

THESIS

**Optimizing Vendor Selection and Standardization in
EDC Machine Supply Chain at PT. XYZ**

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22451012

MASTER'S DEGREE

in

MASTER OF INFORMATION TECHNOLOGY

FACULTY OF ENGINEERING AND INFORMATION TECHNOLOGY



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August 2025

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.

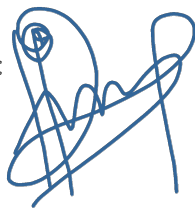
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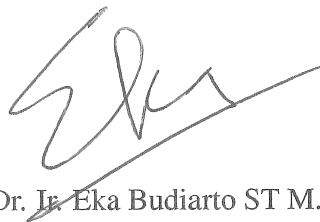
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ABSTRACT

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This study purpose to optimize process vendor selection and standardization at supply chain process of EDC machines at PT. XYZ, by utilize IT Governance approach using *COBIT 2019*. Main problem that being face by organization are undelivered SLA performance, non standard quality between vendor in separate area nationwide, and there is no standard in selected specific vendor outsourcing. Using research methodology using qualitative and quantitative approach, this study analyze gap between Vendor Governance by utilize key domains of COBIT 2019, especially at APO10 (Managed Vendors), DSS01 (Managed Operations), and MEA01 (Monitoring Performance). This process including Enterprise Goal mapping to Alignment Goal and choosing relevance domain to be used, and measure Capability Level of process using Level 0-5. This evaluation being conduct by Executive Vice President (EVP), Vice President (VP) and Assistant Vice President (AVP) of EDC Services team in contextual with operational process. This research show that more of several key activities at domain APO10, DSS01 and MEA01 still at level of capabilities of 2 and 3, showing that several activities not well documented consistently across several areas. Therefore recommendation being deliver by creating performance scoring based on Simple Weighted Average (SAW) as part of Multi Criteria Decision Making

(MCDM) model, performance score card, vendor evaluation and simulation of vendor rationalization to enforce efficiency and increasing service quality. This study have given direct contribution at PT. XYZ in order to design and develop Governance Vendor Management that more structured and approachable to increase transparency and consistency that align with Organization Strategic. Not only that, this study showing how EGIT framework can be implemented to handle real world case in managing distribution of I&T asset.

Keywords: IT Governance, Vendor Management, COBIT 2019, Capability Maturity Model, MCDM

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DEDICATION

This thesis is wholeheartedly dedicated to:

- My beloved parents, whose endless prayers, sacrifices, and unwavering support have been the foundation of my journey. Your belief in me is my greatest strength.
- My wife and children, for the laughter, encouragement, and reminders to never give up, even in the most difficult times.
- My lecturers and mentors at Swiss German University, who have guided me not only with knowledge but also with integrity and purpose.
- My dearest friends and colleagues, for standing by me and providing the motivation I needed to complete this work.
- And to everyone who believed in this journey and the vision behind it — this achievement is not mine alone.

ACKNOWLEDGEMENT

First and foremost, all praise and gratitude be to God Almighty for the strength, health, and guidance that enabled the completion of this thesis titled "*Optimizing Vendor Selection and Standardization in EDC Machine Supply Chain at PT. XYZ*".

This thesis is submitted in partial fulfillment of the requirements for the Master of Information Technology program at Swiss German University. Throughout the process of writing and completing this research, I have received tremendous support, encouragement, and valuable insights from many individuals.

- Dr. Ir. Heru Purnomo Ipung M.Eng, Advisor, my thesis advisor, for his continuous guidance, constructive feedback, and patience throughout the development of this research.
- Dr. Ir. Eka Budiarto ST M.Sc, Co-Advisor interest in sense of competence was the impetus for my proposal
- All lecturers and academic staff at Swiss German University who have shared their knowledge and expertise during my time in the program.
- My fellow MIT classmates, for their collaboration, discussions, and moral support throughout the journey.
- My colleagues and leaders at PT. XYZ, especially the EDC Services team, for their time, insights, and the opportunity to simulate and validate the framework proposed in this study.
- My beloved family—my parents and siblings—whose unwavering support, love, and prayers have been a constant source of strength.

I am fully aware that this thesis is not without its limitations. Therefore, I welcome any constructive criticism and suggestions for improvement.

Finally, I hope this research can provide practical value in the field of vendor governance and serve as a meaningful contribution to both academic and professional practices.

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