Change Management Strategy To Improve Performance Efficiency (Case Study At PT Colorado Outdoor Gear Indonesia)

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Abstract

In an increasingly competitive business environment, change management has become key to improving the operational efficiency of manufacturing companies. This study analyzes change management strategies to enhance performance efficiency at PT. Colorado Outdoor Gear Indonesia focuses on the issue of manual record-keeping that hampers operational effectiveness. A qualitative case study approach was used, collecting data through semi-structured interviews and observations. The findings indicate that manual recording causes production delays, miscommunication between divisions, and difficulties in data-based decision-making. Employees responded positively to the digitalization plan, although concerns about technological adaptation were noted. The implemented change strategy refers to Kotter's (2012) model and Hammer & Champy's (2009) Business Process Reengineering, emphasizing creating urgency, forming a change team, and reinforcing sustainable change. A SWOT analysis supports the formulation of adaptive strategies to the company's internal and external conditions. In conclusion, structured change management can improve performance efficiency through digital-based transformation..

***Keywords**: Change Management, Performance Efficiency, Manual Record-keeping, Digitalization*

1. INTRODUCTION

The current development of the business world is marked by the growing number of large companies and increasingly intense competition. Generally, a company's primary objective is to maximize profit to ensure the sustainability of its operations. Companies need high-quality resources to face rapid changes and intensifying business competition (Bangun, 2012). One effort to ensure this is through the implementation of well-planned change management.

Change management refers to the process of organizing and directing human resources and available facilities to achieve common goals (Arifin, 2017). It involves applying specific knowledge, skills, tools, and methodologies to integrate the change process into organizational strategy (Hidayanto et al., 2010). With appropriate change management, companies can adapt to internal and external dynamics without disrupting operational stability.

Manual data recording is a significant issue frequently encountered at PT. Colorado Outdoor Gear Indonesia. Using a manual recording system often causes various obstacles that negatively affect operational efficiency and department communication. Inefficiencies in data recording may lead to miscommunication, work errors, and delays in various production processes. A concrete example of this issue is the mismatch between the number of items and production needs. Research by Firmansyah et al. (2024) highlights that manual recording lacks standardization and consistency in data collection and processing, resulting in inaccurate and hard-to-access data.

Without an integrated digital system, inventory data is not updated in real-time, causing the production department to receive inaccurate information regarding raw material availability. This often leads to unnecessary overstock or critical shortages. When the required inventory is not available on time, the production process may be delayed, impacting the timely completion of operations.

Therefore, changing the data recording system through a strategic change management approach is crucial and worth investigating. According to Kotter (2012), successful change depends on a systematic process that includes creating a sense of urgency, building a guiding coalition, and communicating the vision for change. These strategies can be applied to support the digitalization of company systems, making them more efficient and adaptive.

This study aims to understand the change management strategies that enhance operational efficiency at PT Colorado Outdoor Gear Indonesia, particularly in addressing inefficiencies caused by manual recording systems in production and interdepartmental communication. The objectives are to analyse the problems of manual data recording, identify organisational barriers, and provide effective change management strategy recommendations.

Most previous studies have discussed digital transformation and change management strategies in general across various industries. For instance, the study by Royyana (2020) focused on the digital transformation strategy at PT Kimia Farma (Persero) Tbk, emphasising the formulation of corporate digitalisation strategies. Meanwhile, the research by Rahmadyah & Aslami (2022) primarily discussed the concept and approach of change management in the digital era without highlighting specific case studies. This indicates that, despite extensive research on digitalisation and change management, there remains a gap in studies that specifically examine the impact of change management on digitalisation efforts in manufacturing companies that still rely on manual data recording systems.

Therefore, this study aims to analyze issues arising from manual recording systems in production processes and provide recommendations for effective change management strategies to improve work system efficiency and accuracy at PT Colorado Outdoor Gear Indonesia.

