UNIWERSYTET Andrzeja Frycza Modrzewskiego w Krakowie
BEZPIECZEŃSTWO TEORIA I PRAKTYKA SECURITY THEORY AND PRACTICE
e-ISSN 2451-0718
ISSN 1899-6264
2026
Nr 1
https://doi.org/10.31749/2451-0718-btip-2026-1-00W

The importance of specific research areas in non-military security management: A conversation with Prof. Adam Jabłoński[1], BEng., PhD, DSc, and Dr. Marek Jabłoński[2], BEng., DSc, Assoc. Prof., members of the Scientific Council of the *Security: Theory and Practice*

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A. Chodyński: I invited you to a conversation regarding the importance of developing security topics in business and economic sectors, particularly the railway sector. This relates to the need to ensure the resilience of economic entities in the face of contemporary climate threats. In recent years, our journal has devoted considerable attention to the issue of resilience models, particularly in the face of environmental and energy threats, and the potential use of "clean" energy sources, including hydrogen-based ones.

The need to leverage modern technological solutions, including artificial intelligence, is leading to the creation of new organizational resilience models and business models. Your achievements in promoting climate threats (with the participation of the Andrzej Frycz Modrzewski Krakow University employees)

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are presented in issue 1/2024 of the *Security: Theory and Practice* (A. Jabłoński 2024). We also discussed the issue of safety in railway traffic, taking into account, among others, ecological aspects, climate, energy transformation and renewable energy sources, in an interview with the authorities of the European Railway Clusters Initiative ASBL with your participation in the issue 2/2022 of the *Security: Theory and Practice* (Conversation… 2022). The topic of business models has been the subject of research for many years, from proposals for pro-ecological, pro-efficiency and entrepreneurial business models (Chodyński 2011: 208–238) to the business models proposed by the Professors, taking into account the double transformation: digital and climate (Jabłoński & Jabłoński 2025).

Please share your achievements, also at the international level, in the field of new concepts for building business models, particularly in the face of climate threats and contemporary solutions for rail security.

A. Jabłoński, M. Jabłoński: The research area we have been involved in for many years focuses on two closely interconnected pillars. The first pillar concerns a broad understanding of the concept of business models against the backdrop of ongoing changes in the economy, business, and society related to the operation of enterprises in the so-called multi-crisis environment (economic, social, military, health, climate, etc.). Here, we focus on developing various types of business models (analog, digital, technical, power, climate, ecological, AI-driven, etc.) and their attributes: scalability, consistency, sustainability, circularity, etc.). The second pillar is related to the management of rail transport safety and cybersecurity by High Reliability Organizations (HROs), such as rail transport operators. In this area, we broadly develop the principles of safety culture, technical compliance, safe integration, and digital rail traffic control systems and digital data transmission, as well as their impact on safety management criteria in rail transport. These activities influence the creation of various solutions related to operational safety, operational cybersecurity, the physical protection of infrastructure critical to national security, such as rail infrastructure, and the cybersecurity of infrastructure, ICT systems, and devices used on the railways. The connecting factor between these two pillars of our scientific development is creating a framework for organizations' ability to ensure business continuity and achieve high efficiency through key ontological entities, which include business models, strategies, processes, and projects, creating a specific strategic hybrid in managers' decision-making processes under conditions of pressure, constraints, opportunities, possibilities, and threats.

A. Chodyński: How do you perceive the interrelationships between the concepts leading to the construction of business models and organizational resilience models?

A. Jabłoński, M. Jabłoński: One of the key attributes of business models, in the context of the automation, robotics, IT, ICT, technical diagnostics, cybernetics, and

artificial intelligence solutions being developed and incorporated into them, is the resilience and agility of business models. Resilience is more focused on the external protection of business models against their potential imitation by competitors, thus weakening the market potential of enterprises. In our interpretation, agility is primarily focused on the internal capacity of enterprises to strategically renew the organization's key resources and thus the capacity to sustainably develop them. Combining these two components creates a vertical-horizontal model for managing an organization's business security.

A. Chodyński: In my proposed model of responsible innovative behavior for organizations (Chodyński 2021: 203–222), including those facing extreme environmental turbulence that threatens security, and taking into account the assumptions of organizational resilience, a special role is assigned to collaboration with stakeholders. How do you see the potential for utilizing these views in implementing business models?

A. Jabłoński, M. Jabłoński: The relational dimension of enterprises operating on the edge of the real and virtual worlds through the joint construction of analog and digital identities requires openly shaping relationships with all stakeholders, or otherwise known as actors in the relationship network (stakeholders and net stakeholders). This is achieved by combining the contributions and incentives of various stakeholder groups, thus creating and developing progressive and inclusive business models for enterprises. In such a space, the subjective nature of decision-making determines the organization's ability to survive even in the most difficult conditions, creating platforms for market dialogue and value exchange with them, becoming their first choice as the purchasing power of customers declines.

A. Chodyński: Given the occurrence of extreme environmental turbulence that threatens the security of organizations, I proposed building a model for non-economic crisis in organizations, along with an analysis of the resilience curve of these organizations (Chodyński 2022). How do you see the relationship between these views and the business models you are building and their practical application?

