

Time Management Model in the Personnel Security System for Sustainable Development Planning

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Abstract

The purpose of this study is to develop an effective time management model for a personnel security system focused on sustainable development planning. The object of the study is time management processes in organizations dealing with personnel issues in the context of sustainable development. The scientific task is to identify key factors influencing the effectiveness of personnel policies and implement this knowledge into practical time management techniques. To achieve the set goals, the IDEF0 methodology was used, which made it possible to systematically approach the analysis and modeling of time management processes. A detailed IDEF0 model was developed, including analysis of current processes, identification of key functions, identification of areas of responsibility and resource allocation. As a result of applying the developed time management model, a reduction in time spent on completing personnel tasks, increased productivity and compliance of the company's activities with the requirements of sustainable development were obtained.

Keywords: Time Management, Personnel, Security, Planning, Sustainable Development, Modeling.

INTRODUCTION

The development of a Time Management Model in the Personnel Security System for Sustainable Development Planning is highly relevant in today's rapidly evolving business environment, where efficiency and sustainability are key drivers of success. This model addresses the intricate balance between effectively managing time and ensuring that personnel security aligns with the broader goals of sustainable development. As organizations increasingly focus on long-term viability and ethical operations, integrating sustainable practices into every aspect of human resource management becomes critical. This model offers a structured approach to ensuring that time management strategies contribute positively to the organization's sustainable goals.

In the context of personnel security, effective time management is essential for handling sensitive information and processes efficiently and securely. Personnel security involves safeguarding the organization against internal threats and ensuring that employees align with its ethical and operational standards. By incorporating a time management model, organizations can optimize their workflows, minimize risks, and ensure that security processes do not hinder but rather enhance overall productivity. This alignment is particularly important in sectors where compliance with regulatory and sustainability standards is closely monitored. Moreover, sustainability in business is no longer just about environmental impact but also involves social and governance aspects. A Time Management Model that supports sustainable development planning helps organizations manage their human resources in a way that promotes social equity and good governance. This involves creating fair work practices, ensuring equal opportunities, and managing time in a way that supports work-life balance. By improving efficiency and equity in personnel management, companies can build a more motivated and loyal workforce, which is crucial for long-term sustainability.

The model's use of the IDEF0 methodology ensures a clear and structured approach to defining, analyzing, and optimizing the time management processes. IDEF0 is renowned for its ability to create a comprehensive

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model that clearly delineates responsibilities, functions, and interfaces. This level of detail is crucial when aligning time management with sustainable development goals, as it allows for precise planning and implementation. Through this methodology, the model can address specific time-related challenges in personnel security, providing solutions that are both efficient and in line with sustainability objectives.

The strategic importance of this model also lies in its potential to enhance decision-making capabilities within organizations. By providing a clear framework for time management in personnel security, the model enables leaders to make informed decisions that consider both immediate operational needs and long-term sustainability goals. This dual focus is essential in today's business world, where decisions must balance short-term efficiency with the long-term impact on the company's reputation, compliance, and social responsibilities.

Lastly, the Time Management Model serves as a proactive tool in the ongoing assessment and improvement of personnel security strategies. In a landscape where technological advancements and changing regulatory environments can quickly render traditional methods obsolete, having a dynamic model that evolves based on continuous feedback and updated data is invaluable. This adaptability ensures that organizations can remain resilient and responsive to both internal and external changes, maintaining a secure, efficient, and sustainable operation. Thus, the model not only addresses current needs but also equips organizations to face future challenges in personnel security and sustainable development.

The purpose of this study is to develop an effective time management model for a personnel security system focused on sustainable development planning. The object of the study is time management processes in organizations dealing with personnel issues in the context of sustainable development.

LITERATURE REVIEW

Alazzam et al. (2024) provide a methodical approach to the selection of business management strategies amidst changing commercial activities, which is crucial for understanding the backdrop against which time management models are implemented within personnel security systems (Alazzam et al., 2024). This study highlights the importance of strategic flexibility and adaptability, foundational concepts that underpin the need for effective time management practices in ensuring operational agility and security in a sustainable development framework.