2. METHODS

This study employs a descriptive qualitative approach using a case study method, aiming to gain an in-depth understanding of the phenomenon of change management

implementation and its impact on operational efficiency at PT Colorado Outdoor Gear Indonesia, particularly about the use of manual recording systems. A qualitative approach is chosen because it provides a comprehensive and contextual depiction of reality (Creswell, 2014). The case study method is utilised as the research focuses intensively on a single object within a real-life context (Yin, 2014).

The research was conducted at the company's site. Twelve employees were recruited as research subjects, representing various departments within production, including Sewing Operators, Administrative Staff, Supervisors, and Cutting Division personnel. Participants were selected using purposive sampling to ensure that the informants had a substantial understanding of the problems under investigation (Sugiyono, 2012).

Data were collected through the following techniques: Semi-structured interviews, which followed an interview guide while allowing flexibility to explore deeper insights (Sugiyono, 2012); observation, which involved direct monitoring of manual recording activities in the field (Creswell, 2014); and documentation, which entailed reviewing documents related to operational recording processes (Bowen, 2009).

The data were analysed using a qualitative descriptive analysis technique outlined by Miles and Huberman (1994), consisting of three main stages: data reduction, data display, and conclusion drawing. To ensure data validity, a triangulation technique was applied, which involved the integration of interviews, observations, and documentation to enhance the accuracy and reliability of the findings (Sugiyono, 2011)

3. RESULTS AND DISCUSSION

PT Colorado Outdoor Gear Indonesia is an outdoor bag manufacturing company located in Semarang Regency. This research focuses on the production department, particularly on the manual recording processes in the cutting and sewing divisions. The objective is to analyze the problems associated with manual data recording and explore change strategies towards a digital system to enhance work efficiency. The study employs a descriptive qualitative approach, utilizing interviews and observation techniques.

Production Flow Diagram and Manual Recording Problem Points

The following is a diagram of the production flow process at PT. Colorado Outdoor Gear Indonesia has three stages: Preparation, Production, and Reporting. This diagram sequentially illustrates the production process from start to finish and highlights the specific points where manual data recording is still in use. The sections marked in blue in the diagram indicate activities that rely on manual recording systems, which, based on observational findings, have been identified as the primary sources of various inefficiencies in operational performance.

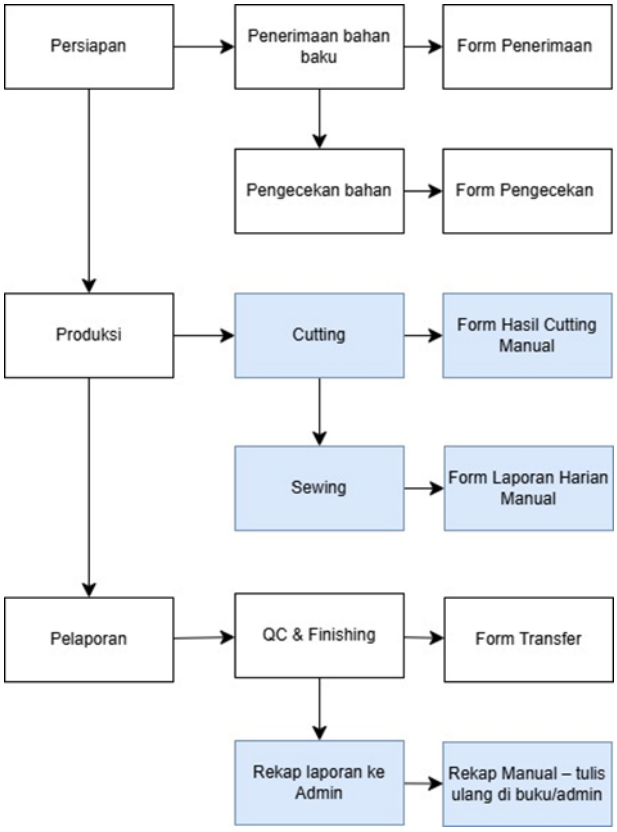

Figure 1.

