
RESEARCH PROPOSAL
ASSESSMENT 3

RESEARCH METHODOLOGIES
PROF DR. BUSHRA NAEEM

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

December, 2025

INTRODUCTION

Problem Statement

- NPS widely used to measure satisfaction but rarely validated against revenue in healthcare.
- Clinics rely on assumptions rather than empirical evidence.

Aim & Objectives

- Quantify the correlation between NPS and monthly revenue.
- Provide data-driven insights for managerial decisions.

Research Questions

- RQ1: To what extent can NPS predict revenue growth?
- RQ2: What is the statistical significance and strength of this correlation?

POSITIONING WORK IN THE FIELD

- Bar chart: Studies linking Customer Experience → Profit (Healthcare vs Retail).
- Timeline graphic: Evolution of NPS (2003 → 2025).
- Callouts with key sources:
 - Dawes (2024) – NPS predictive validity.
 - Godovskykh & Pizam (2023) – Patient experience impact.
 - Wohlin & Runeson (2021) – ICT empirical methods.

The 2010s marked the real AI revolution in recommendation — where algorithms began learning autonomously from millions of behavioral signals.

KNOWLEDGE GAP & CONCEPTUAL FRAMEWORK

- **Gap:**
- No quantitative validation of NPS–Revenue relationship in healthcare.

Conceptual Model (Figure 1):

Patient Feedback → NPS Score → Loyalty → Revenue Growth

(show flow diagram with arrows + clinic icons)

PROPOSED METHODOLOGY

What are **AI Recommender Systems?**

- **Paradigm:** Pragmatic–Positivist → data-driven evidence.
- **Design:** Quantitative correlational.
- **Data Source:** Pro-Corpo Estética (21 clinics, 2022–2025).
- **Approach Diagram:**
 - Visualise pipeline:

Data collection → Cleaning → Descriptive Stats → Pearson r → Regression → Findings.

METHODS & ETHICS

Tools & Procedures

```
corr = df[['nps','revenue']].corr(method='pearson')
```

Descriptive stats → normality test → correlation → linear regression.

