your Profit Margin - FasterCapital*. [online] FasterCapital. Available at: <https://fastercapital.com/content/Break-Even-Analysis--How-to-Find-Your-Break-Even-Point-and-Increase-Your-Profit-Margin.html> [Accessed 4 May 2026].
4. Das, M. (2025). *Capacity Planning Strategies: Optimize Resource Allocation*. [online] Celoxis.com. Available at: <https://www.celoxis.com/article/capacity-planning-strategies> [Accessed 4 May 2026].
5. FasterCapital. (2025). *How Market Research Helps with Sales Forecasting*. [online] Available at: <https://fastercapital.com/content/How-Market-Research-Helps-with-Sales-Forecasting.html> [Accessed 4 May 2026].
6. Garro, B.A.R. (2025). *LinkedIn*. [online] LinkedIn.com. Available at: <https://www.linkedin.com/pulse/impact-incorrect-forecasting-supply-chain-efficiency-ramirez-garro-jinfe/> [Accessed 4 May 2026].
7. Guerrero-Pineda, C., Gerber, L.R., Sangolquí, P., Chafla, J. and Iacona, G.D. (2025). A ‘data-for-decisions’ management system to facilitate cost-efficiency in conservation interventions. *Conservation Science and Practice*, 7(3). doi:<https://doi.org/10.1111/csp2.70007>.
8. Huang, J. and Zhang, C. (2024). Daily Tourism Demand Forecasting with the iTransformer Model. *Sustainability*, 16(23), p.10678. doi:<https://doi.org/10.3390/su162310678>.
9. Johnny (2024). *Why Are Aquariums So Expensive: Understanding Costs and Key Components for Your Setup*. [online] The Aquarium Expert. Available at: <https://theaquariumexpert.com/why-are-aquariums-so-expensive/> [Accessed 4 May 2026].

10. Key, A. (2025). *Financial Performance Evaluation: Financial Performance Evaluation: A Key Tool for Business Decision Making - FasterCapital*. [online] FasterCapital. Available at: <https://fastercapital.com/content/Financial-Performance-Evaluation--Financial-Performance-Evaluation--A-Key-Tool-for-Business-Decision-Making.html> [Accessed 4 May 2026].
11. Labour, S. (2022). *Swansea Labour*. [online] Swansea Labour. Available at: <https://www.swansealabour.org/news/swansea-labour-council-aims-to-make-a-splash-with-new-aquarium> [Accessed 3 May 2026].
12. Mansfield, M. (2022). *Plans announced for innovative aquarium in Swansea*. [online] Nation.Cymru. Available at: <https://nation.cymru/news/plans-announced-for-innovative-aquarium-in-swansea/> [Accessed 4 May 2026].
13. Mark (2023). *Fixed Costs Explained: Definitions, Formulas and Examples*. [online] Capital City Training Ltd. Available at: <https://www.capitalcitytraining.com/knowledge/fixed-costs/> [Accessed 4 May 2026].
14. Morris, J. (2019). Plymouth's National Marine Aquarium loses £3m in five years. *BBC News*. [online] 4 Apr. Available at: <https://www.bbc.co.uk/news/uk-england-devon-47456674> [Accessed 4 May 2026].
15. Nakagawa, Y., Abe, Y. and Isobe, M. (2024). Ticketing and Crowd Management System for Attraction Facilities: An Aquarium Case Study. *Journal of Disaster Research*, 19(2), pp.303–315. doi:<https://doi.org/10.20965/jdr.2024.p0303>.
16. ONS (2025). *The Impact of Higher Energy Costs on UK Businesses*. [online] Ons.gov.uk. Available at: <https://www.ons.gov.uk/economy/economicoutputandproductivity/output/articles/theimpactofhigherenergycostsonukbusinesses/2021to2024> [Accessed 4 May 2026].
17. Popa, I., Stanescu, S.-G., Anisoara Duica, Molnar, E.I. and Mircea Constantin Duica (2025). Cost Optimisation of Supply Chains in the Food Industry: Cost Function Modelling. *Amfiteatru Economic*, 27(69), pp.293–293. doi:<https://doi.org/10.24818/ea/2025/69/293>.
18. Stangl, B., Kastner, M. and Natter, M. (2025). The Impact of Cost Structure Appeals on Fairness Perceptions and Payments. *Journal of Service Research*, 29(3). doi:<https://doi.org/10.1177/10946705251341080>.
19. Swansea. (2024). *Amazing attractions see tourism go from strength to strength - Swansea*. [online] Available at: <https://www.swansea.gov.uk/article/37763/Amazing-attractions-see-tourism-go-from-strength-to-strength> [Accessed 4 May 2026].

20. Swansea. (2026). *Tourism research and statistics*. [online] Available at:
<https://www.swansea.gov.uk/article/8449/Tourism-research-and-statistics> [Accessed 4 May 2026].
21. Tutor2u.net. (2019). *Profits and Changes in Demand*. [online] Available at:
<https://www.tutor2u.net/economics/reference/profits-and-changes-in-demand>
[Accessed 4 May 2026].
22. Tutor2u.net. (2024). *2.4.4 The Multiplier*. [online] Available at:
<https://www.tutor2u.net/economics/reference/2-4-4-the-multiplier> [Accessed 4 May 2026].
23. YEAR IN R E V I E W 2 0 2 5. (2025). Available at:
https://www.thedeep.co.uk/sites/default/files/documents/Year%20in%20Review%202025_Digital.pdf [Accessed 4 May 2026].
24. Zhang, Z., Xu, Z. and Yu, W. (2025). Tourism demand forecasting with multi-source data: a hybrid model incorporating seasonal-trend decomposition. *Annals of Operations Research*. doi:<https://doi.org/10.1007/s10479-025-06832-0>.
25. Zheng, P., Ren, L., Soto, I., Oficialdegui, F.J., Cheng, W., Zhang, F., Sun, Z. and Jiang, X. (2025). Economic costs of aquarium trade invaders: a global perspective on ecological and management gaps. *Reviews in Fish Biology and Fisheries*, 36(1). doi:<https://doi.org/10.1007/s11160-025-10011-6>.