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## Impact of Crew Change on Contractual Adherence in Maritime Industry: A Case Study of PT. Amas Iscindo Utama

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**Abstract:** This research investigates the repercussions of crew change practices on contractual adherence within the maritime industry, focusing on PT. Amas Iscindo Utama. Through a mixed-methods approach, quantitative data was collected via structured questionnaires and analyzed using SPSS, supplemented by qualitative insights derived from open-ended responses. Findings reveal that delayed crew recruitment significantly impacts contractual accuracy and compliance, leading to operational disruptions and challenges in crew management. Recruitment challenges, contractual inconsistencies, operational disruptions, and professionalism and standards emerged as key themes, underscoring the multifaceted nature of crew management dynamics. Strategic recommendations include streamlining recruitment processes, developing standardized contractual templates, fostering transparent communication channels, prioritizing professional development initiatives, and safeguarding crew welfare and rights. Collaboration among industry stakeholders is essential to implement proactive measures and uphold professionalism and adherence to contractual obligations within the maritime sector. This research contributes to advancing knowledge and best practices in crew management and contractual governance, informing policy decisions and interventions to enhance the sustainability and competitiveness of the maritime industry.

**Keyword:** Crew Change, Contractual Adherence, Maritime Industry, Professionalism.

### INTRODUCTION

The maritime industry serves as a vital artery for global trade, facilitating the movement of goods and commodities across vast expanses of the world's oceans (Cicek et al., 2019; Gavalas et al., 2022). Central to the seamless operation of maritime enterprises are the dedicated crews that navigate these vessels, ensuring their safe passage and efficient functioning. Within this dynamic context, the maintenance of contractual agreements governing the employment terms of these seafarers holds paramount importance, not only for the operational integrity of shipping companies but also for the welfare and rights of the individuals involved. Against this backdrop, the present research endeavors to delve into the intricate interplay between crew change practices and the adherence to Sea Employment

Agreement (PKL) contracts within the esteemed confines of PT. Amas Iscindo Utama, a prominent shipping entity in Indonesia.

The rationale behind this research stems from the inherent complexities and challenges embedded within the maritime labor market, particularly concerning crew recruitment and contractual compliance (Christodoulou-Varotsi & Pentsov, 2008). PT. Amas Iscindo Utama, like many other shipping companies, operates within a dynamic environment characterized by fluctuating crew requirements, regulatory frameworks, and logistical constraints. As such, the periodic replacement of crew members necessitates meticulous planning and execution to ensure continuity in operations while upholding contractual obligations. However, empirical evidence suggests that delays in crew recruitment can disrupt the temporal alignment between crew changes and the expiration of employment contracts, thereby engendering discrepancies in contractual compliance (Ghosh et al., 2014). This discrepancy, in turn, not only poses legal ramifications for shipping companies but also has profound implications for the welfare and job security of seafarers.

Against this backdrop, the primary objective of this research is twofold: firstly, to empirically examine the impact of crew change practices on the adherence to Sea Employment Agreement contracts within PT. Amas Iscindo Utama, and secondly, to identify strategic interventions aimed at optimizing crew management practices to mitigate the aforementioned discrepancies. By adopting a quantitative research approach supplemented by qualitative insights, this study endeavors to unravel the intricacies of crew management dynamics within the maritime industry and offer pragmatic solutions to enhance operational efficiency and contractual compliance.

At its core, this research seeks to address a critical gap in the existing literature pertaining to crew management practices and contractual compliance within the maritime domain (Ivančić et al., 2019; Zaid et al., 2018). While extant scholarship has extensively documented the operational challenges and regulatory frameworks governing crew management, scant attention has been paid to the specific nexus between crew changes and contractual adherence, particularly within the context of Indonesian shipping companies. By focusing on PT. Amas Iscindo Utama as a case study, this research seeks to fill this lacuna by providing empirical evidence and nuanced insights into the repercussions of delayed crew recruitment on Sea Employment Agreement contracts. Moreover, by delineating the causal mechanisms underlying these discrepancies and proposing targeted interventions, this study aspires to contribute to the body of knowledge surrounding crew management strategies and contractual governance within the maritime industry (Cicek et al., 2019).

This research embarks on a scholarly exploration of the intricate dynamics shaping crew management practices and contractual compliance within PT. Amas Iscindo Utama, with the overarching aim of elucidating the impact of crew changes on Sea Employment Agreement contracts. Through empirical inquiry and strategic analysis, this study endeavors to shed light on this underexplored facet of maritime labor relations and offer actionable insights to enhance operational efficiency and contractual integrity within the shipping industry.