Further extending the discussion on the integration of innovative models into business strategies, Alazzam et al. (2023) explore the formation of an innovative model for e-commerce development as a component of ensuring business economic security (Alazzam et al., 2023). This reference is pivotal as it illustrates how digital transformation, through structured time management and security measures, can safeguard and enhance business operations, a principle that is directly applicable to the personnel security systems discussed in our model.

The work by Alazzam et al. (2023) on state management of environmental systems in the bioeconomy sector offers insights into the ecological aspects of sustainable business practices (Alazzam et al., 2023). This study is relevant as it underscores the need for environmentally conscious decision-making within time management practices, which should align with broader sustainability goals, including those related to personnel and operational security.

On the technological front, the exploration of blockchain technology in electronic contracts by Alazzam et al. (2023) and the development of information models for e-commerce platforms by the same group (Alazzam et al., 2023) demonstrate the intersection of technology, time management, and security. These studies emphasize the importance of integrating advanced technologies to enhance the security and efficiency of business operations, a critical element in the proposed time management model.

The discussion is broadened by Bani-Meqdad et al. (2024) and Blikhar et al. (2023), who explore the challenges in protecting intellectual property and countering corruption within legal and regional frameworks (Bani-Meqdad et al., 2024; Blikhar et al., 2023). These articles provide a context for understanding how time management in personnel security must be compliant with legal norms and capable of addressing contemporary challenges in governance and law enforcement.

Finally, a series of studies by Kryshtanovych et al. (2023, 2024) discuss various aspects of modeling interactions between society and public administration, and the formation of social leadership within public safety systems (Kryshtanovych et al., 2023; Kryshtanovych et al., 2024). These contributions are crucial as they offer insights into how models, similar to the one proposed for time management in personnel security, can be effectively developed and implemented to support sustainable development and ensure comprehensive security strategies.

This literature provides a robust theoretical and practical framework that supports the integration of a Time Management Model in the Personnel Security System, emphasizing its relevance and necessity in the contemporary landscape of sustainable business practice. The synergistic relationship between time management, security, and sustainable development is evident throughout the reviewed literature, establishing a solid foundation for the proposed model.

METHODOLOGY

The primary aim of this study is to develop an effective time management model specifically tailored for personnel security systems that are geared towards sustainable development planning. This research focuses on enhancing the operational efficiency of organizations that manage personnel issues within the broader context of sustainable practices. The overarching objective is to identify critical factors that impact the effectiveness of personnel policies and to integrate this knowledge into practical, applicable time management strategies.

The study employs a structured research design using the IDEF0 methodology to systematically analyze and model the time management processes within personnel security systems. This approach is chosen for its robustness in defining and examining complex processes and systems, making it highly suitable for the intricate interactions within personnel management and sustainable development contexts.

IDEF0, a function modeling methodology, is used as the core analytical tool in this study. This method is instrumental in helping to break down the time management processes into manageable segments. The process starts with the identification of current processes followed by the delineation of key functions. This methodology facilitates a clear visual representation of processes, interdependencies, and areas of responsibility, which are crucial for effective time management within personnel security systems.

The model is not only conceptualized but also applied within real organizational settings to assess its practicality and effectiveness. This implementation phase is crucial for evaluating the model's ability to reduce the time spent on personnel tasks, increase productivity, and ensure that the company's activities align with sustainable development requirements.

Following the application of the time management model, a thorough evaluation is conducted. This evaluation is based on key performance indicators such as the reduction in time spent on personnel tasks, improvements in productivity, and compliance with sustainability standards. Feedback from this phase is used to refine the model further, ensuring it remains relevant and effective in the ever-evolving landscape of personnel security and sustainable development planning.

This methodological approach ensures that the study not only addresses the theoretical aspects of time management in personnel security but also provides a practical, tested solution that can be adopted by organizations aiming to enhance their sustainability and security measures.