Flow Diagram of the Production Process at PT Colorado Outdoor Gear Indonesia

The production flow at PT Colorado Outdoor Gear Indonesia consists of three main stages: Preparation, Production, and Reporting. The process begins with receiving raw materials, which are recorded manually using a material receipt form. The materials undergo a physical inspection, and the results are documented manually. Although the procedures appear straightforward, manual recording at this stage often results in disorganized data and requires additional time for revalidation, particularly when discrepancies arise between recorded data and actual stock conditions.

In the production stage, manual data entry becomes increasingly dominant. In the cutting division, operators record the number of material cuts on a "cutting result form" by hand. Based on field observations, this is typically done directly on the worktable using notebooks collected by the administrative staff at the end of each shift. Problems arise when there is a mismatch between the number of cuts and the recorded figures, often due to writing errors or delays in form submission.

Similarly, in the sewing division, workers manually log their daily output in personal report books, which are later submitted to the production administrator. Observations indicate that this process frequently causes delays in reporting, especially when the forms are incomplete or illegible. These issues often lead to miscommunication across departments, such as between sewing and admin or the preceding production stages, as information is not

conveyed accurately or promptly.The blue-highlighted sections in the production flow diagram indicate the points at which manual data recording contributes significantly to workflow inefficiencies.

After the Quality Control (QC) and Finishing stages, the admin staff compiles and summarises production output data into final reports using a manual process. This requires transferring data from earlier forms into ledgers or daily report documents. Observations show that this task is prone to transcription errors, is time-consuming, and becomes a major obstacle when historical data needs to be traced for reporting or repeat orders. Furthermore, the physical storage of documents increases the risk of data loss or damage. These observations confirm that manual data recording at several critical stages in the production process significantly hampers workflow efficiency and delays the availability of accurate information across divisions.

Manual recording issues were identified across several production segments, especially cutting and sewing. According to Agus Riyanto (Cutting Division), manual recording slows the workflow as data must be rechecked. He stated, "Manual recording affects the process because we always have to double-check to minimize potential errors."

This statement is supported by observational findings that show manual data logging in the cutting and sewing divisions slows down operations. For example, cutting staff frequently spend extra time writing down material counts in notebooks and repeatedly verifying the numbers to avoid mistakes. Observations also revealed that sewing workers often had to pause work due to delayed stock information from admin staff, caused by inefficient recording processes. In some cases, production reports took several hours to complete due to rewriting incorrect data or searching for misplaced records, leading to production delays, particularly during high-demand periods.

This situation is echoed by Ukhti Nikmatiana (Sewing Supervisor), who remarked, “This system makes it difficult to create reports due to unclear records.” Similarly, Meri Agustin (Production Operator) stated, “It's tough, and mistakes often happen because of manual recording."

Field observations support these claims. In the sewing division, manual entries frequently lead to errors in production data—for instance, discrepancies between recorded and actual material quantities require operators to stop work to re-verify information. Daily production reports created by the admin staff were sometimes inaccurate due to illegible handwriting or misplaced notes. These errors often triggered miscommunication between the sewing and cutting divisions, such as when the fabric quantities received did not match production requirements. As a result, reporting inaccuracies led to decision-making delays in production planning.

Another key issue is the inaccessibility of archived data. David Porwanto (Production Admin) states, "Records are often lost or torn, and it takes a long time to search for data needed for reports." Observations confirmed that many manual records stored in notebooks or paper sheets were torn, damaged, or faded due to ink smudging and poor storage. For example, several past production reports were unreadable, and some were missing altogether. Retrieving older data proved to be time-consuming because the records were not well-organized, often

causing difficulties for admin staff in preparing reports or responding to repeat orders, ultimately hindering operational efficiency.

These findings indicate that while manual systems have become habitual, their effectiveness and efficiency are low. Inaccurate recordings lead to data mismatches, disrupt the production flow, and increase the overall workload.