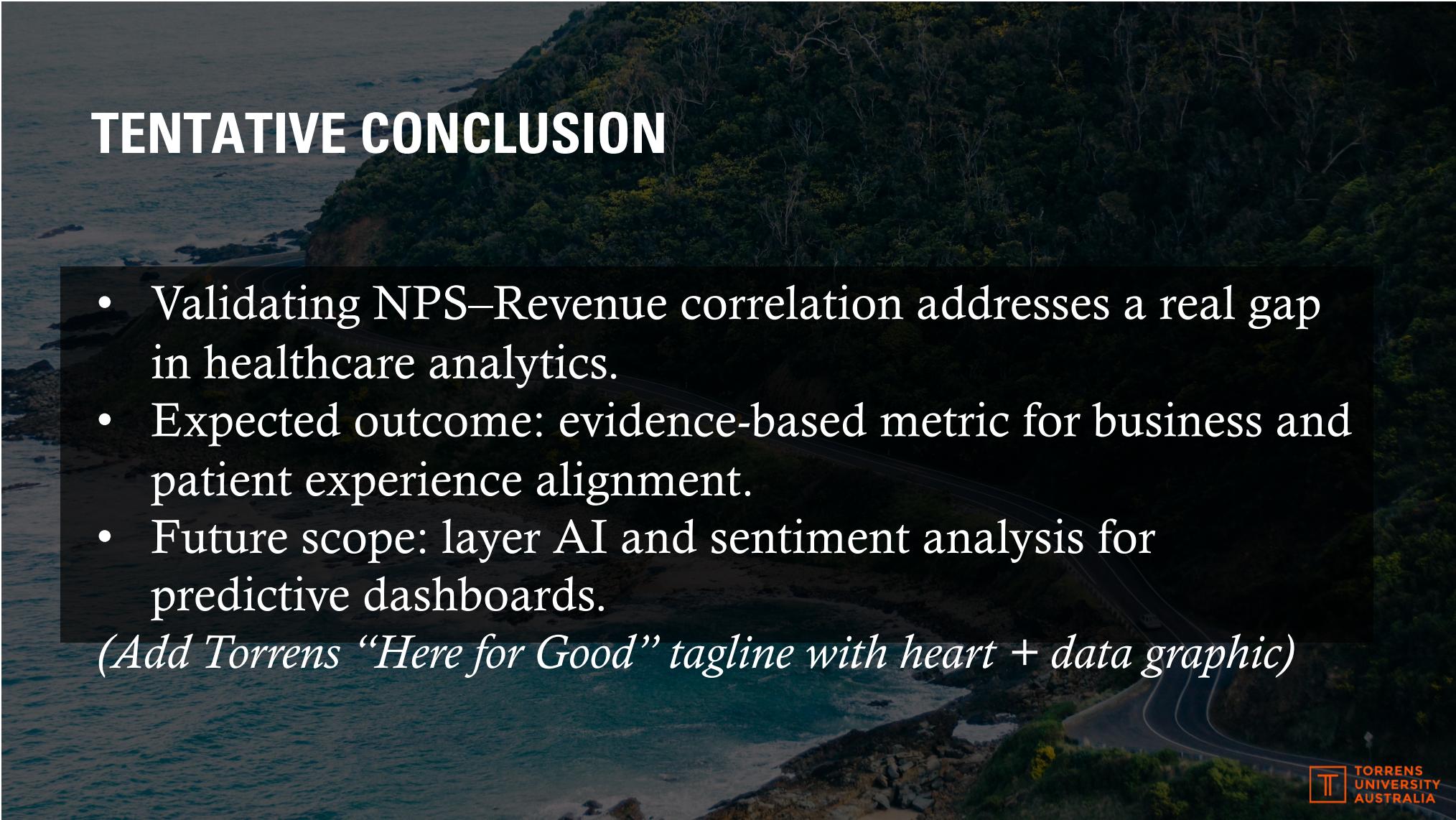
Ethics & Governance

Organisational consent (see Appendix A).

Anonymised data; no personal identifiers.

Encrypted storage; GDPR + Privacy Act 1988 compliance.

(Add shield icon + short bullet visual)



TENTATIVE CONCLUSION

- Validating NPS–Revenue correlation addresses a real gap in healthcare analytics.
- Expected outcome: evidence-based metric for business and patient experience alignment.
- Future scope: layer AI and sentiment analysis for predictive dashboards.

(Add Torrens “Here for Good” tagline with heart + data graphic)

TIMELINE

Week	Task	Deliverable
1	Ethics approval	Letter obtained
2-3	Data collection/cleaning	Clean dataset
4-6	Analysis	Correlation + Regression outputs
7-9	Draft writing	Preliminary report
10-11	Review + refinement	Revised version
12	Submission	Final proposal

STATEMENT OF ACKNOWLEDGEMENT

I acknowledge that I have used OpenAI's ChatGPT (GPT-5) to assist in the planning, outlining, and refinement of my presentation for HCD402 – Assessment 1. The tool supported me in structuring slide content, improving clarity of written explanations, and enhancing the overall flow of the presentation.

I confirm that the use of the AI tool has been in accordance with the Torrens University Academic Integrity Policy and TUA, Think, and MDS's Position Paper on the use of AI. I confirm that the final presentation and its analysis are authored by me and represent my own understanding, research, and critical thinking. I take full responsibility for the final content of this presentation.

REFERENCES

- World Health Organization. (2020). *WHO guidelines on physical activity and sedentary behaviour*. [https://www.who.int/...](https://www.who.int/)
- Bull, F. C., et al. (2020). 2020 WHO guidelines... *Int. J. Behav. Nutr. Phys. Act.*, 17, 141. <https://doi.org/10.1186/s12966-020-01037-z>
- Aykut, G., et al. (2023). Reliability and validity of the problematic TikTok Use Scale... *Frontiers in Psychiatry*, 14. <https://doi.org/10.3389/fpsyg.2023.1068431>
- Haliti-Sylaj, L., & Sadiku, A. (2024). Impact of short reels on attention span... *Eurasian Journal of Applied Linguistics*, 10(3), 60–68.
- Zhang, X., et al. (2024). Mobile phone short video use negatively impacts attention... *Frontiers in Human Neuroscience*. <https://doi.org/10.3389/fnhum.2024.1383913>
- Shojaati, M., et al. (2022). Screen time increases overweight and obesity risk among adolescents: **Systematic review & meta-analysis**. *BMC Primary Care*, 23, 220. <https://doi.org/10.1186/s12875-022-01761-4>
- Wang, Y., et al. (2022). Effect of screen-time intervention on obesity... **Meta-analysis of RCTs**. *Preventive Medicine*. <https://doi.org/10.1016/j.ypmed.2022.107021>
- Bountouridis, D., et al. (2023). Filter bubbles in recommender systems: **Systematic review**. *arXiv:2307.01221*.
- Nielsen, R. K., et al. (2022). **Echo chambers & polarisation**: Literature review. Reuters Institute. <https://doi.org/10.60625/risj-etxj-7k60>
- Reuters. (2025, May 2). TikTok fined €530m... (EU DPC).
- Jannach, D., Pu, P., Ricci, F., & Zanker, M. (2021). Recommender systems: Past, present, future. *Ai Magazine*, 42(3), 3-6.
- Dong, Z., Wang, Z., Xu, J., Tang, R., & Wen, J. (2022). A brief history of recommender systems. *arXiv preprint arXiv:2209.01860*.

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A large, semi-transparent orange rectangular box covers the right side of the slide, containing the main text. The background image shows a modern study or library space with wooden structural beams, long tables, and people working.

Thank You

December, 2025