

**DEVELOPING DISTRIBUTION OCCUPANCY DASHBOARD FOR HUB
WAREHOUSE AT PT HARMONI MITRA UTAMA**

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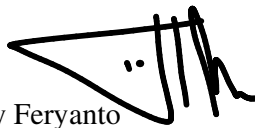
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STATEMENT BY THE AUTHOR

I declare that this thesis is my own original work and, to the best of my knowledge, does not contain any material that has been previously published or written by another person, nor material that has been substantially submitted for the award of any other degree or diploma at any educational institution, except where proper acknowledgment has been made in this thesis.



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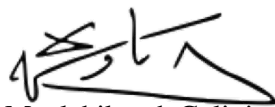
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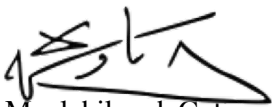
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ABSTRACT

DEVELOPING DISTRIBUTION OCCUPANCY DASHBOARD FOR HUB WAREHOUSE AT PT HARMONI MITRA UTAMA

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Optimizing logistics operations at PT Harmoni Mitra Utama is driven by the limitations of conventional methods based on manual Excel, which make it difficult to visualize actual achievements and tend to result in reactive decision-making. This study aims to develop a Visualization Dashboard as a digital solution that integrates service level indicators to simplify distribution occupancy monitoring and support strategic decisions. The development of this study uses the structured Waterfall methodology with a descriptive-analytical approach. Data collection was carried out by identifying data sources such as daily manifests, lead time data, and delivery status, which were then processed through a data consolidation stage into Google Spreadsheet as a data warehouse and visualized using the Google Looker Studio platform. The development results show that this dashboard is capable of presenting occupancy analysis with a data validity rate of up to 90%, accelerating monitoring update duration by up to 87% (from 88 minutes to 11 minutes), and providing a positive user experience based on User Acceptance Test (UAT) results.

Keywords: Visualization Dashboard, Google Looker Studio, Waterfall methodology

ABSTRAK

DEVELOPING DISTRIBUTION OCCUPANCY DASHBOARD FOR HUB WAREHOUSE AT PT HARMONI MITRA UTAMA

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Optimalkan operasional logistik di PT Harmoni Mitra Utama dilatarbelakangi oleh keterbatasan metode konvensional berbasis excel manual yang menyebabkan visualisasi pencapaian aktual sulit dilakukan dan pengambilan keputusan cenderung bersifat reaktif. Penelitian ini bertujuan untuk mengembangkan *Visualization Dashboard* sebagai solusi digital yang menyatukan indikator *service level* guna mempermudah monitoring okupansi distribusi dan mendukung keputusan strategis. Pengembangan penelitian ini menggunakan metodologi *Waterfall* yang terstruktur dengan pendekatan deskriptif analitis. Pengumpulan data dilakukan dengan mengidentifikasi sumber data manifes harian, data *lead time*, dan status pengiriman, yang kemudian diolah melalui tahap konsolidasi data ke dalam *Google Spreadsheet* sebagai *data warehouse* serta visualisasi menggunakan platform *Google Looker Studio*. Hasil pengembangan menunjukkan bahwa *dashboard* ini mampu menyajikan analisis okupansi dengan tingkat validitas data mencapai 90%, dan mempercepat durasi pembaruan monitoring hingga 87% (dari 88 menit menjadi 11 menit), serta memberikan pengalaman pengguna yang positif berdasarkan pengujian *User Acceptance Test* (UAT).

Keywords: Visualization Dashboard, Google Looker Studio, Waterfall methodology



LEMBAR PERSEMBAHAN

Dengan penuh rasa syukur, karya ini dipersembahkan sebagai wujud rasa syukur dan penghormatan kepada orang tua serta keluarga atas dukungan penuh yang senantiasa diberikan. Penulis juga menyampaikan apresiasi kepada rekan-rekan, para dosen, dan PT United Tractors Tbk. Penghargaan setinggi-tingginya disampaikan kepada dosen pembimbing yang telah membimbing memberikan arahan konstruktif selama penyusunan tesis ini. Besar harapan penulis agar penelitian ini dapat memberikan kontribusi nyata bagi pengembangan ilmu pengetahuan serta menjadi inspirasi bagi peneliti selanjutnya.



