**Table of Contents**

[CHAPTER THREE - METHODOLOGY 3](#_Toc194402799)

[3.0 Introduction 3](#_Toc194402800)

[3.1 Design Science Research Methodology 3](#_Toc194402801)

[3.2 Area of Focus/Study 3](#_Toc194402802)

[3.3 Research Methods and Objectives Mapping 4](#_Toc194402803)

[3.4 Research Methods 4](#_Toc194402804)

[3.4.1 Qualitative Research Method 4](#_Toc194402805)

[3.4.2 Design Science Method 5](#_Toc194402806)

[3.4.3 Experimental Method 6](#_Toc194402807)

[3.4.4 Empirical Method 6](#_Toc194402808)

[3.5 Development Approach: Waterfall Model 6](#_Toc194402809)

[3.5.1 Requirements Phase 7](#_Toc194402810)

[3.5.2 Design Phase 8](#_Toc194402811)

[3.5.3 Development Phase 8](#_Toc194402812)

[3.5.4 Testing Phase 8](#_Toc194402813)

[3.5.5 Deployment Phase 9](#_Toc194402814)

[3.5.6 Maintenance Phase 9](#_Toc194402815)

[3.6 Tools and Techniques 10](#_Toc194402816)

[3.6.1 Design Tools 10](#_Toc194402817)

[3.6.2 Programming Tools/Techniques/Approaches 10](#_Toc194402818)

[3.6.3 System Evaluation Tools 12](#_Toc194402819)

[3.7 Conclusion 12](#_Toc194402820)

[References 13](#_Toc194402821)