Research Proposal

Design and Creative Technologies

Torrens University, Australia

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Exploring the Relationship between Net Promoter Score and Revenue Growth in Healthcare Clinics

1. Abstract

This study investigates whether the Net Promoter Score (NPS) is statistically correlated with revenue growth in healthcare clinics. While NPS is widely used as a measure of patient satisfaction and loyalty, limited empirical research validates its direct financial impact in the healthcare context.

Adopting a **quantitative correlational design** within a **pragmatic–positivist paradigm**, this research will analyze a three-year dataset (2022–2025) from Pro-Corpo Estética, a network of Brazilian clinics. Monthly NPS and revenue data will be examined using descriptive statistics, Pearson correlation, and linear regression to determine the strength and direction of their relationship.

By establishing empirical evidence on how patient experience metrics align with business outcomes, the research will contribute actionable insights for healthcare managers. The project also aligns with Torrens University's Here for Good ethos, promoting responsible data-driven innovation that supports both patient care quality and sustainable business performance.

2. Introduction

Healthcare organisations increasingly depend on analytics to understand how patient experience drives operational success. The **Net Promoter Score (NPS)** - a single-question metric asking customers how likely they are to recommend a service—has become one of the most widely adopted indicators of satisfaction. Although extensively applied in commercial industries, NPS's financial relevance in healthcare remains largely anecdotal and unverified.

Assessment 1 identified this gap through a review of literature that conceptually linked satisfaction metrics to profitability but rarely demonstrated quantitative validation. Assessment 2 responded by designing a research framework grounded in statistical correlation to empirically test this relationship. This proposal consolidates those findings into a complete research plan, outlining objectives, hypotheses, methodology, ethics, and a timeline for execution.

Research Questions:

- Aim: To examine whether higher NPS scores are statistically correlated with increased monthly revenue in healthcare clinics.

Research Questions:

- RQ1: To what extent is NPS correlated with monthly revenue growth in healthcare clinics?
- RQ2: Can NPS trends over time predict short-term revenue fluctuations?

Hypothesis:

- H0: There is no statistically significant correlation between NPS scores and monthly revenue.
- H1: There is a positive correlation between NPS scores and monthly revenue.

Aligned with Torrens University's Here for Good philosophy, this study converts patient feedback into actionable, privacy-compliant insights that enhance both care quality and organizational sustainability.

3. Literature Review

3.1. Customer Experience and Performance Metrics

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

3.2. NPS and Business Outcomes

In corporate contexts, high NPS values correlate with repeat purchase behavior and reduced churn (Field 2018). However, healthcare differs because satisfaction depends on trust, empathy, and perceived competence. Studies such as Shankar and Yip (2024) and Xiao et al. (2022) suggest that analyzing structured feedback through data analytics enables service optimization, yet few extend this to monetary impact.

3.3. Patient Experience in Healthcare

Healthcare literature recognizes that patient feedback is an early-warning system for service quality. Godovykh and Pizam (2023) propose that experience influences both clinical outcomes and operational efficiency. Despite this, evidence connecting NPS scores to revenue remains largely anecdotal - creating a gap this study addresses.

3.4. Quantitative Approaches in Service Analytics

Quantitative analysis provides objectivity and replicability (Polonsky & Waller 2019). Correlational designs test associations between independent and dependent variables using statistical measures such as Pearson's r and R^2 (Cohen 1988). Regression models can estimate how changes in NPS relate to revenue variations. Wohlin and Runeson (2021) advocate such empirical methods for ICT-driven organizational research.

3.5. Identified Knowledge Gap and Research Contribution

While NPS is universally employed, its financial validity in healthcare remains under-examined. This study contributes by providing empirical correlation evidence using real-world data, thereby bridging marketing analytics and health-service management. The expected outcome is a replicable model for decision support within data-driven healthcare operations.

Figure X:Customer Experience → NPS Score → Loyalty → Revenue Growth

4. Methodology and Methods

4.1. Research Design and Philosophical Orientation

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

4.2. Data Sources and Sampling

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

4.3. Data Preparation

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

4.4. Analytical Procedures

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

4.5. Ethical Considerations

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

4.6. Reliability, Validity and Limitations

Customer experience research has evolved from qualitative satisfaction measures toward quantitative indices such as NPS and Customer Effort Score (Bryman 2016; Creswell & Plano Clark 2023). Dawes (2024) emphasizes that NPS captures both affective and behavioral loyalty components, while Godovykh and Pizam (2023) demonstrate that positive patient experiences enhance willingness to recommend.

5. Conclusion

This proposal formalizes a feasible and ethically sound quantitative study aimed at determining whether patient-experience metrics, measured by NPS, are statistically linked to financial performance in healthcare clinics. By combining descriptive and inferential statistics, the research will clarify whether NPS can serve as a predictive indicator of revenue growth.

The work will contribute to academic and professional knowledge in ICT R&D by demonstrating how data analytics can bridge operational and service-quality domains. Future extensions may incorporate mixed-methods designs that include qualitative feedback or design-science prototypes for automated dashboards.

Ultimately, the research embodies Torrens University's commitment to socially responsible innovation—advancing data-driven healthcare management that improves both patient outcomes and organizational resilience.

6. Proposed Timeline

The overlapping structure enables iterative refinement: preliminary findings from correlation analysis inform regression model specifications, while early visualization prototypes guide final dashboard design.

- Weeks 1-2: Data extraction and cleaning (Milestone: validated dataset ready for analysis)
- Weeks 3-4: Exploratory data analysis and assumption testing (Milestone: confirmed data meets parametric test requirements)
- Weeks 5-6: Correlation analysis for RQ1 (Milestone: Pearson/Spearman correlations computed)

- Weeks 7-8: Regression modeling for RQ2 (Milestone: predictive models validated)
- Weeks 9-10: Robustness checks and sensitivity analysis (Milestone: findings confirmed across subgroups)
- Weeks 11-12: Report writing and visualization development (Milestone: final deliverables complete).

Figure X:Gantt Chart – 12-week research Timeline

7. Appendices

7.1. Appendix A – Company Consent Letter

Signed authorization from Pro-Corpo Estética granting permission to use anonymized data for academic purposes.

7.2. Appendix B – Data Preparation Code Excerpt

Snippet of Python workflow showing cleaning and correlation analysis.

7.3. Appendix C – Gant Chart (12 weeks)

Visual timeline representation for the project schedule.

7.4. Appendix D – Ethics Statement

Compliance declaration aligned with Torrens University and data governance frameworks.

End of Appendix Section

Statement of Acknowledgment

I acknowledge that I have used the following AI tool(s) in the creation of this report:

- OpenAI ChatGPT (GPT-5): Used to assist with outlining, refining structure, improving clarity of academic language, and supporting APA 7th referencing conventions.

I confirm that the use of the AI tool has been in accordance with the Torrens University Australia Academic Integrity Policy and TUA, Think and MDS's Position Paper on the Use of AI. I confirm that the final output is authored by me and represents my own critical thinking, analysis, and synthesis of sources. I take full responsibility for the final content of this report.

8. References

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