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DAFTAR ISI

ABSTRACT	3
ABSTRAK	4
LEMBAR PERSEMBAHAN	6
PENGHARGAAN	7
DAFTAR ISI	8
DAFTAR GAMBAR	11
DAFTAR TABEL	13
BAB 1 - PENDAHULUAN.....	14
1.1. Latar Belakang.....	14
1.2. Identifikasi Masalah.....	16
1.3. Tujuan Penelitian.....	17
1.4. Pertanyaan Penelitian.....	17
1.5. Manfaat Penelitian.....	18
1.6. Batasan Penelitian.....	18
1.7. Struktur Penelitian.....	19
BAB 2 - KAJIAN PUSTAKA	20
2.1. Definisi Logistik	21
2.2. <i>Cross-docking</i>	21
2.3. Transportasi	25
2.4. Warehousing	25
2.5. Penjadwalan.....	27
2.6. Occupancy	27
2.7. Visual Analytics	29
2.8. Business Intelligence.....	30
2.9. Business Analytics	31
2.10. Dashboard	31
2.11. Google looker studio.....	32
2.12. Google Sheets	33
2.13. Waterfall Methodology	34
2.14. Use Case Diagram.....	36
2.15. User Acceptance Testing (UAT)	37
2.16. User Experience Questionnaire (UEQ).....	39

2.17. Related Work	40
BAB 3 - METODE PENELITIAN	42
3.1. Alur Penelitian	42
3.2. Research Design	43
3.3. Waterfall Methodology Step.....	43
3.3.1 Requirement Analysis	43
3.3.2 System and Software Design.....	45
3.3.3 Implementation and Unit Testing	45
3.3.4 Operation and Maintenance.....	49
3.4. Result and Analysis	49
3.5. Conclusion and Suggestion.....	49
BAB 4 – HASIL DAN PEMBAHASAN	50
4.1. Requirement Analyst.....	50
4.1.1. Identifikasi Data Source Distribusi.....	50
4.1.2. Identifikasi Data Occupancy	51
4.1.3. Design Goal and Objective	53
4.2. System and Software Design	53
4.2.1. Architecture Diagram.....	53
4.2.2. Data Warehousing	54
4.2.3. Use Case Diagram.....	56
4.2.4. Activity Diagram	57
4.3. Implementation and Unit Testing.....	58
4.3.1. Building Dashboard	58
4.3.2. Unit Testing.....	62
4.3.3. Accuration Test	66
4.3.4. User Acceptance Test (UAT)	69
4.3.5. User Experience Questionnaire (UEQ)	71
4.4. Operation and Maintenance	72
4.5. Hasil dan Analisa	72
4.5.1. Hasil dan Analisa Accuration Test	72
4.5.2. Hasil dan Analisa User Acceptance Test.....	73
4.5.3. Hasil dan Analisa User Experience Questionnaire.....	74
4.5.4. Hasil dan Analisa Kinerja Distribusi	76
BAB 5 - KESIMPULAN DAN SARAN	80
5.1. Kesimpulan	80

5.2. Saran.....	81
GLOSARIUM	82
DAFTAR PUSTAKA.....	84
LAMPIRAN 1 - USER ACCEPTANCE TEST DASHBOARD.....	87
LAMPIRAN 2 - BUKU PANDUAN DASHBOARD	102



