

**DESIGN OF A CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM
FRAMEWORK TO ENHANCE AFTER-SALES SERVICE QUALITY AND
OPERATIONAL EFFICIENCY AT PT. XYZ**

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STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains no material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.



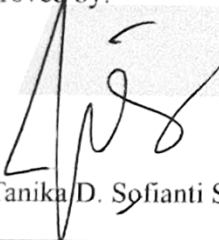
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ABSTRACT

DESIGN OF A CRM SYSTEM FRAMEWORK TO ENHANCE AFTER-SALES SERVICE QUALITY AND OPERATIONAL EFFICIENCY AT PT. XYZ

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PT. XYZ, a B2B distributor of Siemens industrial automation products in Indonesia, operates its after-sales service without a centralized system, inquiry records, or Standard Operating Procedure, resulting in an estimated 15-minute information retrieval latency and a workflow dependent on individual tacit knowledge. This research aims to diagnose the structural root causes of these deficiencies and design a CRM system framework to resolve them. The research applies DMAIC as the overarching methodology, with a Waterfall SDLC embedded within the Improve phase. In the Define and Measure phases, qualitative interviews with three operational staff and “As-Is” UML mapping using Activity and Sequence diagrams document the current workflow, establishing NVA waste classification and a latency baseline. In the Analyze phase, a Fishbone diagram and 5 Whys analysis identify the complete absence of a CRM framework as the single structural root cause. A Gap Analysis across six operational dimensions translates the diagnosis into system requirements, and a Weighted Scoring Model selects Zoho Creator as the implementation platform. In the Improve phase, four “To-Be” UML diagrams: Use Case, Activity, Sequence, and Class, define the relational architecture prior to configuration. A six-module CRM prototype is verified through 23 Black Box test cases, achieving a 100% pass rate. User Experience Questionnaire evaluation produces a Pragmatic Quality mean of +1.25, exceeding the 0.8 usability threshold. In the

Control phase, a Standard Operating Procedure governing seven procedures is developed and enforced through a “No Ticket, No Action” rule.

Keywords: Operational CRM, DMAIC, After-sales service, Information retrieval latency, UML system modeling.





DEDICATION

I dedicate this work to myself, my thesis company and all the growing local enterprises out there striving to elevate their operational excellence and compete at the highest level.



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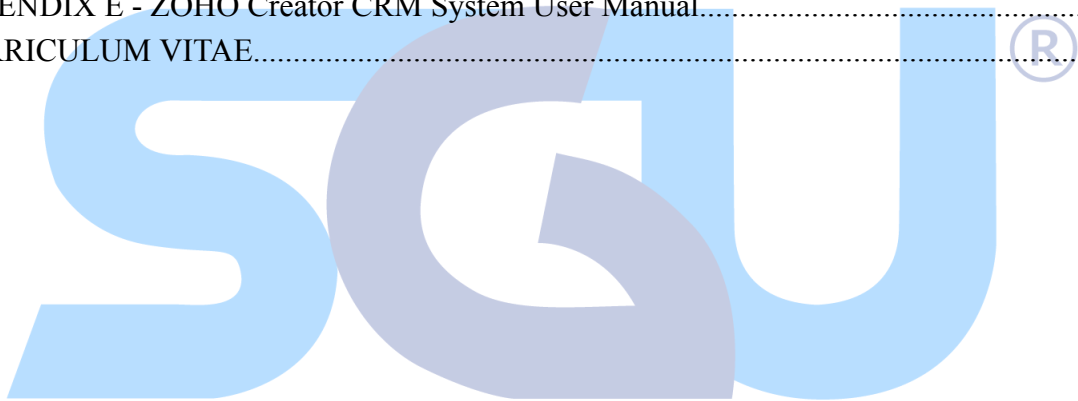
Finally, I would like to thank myself for staying resilient, patient and sane, pulling through the burnout, pressure, stress, headaches and actually getting this done.

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