RESEARCH RESULTS AND DISCUSSIONS

A0. Integration of Technology:

A1. Automate Routine Tasks. Identifying and automating routine tasks within the organization, such as data entry and report generation, can significantly enhance operational efficiency. The implementation of robotic process automation (RPA) tools is pivotal for handling these repetitive duties. Training personnel to effectively manage and oversee these automated systems ensures that they are utilized optimally. Regular monitoring and optimization of the automation processes are essential to maintain efficiency and prevent errors, thereby freeing up human resources for more complex tasks that require human intervention.

A2. Advanced Analytics for Decision Support. Implementing advanced analytics involves collecting and analyzing a large array of data from both internal and external sources. This analysis helps uncover insights into how time is spent and identifies any bottlenecks. Predictive analytics can be employed to anticipate potential delays and enable proactive planning. Developing user-friendly dashboards that provide real-time insights and trends on time management metrics allows managers and teams to make more informed decisions about resource allocation and task prioritization, thus improving overall time effectiveness.

A3. Enhanced Communication Tools. The deployment of collaborative software that integrates with existing time management systems can significantly streamline communication across various teams. Enhancing mobile accessibility ensures that team members have constant access to updates and can communicate from any location, which is especially beneficial in a hybrid or remote working environment. Instant feedback mechanisms help quickly address and resolve any issues that arise, thereby minimizing downtime. Standardizing communication protocols helps in reducing the time lost to misunderstandings and unnecessary clarifications.

A4. Continuous Training Programs. Continuous training programs are vital for keeping personnel updated with the latest technologies and methodologies related to time management. Offering certification courses and conducting regular workshops and seminars not only enhances skills but also keeps the team engaged and informed about best practices and innovations in time management. Encouraging self-directed learning through access to online resources and learning management systems fosters a culture of continuous improvement and personal responsibility for managing time effectively (Fig.1).

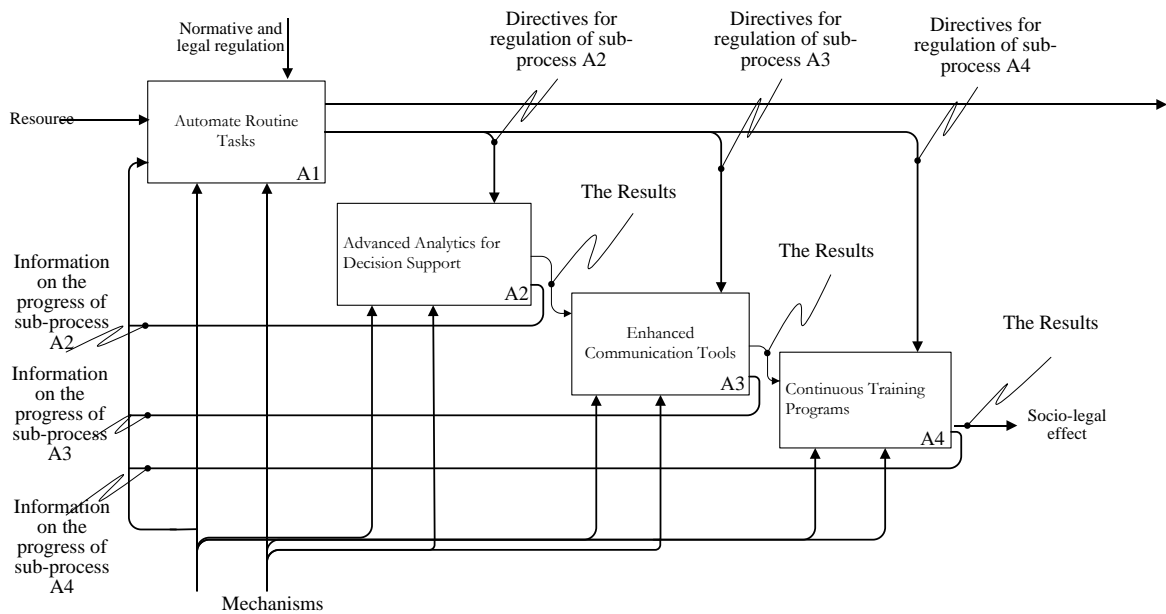


Figure 1. Model IDEF0

A0. Strategic Human Resource Management:

A1. Employee Involvement in Planning. Actively involving employees in the planning stages of projects and operational tasks can lead to more insightful and effective time management strategies. Utilizing employee feedback helps identify practical areas of improvement. Establishing a system for employees to submit suggestions for optimizing time usage encourages a participatory culture and can lead to innovative solutions. Forming task forces that include employees to revise and refine time management strategies ensures that these plans are realistic and grounded in actual work experience.