## **METHOD**

The research methodology adopted for this study reflects a concerted effort to rigorously investigate the impact of crew change practices on Sea Employment Agreement contracts within PT. Amas Iscindo Utama, employing a systematic and structured approach to data collection, analysis, and interpretation. Given the complex and multifaceted nature of the research objectives, a quantitative research design supplemented by qualitative insights was deemed most appropriate to provide a comprehensive understanding of the phenomenon under investigation.

To initiate the research process, careful consideration was given to the selection of participants who could provide valuable insights into the dynamics of crew management and contractual compliance within the maritime industry. In line with the research scope, the study targeted professionals with expertise in transportation management, transportation education, and transportation literacy, particularly those who had graduated from the Maritime Institute (Sekolah Tinggi Ilmu Pelayaran Jakarta) and possessed experience in multimodal transportation, logistics, transportation safety, and port and shipping management. By focusing on individuals with firsthand experience in the field, the research aimed to capture nuanced perspectives and practical insights that could inform the analysis and interpretation of findings.

Data collection was primarily facilitated through the administration of structured questionnaires designed to elicit responses pertaining to key variables relevant to the research objectives. The questionnaire instrument was meticulously crafted to ensure clarity, relevance, and comprehensiveness, incorporating items that gauged respondents' perceptions regarding crew change practices, contractual compliance, and the interplay between the two. Additionally, open-ended questions were included to afford participants the opportunity to elaborate on their experiences, challenges, and recommendations related to crew management and contractual governance within the maritime sector.

The sampling strategy employed for this study adhered to principles of purposive sampling, whereby participants were selected based on their relevance to the research objectives and their capacity to provide meaningful insights into the phenomenon under investigation. Given the targeted nature of the study population, efforts were made to ensure adequate representation across diverse demographic and professional backgrounds, thereby enhancing the richness and diversity of data collected.

Upon completion of data collection, the next phase of the research involved data analysis and interpretation, which were conducted using the Statistical Package for the Social Sciences (SPSS) version 25. Quantitative data obtained from the questionnaires were subjected to descriptive and inferential statistical analyses to identify patterns, trends, and correlations among variables of interest. Specifically, measures such as frequency distributions, mean scores, and correlation coefficients were computed to quantitatively assess the relationship between crew change practices and adherence to Sea Employment Agreement contracts.

In addition to quantitative analysis, qualitative insights gleaned from open-ended questionnaire responses were subjected to thematic analysis, wherein recurring themes, patterns, and narratives were identified and synthesized to provide deeper contextual understanding and interpretive richness (Ferritto, 2016; Sankoff, 1972; Yilmaz, 2013). By triangulating quantitative findings with qualitative insights, this mixed-methods approach facilitated a holistic and nuanced exploration of the research phenomenon, allowing for the identification of convergent and divergent perspectives and the formulation of comprehensive conclusions.

The research methodology employed for this study reflects a rigorous and systematic approach to investigating the impact of crew change practices on Sea Employment Agreement contracts within PT. Amas Iscindo Utama. By integrating quantitative data collection and analysis with qualitative insights, this methodological framework enabled the exploration of complex dynamics inherent in maritime labor relations, thereby contributing to a nuanced understanding of the research topic and informing actionable recommendations for optimizing crew management practices within the shipping industry.

## RESULTS AND DISCUSSION

### Results

The findings of the research offer valuable insights into the impact of crew change practices on Sea Employment Agreement (PKL) contracts within PT. Amas Iscindo Utama, shedding light on the intricate dynamics shaping contractual compliance and operational efficiency within the maritime industry. Through a comprehensive analysis of quantitative data collected from structured questionnaires and qualitative insights derived from open-ended responses, this study endeavors to elucidate the causal mechanisms underlying discrepancies in contractual adherence and offer pragmatic solutions to enhance crew management practices.

**Table 1: Summary of Findings**

Indicator	Parameter	Weight	Impact of Crew Change	Sea Employment Agreement Score	Percentage
Contract Accuracy	Timeliness of Crew Recruitment	0.30	High	Low	70%
	Compliance with Contract Terms	0.25	Moderate	Moderate	55%
Operational Impact	Disruption to Vessel Schedule	0.20	High	High	80%
	Financial Implications	0.15	Moderate	High	65%
	Crew Morale and Performance	0.10	Low	Moderate	45%

The analysis reveals that the timeliness of crew recruitment significantly impacts the accuracy of Sea Employment Agreement contracts, with delayed crew changes leading to a discrepancy between the stipulated contract period and the actual duration of crew service onboard vessels. This discrepancy is attributed to challenges in sourcing replacement crew members within the designated timeframe, resulting in contractual inaccuracies and potential legal implications for the company. Approximately 70% of respondents indicated that delayed crew recruitment adversely affected contract accuracy, highlighting the urgency of optimizing crew change practices to ensure contractual integrity and compliance.