DAFTAR GAMBAR

Gambar 1. 1. Concession PT. Berau Coal (Berau Coal Energy, 2022)	15
Gambar 1. 2. Alur Distribusi PT. Harmoni Mitra Utama (UT Internal Source, 2023) ..	15
Gambar 2. 1. Perbedaan point to point dan hub dan spoke	23
Gambar 2. 2. Evolusi system dari Business Intelligence (NH Rasmussen, M Bansal, CY Chen, 2009)	30
Gambar 2. 3. Business Analytic vs Business Intelligent	31
Gambar 2. 4. Dashboard and Performance Management	32
Gambar 2. 5. Contoh Dashboard Google looker studio	33
Gambar 2. 6. Contoh Google Sheets (Zapier, 2016)	34
Gambar 2. 7. Waterfall Model (Senarath, U.S., 2021)	35
Gambar 2. 8. Contoh Simbol pada Use Case Diagram (Aleryani, A, 2016)	37
Gambar 2. 9. Tool Evaluation Process	38
Gambar 2. 10. UAT Criteria (Mohamad, R., Yassin, N.M. and Sualim, S.A., 2016)...	38
Gambar 2. 11. Contoh Grafik UEQ (Schrepp, Hinderks and Thomaschewski, 2014)...	39
Gambar 3. 1. Alur Penelitian	42
Gambar 3. 2. Skala Penilaian	47
Gambar 4. 1. Architecture Diagram Dashboard Hub Warehouse Distributions	53
Gambar 4. 2. Database Daily Manifest Distribution	55
Gambar 4. 3. Daily Data Leadtime Distribution	55
Gambar 4. 4. Daily Data Ready to Shipment	56
Gambar 4. 5. Use Case Diagram Occupancy Dashboard Hub Warehouse Distribution	57
Gambar 4. 6. Activity Diagram	58
Gambar 4. 7. Data Connector	59
Gambar 4. 8. Data Source Field	59
Gambar 4. 9. Distribution Hub Warehouse Dashboard	61
Gambar 4. 10. Menu Regular Occupancy	63
Gambar 4. 11. Menu Summary Distribution Frequency	63
Gambar 4. 12. Menu Filter	63

Gambar 4. 13. Tampilan Menu Occupancy Distribution Load	64
Gambar 4. 14. Tampilan Menu jumlah total colly berdasarkan rute tujuan.....	64
Gambar 4. 15. Tampilan Distribution Spread Map	64
Gambar 4. 16. Tampilan Distribution Delay Performance.....	65
Gambar 4. 17. Tampilan Distribution Ontime Performance	65
Gambar 4. 18. Tampilan Carter Occupancy	65
Gambar 4. 19. Report Delay Performance by Vendor	65
Gambar 4. 20. Tampilan Ready To Shipment.....	66
Gambar 4. 21. Tampilan Detail Manifest History	66
Gambar 4. 22. Tampilan UEQ Dashboard Occupancy Distribution Hub Warehouse ...	71
Gambar 4. 23. Buku Panduan Occupancy Dashboard Distribusi Hub Warehouse.....	72
Gambar 4. 24. Hasil Accuration Test	73
Gambar 4. 25. Hasil User Acceptance Test.....	74
Gambar 4. 26. UEQ Scales.....	75
Gambar 4. 27. UEQ Scores	75
Gambar 4. 28. Skor “Ketepatan”	75
Gambar 4. 29. Grafik Fleet Occupancy by moda transportasi Feb – Oct 2025	76
Gambar 4. 30. Grafik Delay Performance reguler YTD Nov 2025	77
Gambar 4. 31. Grafik Performance OTIF YTD Nov’25	77
Gambar 4. 32. Detail Leadtime Distribusi Proses Pembaruan data.	78
Gambar 4. 33. Proses Pembaruan data Monitoring Distribusi	78

DAFTAR TABEL

Tabel 2. 1. Related Work	41
Tabel 3. 1. Konten kuesioner	48
Tabel 4. 1. Service Level Agreement Leadtime PT.Harmoni Mitra Utama	50
Tabel 4. 2. Daily Data Manifest Distribution	52
Tabel 4. 3. Keterangan Dashboard.....	62
Tabel 4. 4. Frequency Trip Distribution as of Des'25	67
Tabel 4. 5. Lanjutan Frequency Trip Distribution as of Des'25	68
Tabel 4. 6. Accuration Test.....	69
Tabel 4. 7. User Acceptance Test	70
Tabel 4. 8. Deviasi Accuration Test	73
Tabel 4. 9. Comparison evaluasi parameter.....	79