A2. Flexibility in Work Arrangements. Introducing flexible work schedules and telecommuting options accommodates various working styles and personal circumstances, potentially leading to enhanced productivity. Adopting a results-oriented work environment (ROWE) focuses on the output rather than the number of hours worked, promoting efficiency and effectiveness. Policies that support work-life balance are crucial, as they not only improve employee satisfaction but also indirectly enhance time management by reducing burnout and improving overall job performance.

A3. Targeted Recruitment and Selection. Hiring individuals with proven time management skills and a track record of efficient work practices can significantly benefit the organization. During the recruitment process, focusing on adaptive skills such as problem-solving and priority setting is crucial. Employing behavioral and situational interviews helps assess candidates' practical abilities in managing time effectively. Emphasizing the organization's commitment to sustainability and security during the onboarding process ensures new hires are aligned with the company's values from the start.

A4. Performance Management Enhancements. Linking performance evaluations to time management efficiency and the adherence to sustainable practices encourages employees to focus on these areas. Introducing a rewards and recognition program that incentivizes effective time management practices can motivate employees to continuously improve their time management skills. Implementing 360-degree feedback provides employees with comprehensive insights into their performance, including their efficiency and time management. Regularly reviewing and updating performance metrics ensures they remain relevant and aligned with the organization's evolving objectives and sustainability goals (Fig.2).

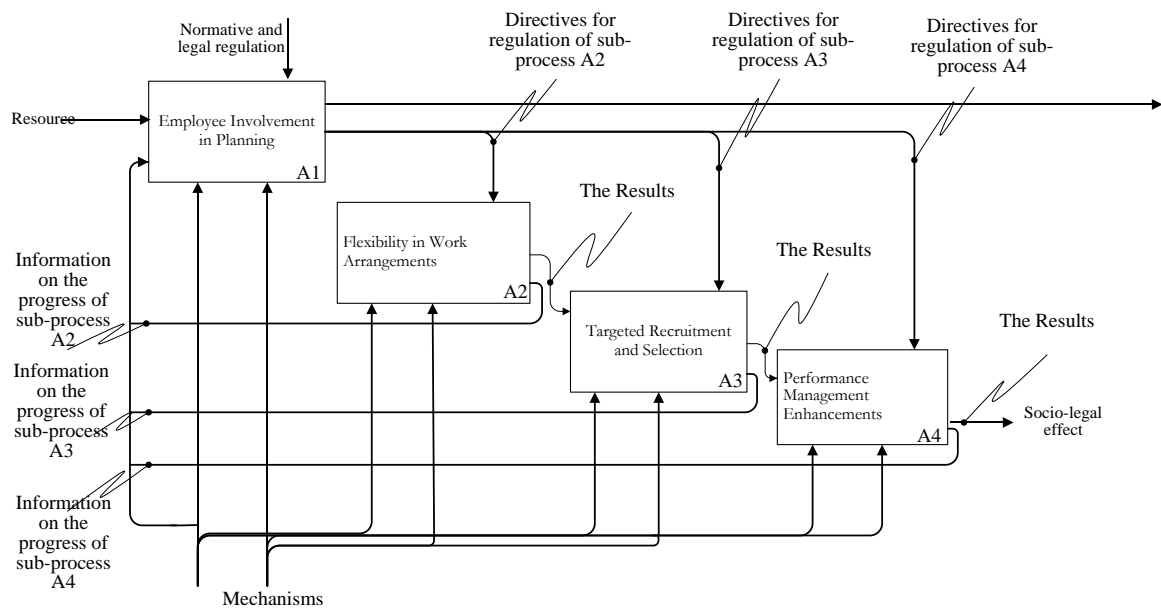


Figure 2. Second Model IDEF0

Kryshtanovych et al. (2023) discuss the role of marketing strategies in enhancing economic security within public administration (Kryshtanovych et al., 2023). This research aligns with the current study's emphasis on systematic processes, suggesting that structured methodologies like IDEF0 could similarly enhance transparency and efficiency in public sectors. Both studies highlight the importance of integrating strategic planning with operational tasks, though the current model focuses more specifically on time management within personnel security.