Furthermore, the study identifies compliance with contract terms as a crucial determinant of contractual adherence, with deviations from contractual obligations posing significant risks to both shipping companies and seafarers. While the analysis indicates a moderate impact of crew changes on compliance with contract terms, with approximately 55% of respondents acknowledging such deviations, there exists a pressing need to reinforce mechanisms for monitoring and enforcing contractual compliance to mitigate potential legal disputes and safeguard the interests of all parties involved.

In terms of operational impact, the findings underscore the profound repercussions of delayed crew recruitment on vessel schedules and operational efficiency. Disruptions to vessel schedules, resulting from prolonged crew change processes, were reported to have a high impact on operational performance, with approximately 80% of respondents citing such disruptions as a major concern. Moreover, the financial implications stemming from these disruptions were deemed significant, with approximately 65% of respondents highlighting the adverse effects on company finances due to delays in crew recruitment.

Additionally, the study elucidates the impact of crew changes on crew morale and performance, with delayed crew recruitment exacerbating feelings of uncertainty and job insecurity among seafarers. Approximately 45% of respondents indicated that delayed crew changes adversely affected crew morale and performance, underscoring the importance of

timely crew rotations in fostering a conducive work environment and ensuring optimal performance onboard vessels.

**Table 2: Correlation Analysis**

Indicator	Parameter	Correlation Coefficient	Statistical Significance
Contract Accuracy	Timeliness of Crew Recruitment	0.75	$p < 0.01$
	Compliance with Contract Terms	0.60	$p < 0.05$
Operational Impact	Disruption to Vessel Schedule	0.85	$p < 0.001$
	Financial Implications	0.70	$p < 0.01$
	Crew Morale and Performance	0.50	$p < 0.05$

The correlation analysis corroborates the findings of the study, revealing strong positive correlations between crew change practices and various indicators of contractual adherence and operational efficiency. Specifically, the timeliness of crew recruitment exhibits a strong positive correlation with contract accuracy ( $r = 0.75$ ,  $p < 0.01$ ) and compliance with contract terms ( $r = 0.60$ ,  $p < 0.05$ ), underscoring the pivotal role of timely crew rotations in upholding contractual integrity and mitigating contractual discrepancies. Similarly, disruptions to vessel schedules demonstrate a strong positive correlation with financial implications ( $r = 0.70$ ,  $p < 0.01$ ) and crew morale and performance ( $r = 0.50$ ,  $p < 0.05$ ), highlighting the multifaceted impact of delayed crew changes on operational efficiency and crew welfare.

In summary, the findings of the research elucidate the complex interplay between crew change practices and Sea Employment Agreement contracts within PT. Amas Iscindo Utama, underscoring the importance of optimizing crew management practices to ensure contractual integrity, operational efficiency, and crew welfare. By providing empirical evidence and actionable insights, this study contributes to the body of knowledge surrounding crew management strategies and contractual governance within the maritime industry, informing policy decisions and managerial interventions aimed at enhancing the sustainability and competitiveness of shipping companies in today's dynamic business environment.

Building upon the foundational findings outlined in the preceding section, the second phase of the research aims to provide additional insights and empirical evidence to support and reinforce the conclusions drawn regarding the impact of crew change practices on Sea Employment Agreement contracts within PT. Amas Iscindo Utama. Through an in-depth analysis of qualitative data derived from open-ended questionnaire responses and supplementary interviews with key stakeholders, this section elucidates the underlying factors contributing to discrepancies in contractual adherence and offers strategic recommendations to enhance professionalism and standardized practices within the maritime industry.

**Table 3: Qualitative Analysis of Crew Change Practices**

Key Themes	Sub-Themes	Frequency (%)
Recruitment Challenges	Difficulty in sourcing qualified crew	45%
	Compliance with regulatory requirements	30%
	Impact of geopolitical factors	25%
Contractual Inconsistencies	Variability in contract terms	40%
	Communication gaps between parties	35%
Operational Disruptions	Vessel downtime due to crew shortages	50%
	Impact on cargo handling operations	30%
	Safety and security concerns	20%
Professionalism & Standards	Training and certification requirements	55%
	Compliance with industry best practices	25%
	Ethical considerations	20%

The qualitative analysis reveals a myriad of challenges and complexities inherent in crew change practices within PT. Amas Iscindo Utama, which collectively contribute to



discrepancies in contractual adherence and operational efficiency. Recruitment challenges emerge as a primary concern, with respondents citing difficulty in sourcing qualified crew members, ensuring compliance with regulatory requirements, and navigating geopolitical factors impacting crew availability. Approximately 45% of respondents highlighted the scarcity of qualified crew members as a significant obstacle, underscoring the need for proactive measures to enhance recruitment strategies and address skill shortages within the maritime labor market.

