

Deepening Research Integrity and Professional Practice in Enterprise IT Management

A Critical Reflection on the Research Methods and Professional Practice Module

Tobias Zeier, 12696372, the 26th of January 2026
University of Essex Online

1 Introduction

This report reflects on my journey through the Research Methods and Professional Practice module taken as part of the MSc Enterprise IT Management programme. It is structured using Rolfe, Freshwater and Jasper's (2001) "What? So What? Now What?" framework. My e-Portfolio, containing all formative and summative assignments, as well as key concepts of each unit, can be found here: <https://tobizeier.github.io/posts/RMPP/>.

2 What?

The Research Methods and Professional Practice module represented the most demanding component of my MSc programme, requiring substantially more tasks and intellectual engagement compared to other modules. Throughout this intensive module, I engaged with learning activities spanning ethical analysis, research methodology, and professional practice across nine units.

My learning commenced with critical examinations of professional ethics through multiple case study analyses. In Unit 1, I analysed the [Q Industries case](#) concerning lethal autonomous weapons systems, identifying severe ethical violations against both ACM and BCS codes of conduct whilst arguing for statutory backing of ethical principles to transform them from voluntary guidelines into [enforceable legal standards](#). This critical stance on ethics enforcement continued through Unit 2, where I examined [three distinct cases](#) involving workplace discrimination, software accessibility failures, and algorithmic bias in content moderation systems.

Unit 4 marked a pivotal transition towards practical research application through [examination of GDPR compliance](#) and data privacy ethics, whilst Unit 5 investigated the [Cambridge Analytica scandal](#) alongside the OKCupid data scraping incident and Crisis Text Line privacy breach, documenting how ostensibly harmless surveys became vehicles for significant ethical violations.

The module's methodological rigour became particularly evident through my literature review development across Units 2, 4, and [final submission](#). My research question examining critical success factors and barriers in e-learning implementation demanded systematic literature synthesis across technological, pedagogical, institutional, and policy dimensions. I employed PRISMA-inspired methodology to systematically search databases, ultimately synthesising evidence from diverse empirical studies.

Units 7, 8, and 9 confronted complex ethical dilemmas in statistical practice and research governance. I analysed scenarios involving [selective reporting](#) pressures, arguing that analytical bias and the garden of forking paths constitute fundamental breaches of research integrity requiring pre-registration of analysis plans before data collection. Unit 8 culminated in developing a comprehensive [research proposal outline](#) for investigating e-learning implementation across UK higher education institutions through qualitative multiple case study methodology.

The module concluded with an extensive [research proposal presentation](#) synthesising my literature review findings into a coherent implementation framework addressing several critical success factors. Additionally, I completed [practical exercises](#) in hypothesis testing and data presentation, developing interactive visualisations demonstrating proficiency in quantitative analytical techniques. Unit 9 further enhanced my data visualisation competencies through [Power BI exercises](#) creating sales analytics dashboards with profit margin analysis and regional performance comparisons.

3 So What?

This intensive engagement with research methodology and professional ethics fundamentally transformed my understanding of academic rigour and professional responsibility within Enterprise IT Management. The module's exceptional demands proved valuable precisely because they required sustained critical engagement across multiple intellectual domains simultaneously. The ethical case studies revealed a critical gap between aspirational professional codes and enforceable accountability mechanisms. My analysis of the Q Industries case exposed how voluntary ethical frameworks remain "toothless" without regulatory enforcement, enabling powerful actors to pursue commercial interests whilst placing harms onto vulnerable populations (Resseguier and Rodrigues, 2020). The Cambridge Analytica analysis demonstrated that seemingly innocuous digital tools can become instruments of manipulation when exploited beyond users' reasonable expectations, highlighting the urgent need for stronger regulatory frameworks addressing digital data collection challenges (Taylor and Pagliari, 2018).

The literature review development process enhanced my capacity for systematic evidence synthesis across diverse empirical contexts. Identifying seven interdependent success factors required integrating findings from studies employing varied methodologies, theoretical frameworks, and cultural contexts. This synthesis revealed that e-learning effectiveness depends on interactions between technological infrastructure, pedagogical design, institutional support, and learner characteristics, rather than treating technology as standalone solutions (Amrane-Cooper *et al.*, 2023).

The statistical ethics scenarios in Units 7 through 9 proved particularly pertinent given my professional responsibilities involving data analysis and reporting. The Abi case demonstrated how market-based funding structures create inherent conflicts where research integrity competes directly with customer satisfaction. My engagement with concepts such as the garden of forking paths and analytical bias revealed how questionable research practices emerge not merely from individual ethical failures but from structural pressures within client-provider research models lacking external oversight (Gelman and Loken, 2014).

The research proposal development integrating qualitative case study methodology with implementation framework design enhanced my capacity for designing rigorous investigations addressing complex organisational challenges. Proposing semi-structured interviews, focus groups, and document analysis across four UK institutional types demonstrated sophisticated understanding of methodological triangulation enabling comprehensive investigation of implementation barriers whilst capturing context-sensitive variation.

The practical exercises in hypothesis testing and Power BI visualisation complemented theoretical understanding with technical proficiency in quantitative analysis and data presentation. These competencies prove directly applicable to IT management contexts requiring evidence-based decision making supported by clear, accessible data visualisations for diverse stakeholder audiences.

4 Now What?

This module's intensive demands have equipped me with sophisticated research capabilities and heightened ethical awareness that will fundamentally shape my future professional practice as IT Team Lead at a Swiss banking institution. The systematic literature review methodology provides a framework for investigating complex organisational challenges within enterprise IT contexts.

The ethical frameworks and critical analyses developed throughout this module establish foundations for ethically informed IT leadership. I shall advocate for embedding pre-registration protocols, transparent reporting standards, and enforceable accountability mechanisms within IT project governance frameworks.

My [Professional Development Action Plan](#), informed by comprehensive [SWOT analysis](#) conducted throughout this module, establishes concrete pathways for applying these competencies. Within six months, I shall complete Python for Data Analysis training to address statistical modelling gaps, applying these skills to quantitative analysis of trading patterns and system performance metrics. This development directly builds upon the hypothesis testing and data presentation exercises completed during this module.

Within four months, I shall deepen my ISO 42001 AI governance knowledge and draft a framework proposal for my team that operationalises the accountability principles from my ethical case analyses. Within nine months, I shall pursue academic-industry research publication by submitting my capstone project paper to an industry journal.

The data analysis and visualisation competencies developed through practical exercises will enhance my capacity for evidence-based IT management decision making. I shall establish regular reporting frameworks employing interactive dashboards to provide transparent, accessible performance metrics supporting strategic IT investment decisions whilst avoiding selective presentation biases.

Ultimately, this module has fundamentally transformed my approach to professional practice within Enterprise IT Management. The integration of rigorous research methodology, critical ethical analysis, and practical analytical skills provides a robust foundation for addressing complex organisational challenges with intellectual rigour and professional integrity. The exceptional demands of this module, whilst challenging, have proven invaluable in developing the advanced capabilities necessary for distinguished performance at Master's level.

Word Count: 1,112

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