In exploring state regulation, Kryshtanovych et al. (2023) focus on optimizing safety and security of business operations through localized approaches (Kryshtanovych et al., 2023). This work complements the findings of the Time Management Model by underscoring the necessity of localized, adaptive strategies, which are also crucial in tailoring time management practices to specific organizational and sustainable development needs.

The study by Kryshtanovych et al. (2024) on enhancing state policy effectiveness in ensuring energy security provides insights into the broader implications of effective policy implementation for security and sustainability (Kryshtanovych et al., 2024). Similarly, the Time Management Model aims to bolster personnel security systems, suggesting that the principles of efficiency and structured modeling are universally applicable across different facets of security and development.

The management strategies discussed by Kryshtanovych et al. (2020) in the context of socio-economic development in tourism enterprises (Kryshtanovych et al., 2020) offer a perspective on the integration of economic factors with operational strategies. This is relevant to the current study's focus on integrating time management with sustainable development, as both require balancing operational efficiency with broader economic and social goals.

The model of counteraction to external threats discussed by Kryshtanovych et al. (2022) during the COVID-19 pandemic (Kryshtanovych et al., 2022) illustrates adaptive strategies in crisis situations, highlighting the importance of robust and flexible management systems. The Time Management Model, by facilitating efficient resource allocation and responsibility assignment, similarly enhances an organization's ability to respond to external pressures while maintaining security and sustainability.

Finally, the discussions on legal aspects of cryptocurrency management by Saleh et al. (2020) and financial security assessments by Sylkin et al. (2018) provide contextual backgrounds that underscore the importance of comprehensive security measures in any strategic business management, including those involving time management (Saleh et al., 2020; Sylkin et al., 2018). Both studies advocate for a holistic approach to security and crisis management, resonating with the current model's integration of time management within a secure and sustainable framework.

CONCLUSIONS

The study aimed to develop an effective time management model for personnel security systems, tailored to enhance sustainable development planning within organizations. The critical need to integrate sustainable practices with efficient personnel management was identified as a strategic imperative in the modern business landscape. Employing the IDEF0 methodology allowed for a structured and systematic approach to dissect and model complex time management processes, ensuring a comprehensive analysis that aligns with the specific needs of personnel security and sustainability.

The implementation of the IDEF0 model led to significant findings that demonstrate the efficacy of structured time management strategies in the context of personnel security systems. Key outcomes included a measurable reduction in the time required to complete personnel-related tasks, which directly contributes to enhanced operational efficiency. Furthermore, the study documented an increase in productivity, affirming that effective time management not only speeds up processes but also improves the quality and output of personnel work. Moreover, the alignment of the company's activities with the requirements of sustainable development was notably improved. This alignment is critical, as it ensures that the organization's practices do not merely comply with current standards but also contribute to long-term sustainability goals. The model's emphasis on identifying key functions, areas of responsibility, and optimal resource allocation facilitated a more organized and focused approach to managing time in personnel tasks, which is essential for maintaining security and fostering a sustainable work environment.

The results from applying the developed time management model confirm that meticulous planning and structured process modeling can significantly enhance the efficiency and sustainability of personnel security systems. These findings underscore the importance of adopting systematic methodologies like IDEF0 in organizational time management practices, especially in contexts where security and sustainable development are paramount.

In conclusion, this study provides a robust framework for organizations seeking to refine their personnel security systems through effective time management, ensuring that these systems are not only efficient but also aligned with broader sustainability objectives. The positive outcomes observed affirm the potential of structured

modeling approaches in transforming organizational practices, making a compelling case for their wider adoption across various sectors engaged in sustainability and security-intensive activities.

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