SWOT Analysist

To formulate an appropriate change management strategy, a SWOT analysis was conducted to identify internal and external factors influencing the implementation of a digital record-keeping system at PT Colorado Outdoor Gear Indonesia. This analysis encompasses the company's strengths, weaknesses, opportunities, and threats, which serve as the foundation for designing strategic changes to improve operational efficiency. The following SWOT analysis is based on field observations and interviews with various stakeholders within the company.

Based on the results of the SWOT analysis, four key strategies were formulated to support the successful change management from a manual to a digital record-keeping system at PT Colorado Outdoor Gear Indonesia. These strategies were developed by considering the company's internal strengths and weaknesses and external opportunities and threats in the digitalisation process.

S–O Strategy (Strengths – Opportunities)

This strategy leverages internal strengths to capitalise on external opportunities. In this case, the openness of administrators and supervisors to digital transformation can be utilised by positioning them as change agents who actively promote the adoption of the new system. Employee enthusiasm toward change also becomes valuable in accelerating the implementation process. As an initial step, the company may introduce a simple, application-based system to facilitate easier adaptation and reduce confusion among new users.

S–T Strategy (Strengths – Threats)

This strategy uses internal strengths to mitigate potential threats. For example, developing clear standard operating procedures (SOPS) for digital transition can help reduce employee resistance and minimise errors during the early stages of implementation. Additionally, involving the IT team or experienced administrators in the initial phase is essential to provide technical support in case of difficulties or confusion regarding the new system.

W–O Strategy (Weaknesses – Opportunities)

This strategy addresses internal weaknesses by leveraging external opportunities. The company should provide basic digital training for employees who are not yet familiar with technological tools. Such training aims to enhance technical competence and build confidence in using the new system. Furthermore, procuring a digital system can serve as a momentum to improve the overall human resource capacity.

W–T Strategy (Weaknesses – Threats)

This strategy focuses on minimising risks by reducing internal weaknesses. The company must prepare visual guides, manuals, or easy-to-follow system usage simulations. Moreover, it is recommended that assistance teams be deployed in each division during the transition period so that employees receive direct support rather than having to adapt independently, thus preventing misunderstandings or disruptions in the workflow.

By integrating internal strengths with external opportunities and proactively addressing weaknesses and threats, the company can execute its change strategy more effectively and with lower risk. These four strategic directions provide a solid foundation for designing a measurable and sustainable implementation plan for the digital record-keeping system.

Change Management Strategy

The majority of respondents expressed readiness to transition to a digital system. Supala (Sewing Supervisor) stated, "*The transition to a digital system will make it easier to retrieve previously stored data."* Similarly, Putri Ragil (Sewing Operator) supported the change, noting that *"A digital system can be easily learned anytime and anywhere."* These findings align with research by Royyana (2020), which indicates that digital transformation in the manufacturing sector can enhance operational efficiency through automated record-keeping systems.

Nevertheless, several respondents acknowledged that the transition would require a period of adaptation. As Dedi Setiawan (Cutting Division) remarked, *"The challenge lies in adapting from manual to digital systems."* To address this challenge, training and simulation are necessary. This was emphasised by Lena (Sewing Supervisor), who stated, *"Training is essential to prepare for the new system."* This need for adaptation is consistent with the study by Westerman et al. (2014), which emphasised that digitalisation is not solely a technological shift, but also a cultural one, requiring changes in employees' work habits and mindset.

These insights suggest that a successful digital transformation strategy at PT Colorado Outdoor Gear Indonesia must include not only the implementation of new technology but also comprehensive support for employees through training programs, simulations, and gradual adaptation processes.

Change management strategies involve more than just the decision to shift from manual to digital systems; they require a structured process of transformation. Kotter (2012) outlines eight stages of organizational change, starting from creating a sense of urgency to institutionalizing new approaches. In this context, the active involvement of supervisors, employee training, and consistent communication are integral components of an effective implementation strategy. This aligns with the perspective of Hammer and Champy (2009), who assert that efficient business processes must be supported by digitalization and process simplification.