Moreover, the analysis unveils inconsistencies in contractual terms and communication gaps between parties as key factors contributing to contractual discrepancies. Variability in contract terms, ranging from contractual duration to remuneration packages, was reported by 40% of respondents, highlighting the importance of standardized contractual templates and transparent communication channels to mitigate misunderstandings and disputes. Additionally, operational disruptions stemming from crew shortages, including vessel downtime, cargo handling delays, and safety concerns, were cited by 50% of respondents as significant challenges, underscoring the imperative of proactive crew management strategies to minimize operational risks and ensure uninterrupted vessel operations.

Furthermore, the analysis underscores the importance of professionalism and adherence to standardized practices within the maritime industry in fostering operational efficiency and contractual integrity. Training and certification requirements emerge as central themes, with 55% of respondents emphasizing the importance of continuous training and skill development to ensure crew competency and compliance with industry standards. Additionally, adherence to industry best practices and ethical considerations, such as fair labor practices and adherence to international regulations, were cited as essential components of professional conduct within the maritime sector, highlighting the need for a holistic approach to crew management that prioritizes ethical principles and industry standards.

In light of these findings, it is evident that addressing the root causes of discrepancies in contractual adherence and operational efficiency necessitates a multifaceted approach that encompasses recruitment, contractual governance, operational planning, and professional development. By proactively addressing recruitment challenges, standardizing contractual templates, fostering transparent communication channels, and prioritizing professional development and adherence to industry standards, shipping companies can enhance professionalism, operational efficiency, and contractual integrity within the maritime industry. Moreover, collaboration between industry stakeholders, regulatory bodies, and educational institutions is essential to driving systemic change and fostering a culture of excellence and accountability within the maritime sector.

The second phase of the research provides additional insights and empirical evidence to support and reinforce the conclusions drawn regarding the impact of crew change practices on Sea Employment Agreement contracts within PT. Amas Iscindo Utama. By elucidating the underlying factors contributing to discrepancies in contractual adherence and offering strategic recommendations to enhance professionalism and standardized practices within the maritime industry, this research contributes to the advancement of knowledge and best practices in crew management and contractual governance, informing policy decisions and managerial interventions aimed at fostering a culture of excellence and accountability within the maritime sector.

## Discussions

The findings presented in the two sections above offer valuable insights into the multifaceted dynamics shaping crew change practices and contractual adherence within the maritime industry, particularly within the context of PT. Amas Iscindo Utama. Through a comprehensive analysis of quantitative and qualitative data, this discussion seeks to

contextualize and interpret the findings, elucidate their implications for industry stakeholders, and offer strategic recommendations to enhance professionalism and standardized practices within the maritime sector.

### ***The Impact of Crew Change Practices on Contractual Adherence:***

The quantitative analysis conducted in the first phase of the research reveals a significant impact of crew change practices on contractual adherence within PT. Amas Iscindo Utama. Specifically, delayed crew recruitment emerges as a critical factor contributing to discrepancies in contractual accuracy and compliance, with approximately 70% of respondents citing such delays as a major concern (H. P. Berg, 2013; N. Berg et al., 2013). This finding underscores the importance of timely crew rotations in upholding contractual integrity and mitigating legal risks associated with contractual discrepancies. Moreover, the correlation analysis demonstrates strong positive correlations between crew change practices and various indicators of contractual adherence, including contract accuracy, compliance with contract terms, and operational impact, further underscoring the pivotal role of crew management practices in shaping contractual outcomes (Brenker et al., 2017; Lahibu et al., 2022).

The qualitative analysis conducted in the second phase of the research provides additional insights into the underlying factors contributing to discrepancies in contractual adherence and operational efficiency within PT. Amas Iscindo Utama. Recruitment challenges, contractual inconsistencies, operational disruptions, and professionalism and standards emerge as key themes, highlighting the multifaceted nature of crew management dynamics within the maritime sector. Recruitment challenges, including difficulty in sourcing qualified crew members and compliance with regulatory requirements, underscore the complexities inherent in crew recruitment processes and the need for proactive measures to address skill shortages and streamline recruitment procedures.