These findings are consistent with Arifin (2017), who emphasizes that change management is essential for aligning organizational resources toward shared goals. The inefficiencies caused by outdated manual systems highlight the need for a carefully planned change strategy. Hidayanto et al. (2019) also stress that successful organizational transformation requires a combination of knowledge, skills, and technological support.

From an operational standpoint, manual systems hinder efficiency, in line with Anwar's (2019) theory of work efficiency, which identifies delays and recording errors as forms of time and energy waste. Therefore, the shift toward digital systems represents a strategic move to enhance production performance and optimize operational processes.

4. CONCLUSION

This study reveals that the manual recording system at PT Colorado Outdoor Gear Indonesia, particularly in the cutting and sewing divisions, has led to various operational inefficiencies, including production delays, data errors, interdepartmental miscommunication, and difficulty accessing historical records. These findings are supported by interviews with employees such as Agus Riyanto, Ukhti Nikmatiana, and David Porwanto, as well as field observations highlighting slow documentation processes, damaged records, and stock discrepancies.

The proposed change management strategy based on digitalization, grounded in Kotter's (2012) change model and Hammer and Champy's (2009) Business Process Reengineering theory, emerges as a critical solution for improving operational efficiency. The SWOT analysis further supports this strategy by leveraging employee support and technological opportunities while addressing weaknesses such as limited digital skills through targeted training programs.

Most employees responded positively to the digitalization plan, although adaptation and technical support are necessary to ensure a smooth transition. This study provides a foundation for understanding how structured change management can effectively resolve inefficiencies inherent in manual systems, echoing the findings of Firmansyah et al. (2024) and Royyana (2020) regarding the role of digitalization in enhancing accuracy and work speed.

The implications of this research suggest that manufacturing companies must adopt digital systems to remain competitive in the Industry 4.0 era. Key recommendations include communicating the vision of change and investing in employee training. However, this study has limitations, including its focus on a single company and a limited scope of divisions, which may affect the generalizability of the findings. Furthermore, the full-scale implementation of digitalization has not yet been tested, as this research represents an initial phase of the transformation process.

Therefore, it is recommended that PT. Colorado Outdoor Gear Indonesia implements digitalization gradually, starting with the cutting and sewing divisions, with regular training sessions and technical support throughout the transition. The company should also develop standard operating procedures (SOPs) for the new digital system and conduct periodic evaluations to assess the effectiveness of the change. Future studies are encouraged to examine the long-term impact of digitalization and explore similar initiatives in other manufacturing

firms to broaden the understanding of change management in the digital age.This study introduces a novel concept: the consistent, creative, and data-driven use of social media can serve as an effective solution to address the issue of low occupancy, especially during low-season periods. Through a combination of social media activity observation, in-depth interviews with hotel management, consumer perception analysis, and the examination of occupancy and social media insights data, the study emphasizes the importance of content consistency, adaptive promotional strategies, and optimal use of various social media platforms to attract and retain customer interest.

The findings are expected to serve as a valuable reference for hospitality industry players, particularly medium-scale hotels, in developing more targeted and effective digital marketing strategies. Ultimately, such strategies can help mitigate fluctuations in room occupancy rates and enhance business sustainability.

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NOVELTY

This study holds significant relevance to the overall research plan, as it highlights the challenges commonly faced by organizations—particularly manufacturing companies—when transitioning from manual to digital systems. The findings contribute directly to understanding the dynamics of change management in the digital era, where technological adaptation is not only a technical issue but also a matter of organizational culture and workforce readiness.

By focusing on a real-world case study at PT. Colorado Outdoor Gear Indonesia, the research offers valuable insights into the practical application of change management strategies in a large-scale manufacturing context in Indonesia. The use of frameworks such as Kotter's eight-step model and Business Process Reengineering by Hammer and Champy reinforces the theoretical foundation of the research, bridging theory with practice.