Contractual inconsistencies, such as variability in contract terms and communication gaps between parties, pose significant challenges to contractual adherence and operational efficiency, necessitating standardized contractual templates and transparent communication channels to mitigate misunderstandings and disputes. Operational disruptions stemming from crew shortages, including vessel downtime, cargo handling delays, and safety concerns, underscore the imperative of proactive crew management strategies to minimize operational risks and ensure uninterrupted vessel operations (H. P. Berg, 2013). Finally, professionalism and adherence to standardized practices emerge as central themes in fostering operational efficiency and contractual integrity within the maritime industry, highlighting the importance of continuous training and professional development to ensure crew competency and compliance with industry standards (Bergheim et al., 2015; de la Peña Zarzuelo et al., 2020).

### ***Implications for Industry Stakeholders:***

The findings of the research have important implications for industry stakeholders, including shipping companies, regulatory bodies, educational institutions, and seafarers. For shipping companies like PT. Amas Iscindo Utama, the research underscores the importance of optimizing crew management practices to ensure contractual integrity, operational efficiency, and crew welfare. By addressing recruitment challenges, standardizing contractual templates, fostering transparent communication channels, and prioritizing professional development, shipping companies can enhance professionalism, operational efficiency, and contractual compliance within the maritime sector.

Regulatory bodies play a crucial role in setting and enforcing industry standards and regulations governing crew management practices and contractual governance. The findings of the research highlight the need for regulatory bodies to collaborate with industry

stakeholders to develop and implement standardized guidelines and best practices that promote professionalism and adherence to contractual obligations within the maritime sector. Moreover, regulatory bodies can play a proactive role in monitoring and enforcing compliance with industry standards and regulations, thereby safeguarding the interests of seafarers and ensuring the sustainability and competitiveness of the maritime industry.

Educational institutions play a pivotal role in preparing future generations of maritime professionals for careers in the maritime industry (H. P. Berg, 2013; Ferritto, 2016). The findings of the research underscore the importance of incorporating training and certification requirements, compliance with industry best practices, and ethical considerations into maritime education curricula to ensure that graduates are equipped with the knowledge, skills, and competencies needed to navigate the complexities of the maritime labor market and uphold professional standards within the industry.

Seafarers are the backbone of the maritime industry, and their welfare and rights must be safeguarded to ensure the sustainability and competitiveness of the industry. The findings of the research highlight the importance of addressing recruitment challenges, contractual inconsistencies, operational disruptions, and professionalism and standards to enhance crew welfare and job security within the maritime sector (Autsadee et al., 2023). By prioritizing crew welfare and adherence to professional standards, industry stakeholders can create a conducive work environment that fosters operational efficiency, contractual integrity, and crew well-being.

The findings of the research provide valuable insights into the impact of crew change practices on contractual adherence within the maritime industry, particularly within the context of PT. Amas Iscindo Utama. By elucidating the underlying factors contributing to discrepancies in contractual adherence and operational efficiency and offering strategic recommendations to enhance professionalism and standardized practices within the maritime sector, this research contributes to the advancement of knowledge and best practices in crew management and contractual governance. Moving forward, industry stakeholders must collaborate to implement proactive measures that prioritize professionalism, adherence to contractual obligations, and crew welfare, thereby ensuring the sustainability and competitiveness of the maritime industry in today's dynamic business environment.

## CONCLUSION

This research sheds light on the complex interplay between crew change practices and contractual adherence within the maritime industry, with a specific focus on PT. Amas Iscindo Utama. Through a comprehensive analysis of quantitative and qualitative data, the study has revealed significant challenges and implications associated with delayed crew recruitment, contractual inconsistencies, operational disruptions, and professionalism and standards. The findings underscore the importance of optimizing crew management practices to ensure contractual integrity, operational efficiency, and crew welfare. Moving forward, industry stakeholders must collaborate to implement proactive measures that prioritize professionalism, adherence to contractual obligations, and crew welfare. This entails streamlining recruitment processes, developing standardized contractual templates, fostering transparent communication channels, prioritizing professional development initiatives, and safeguarding crew welfare and rights. By addressing these challenges and embracing standardized practices, the maritime industry can enhance its competitiveness, sustainability, and resilience in the face of evolving market dynamics and regulatory frameworks. Ultimately, the research highlights the imperative of fostering a culture of excellence, accountability, and collaboration within the maritime sector to uphold the highest standards of professionalism and ensure the well-being of all stakeholders involved.



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