Furthermore, the study aligns with the primary focus of the research plan, which is to analyze the formulation and implementation of change management strategies within an organizational setting. The results provide empirical evidence of how structured planning, employee engagement, and continuous training can facilitate successful digital transformation. These insights will be instrumental in refining future strategic planning for similar organizational transitions and contribute to broader academic discussions on digital change management in emerging markets.

References

Anwar, M., 2019. Dasar-Dasar Manajemen Keuangan Perusahaan. Prenada Media.

Arifin, M., 2017. Strategi Manajemen Perubahan dalam Meningkatkan Disiplin di Perguruan Tinggi. *EduTech: Jurnal Ilmu Pendidikan Dan Ilmu Sosial*, Vol. 3 No. 1.

Astuti, R., Pratama, A., and Wijaya, S., 2020. Optimalisasi Strategi Bisnis melalui Analisis SWOT pada Industri Manufaktur. *Jurnal Manajemen Strategik*, Vol. 8 No. 2 pp. 123–135.

Bangun, W., 2012. *M*anajemen Sumber Daya Manusia. Erlangga.

Bowen, G. A. 2009. Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, Vol. 9 No. 2 pp. 27–40. *https://doi.org/https://doi.org/10.3316/QRJ0902027.*

Chow, D., Heaver, T., and Woo, C., 2016. Improving Inventory Management Through Manual System Optimization. *Journal of Operations Management*, Vol. 42 No. 55–67.

Creswell, J., W., 2014. Research Design: Qualitative, Quantitative, and Mixed Methods (4th ed.). SAGE Publications.

Firmansyah, M. R., Santoso, A. C., Farah, A., Monalissa, U., and Adiyanto, M., R., 2024. Pengaruh Pencatatan Akuntansi Manual dengan Pencatatan Digital di Era Globalisasi dalam suatu Usaha Snack Rehan Demangan Bangkalan. *Jurnal Media Akademik (JMA)*, Vol. 2 No. 7. *https://doi.org/https://doi.org/10.62281.*

Hammer, M., C., J., 2009. Reengineering the Corporation: A Manifesto for Business Revolution. HarperBusiness.

Hidayanto, A., N., Hartana, D., S., and Hapsari, I., C., 2010. Strategi Manajemen Perubahan untuk Mendukung Implementasi Sistem Informasi Rumah Sakit (Studi kasus: RSUD RAA Soewondo Pati). *Jurnal Sistem Informasi*, Vol. 6 No. 2 pp. 108–116.

Kotter, J., P., 2012. Change Leading. Harvard Business Review Press.

Miles, M., B., and Huberman, A., M., 1994. Qualitative Data Analysis: An Expanded Sourcebook (2nd ed.). SAGE Publications.

Rahmadyah, N., and Aslami, N., 2022. Strategi Manajemen Perubahan Perusahaan di era Transformasi Digital. *EKOKAM: Jurnal Ekonomi*, Vol. 2 No. 1 pp. 91–96. *https://doi.org/10.56456/jebdeker.v2i2.117.*

Rangkuti, F., 2001. Analisis SWOT: Teknik Membedah Kasus Bisnis. PT Gramedia Pustaka Utama.

Royyana, A., 2018. Strategi Transformasi Digital pada PT Kimia Farma (Persero) TBK. *Jurnal Sistem Informasi Kesehatan Masyarakat*, Vol. 3 No. 3.

Sugiyono. 2011. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.

Sugiyono. 2012. Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.

Westerman, G., Bonnet, D., and McAfee, A., 2014. Leading Digital: Turning Technology into Business Transformation. Harvard Business Review Press.

Wibowo, A., 2021. Manajemen Perubahan (Change Management). Penerbit Yayasan Prima Agus Teknik. *URL: https://penerbit.stekom.ac.id/index.php/yayasanpat/article/view/107.*

Yin, R., K., 2014. Case Study Research: Design and Methods (5th ed.). SAGE Publications.