A. Jabłoński, M. Jabłoński: The economic nature of an organization's business existence is no longer sufficient to survive in a multi-crisis environment. Only a well-integrated system for creating sets of multiple values embedded in value propositions for various types of stakeholders, and a dedicated revenue-generating logic embedded in the configuration of business models, can create the right space and climate for achieving results in the short and long term. Creating multiple values, including financial, social, climatic, safety-related, and other values, can only be achieved through organizations proactively developing a multi-business model

environment as a response to the dynamic response to the chaos occurring in a multi-crisis environment. Therefore, a non-economic model of organizational functioning based on the principles of resilience is the correct response to uncontrolled phenomena within the network of the economy, business, and society. It should also be noted that the greatest threats to enterprises currently stem not from microeconomic and sectoral conditions, but from macroeconomic decisions related to political and regulatory factors that have a multidimensional impact on the existential dimension of various types of economic entities. In this interpretation, developing non-economic attributes of organizations is fully justified and necessary.

A. Chodyński: How do you assess the chances of integrating the scientific community, including management science specialists, on the issues raised?

A. Jabłoński, M. Jabłoński: These issues are particularly important from the perspective of their applicability. It is important to remember that the discipline of management and quality science is an applied science, and therefore, it is the responsibility of every scientist to create and develop research areas that will inspire and stimulate a creative decision-making system for managers. The scientific community should propose feasible solutions appropriate to the state of development of the economy, business, and society. There is a noticeable underestimation of technology and its impact on the entire development structure of the discipline of management and quality science. For example, classic paradigms and solutions previously used in management are often inapplicable in the digital environment. It is worth noting, for example, that the logic, methodology, and conceptual framework present in the dynamic digital, climate, and energy transformations are significantly different from the principles operating in traditional value chains. Therefore, research opportunities exist in the design and implementation of technical and digital business models driven by Artificial Intelligence solutions. Furthermore, managers, aware of market challenges, should receive tools from scientists to solve even the most challenging business problems. For example, we believe that the scientific community has not fully appreciated the concept of Evidence-Based Management as a new scientific area and the future of modern management. Evidence-Based Management allows for the elimination of errors and decision-making problems for managers, who make better decisions thanks to broad online access to scientific evidence embedded in scientific publications using large datasets. Currently, we believe that combining the concepts of Artificial Intelligence and Data Science with technical, digital, and climate-related solutions supported by Evidence-Based Management opens a new dimension of scientific exploration and exploitation in management and quality sciences.

A. Chodyński: You are involved not only in research but also hold various leadership positions in organizations that influence the implementation of specific requirements and international standards in the area of security management.
A. Jabłoński, M. Jabłoński: Yes, that's true, hence we strive to confront scientific theory with business practice and the direct expectations of managers in creating a scientific panacea for their problems in the organizational-managerial, economic-financial, technical, and operational areas. Above all, in our scientific research and the solutions we present, we strive to be useful to the economy, business, and society. In this cognitive space, the criteria we develop for managing security and cybersecurity in its various dimensions and varieties take on a different driving force.

A. Chodyński: Thank you for the interview. The presented views will allow for a better focus on the thematic areas of the *Security: Theory and Practice*, particularly in the area of security management for economic entities operating in situations of threat. The considerations largely concern crisis management, including for entities that are part of critical infrastructure.

References

Chodyński, A. (2011). *Odpowiedzialność ekologiczna w proaktywnym rozwoju przedsiębiorstw*. Oficyna Wydawnicza AFM.

Chodyński, A. (2021). *Dynamika przedsiębiorczości i zarządzania innowacjami w firmach. Odpowiedzialność – prospołeczność – ekologia – bezpieczeństwo*. Oficyna Wydawnicza KAAFM.

Chodyński, A. (2022). Kryzys pozaekonomiczny przedsiębiorstwa – ekologiczny aspekt rezyliencji organizacyjnej. In: A. Chodyński, D. Fatuła, M. Leśniewski (Eds.). *Zrównoważony rozwój, systemy informacyjne i zarządzanie bezpieczeństwem w perspektywie długoterminowej przedsiębiorstw*. Oficyna Wydawnicza AFM, pp. 11–31. https://repozytorium.uafm.edu.pl/items/48066866-483a-4467-b4bf-cab375d68999

Conversation on and presentation of opinions about safety management in railway traffic of the European Union (2022). Moderated by Professor Andrzej Chodyński. *Bezpieczeństwo. Teoria i Praktyka*, 2, pp. 13–19. https://doi.org/10.48269/2451-0718-btip-2022-2-Con

Jabłoński, A. (2024). Aspekty bezpieczeństwa w kontekście zmian klimatycznych. Sprawozdanie z Międzynarodowej Konferencji Naukowej „Zmiany klimatyczne w środowisku wielu kryzysów – nowa przestrzeń dla biznesu i gospodarki. Jak transformacja cyfrowa i klimatyczna zmienia modele biznesu przedsiębiorstw?", 21–23 listopada 2023, Chorzów, Uniwersytet WSB Merito w Poznaniu Filia w Chorzowie. *Bezpieczeństwo. Teoria i Praktyka*, 1, pp. 125–129. https://doi.org/10.48269/2451-0718-btip-2024-1-007

Jabłoński, A., & Jabłoński, M. (2025). Digital and Climate Changes on the Business Models of Companies. In: A. Jabłoński & M. Jabłoński (Eds.). *Effect of Digital and Climate Changes in the Business Models of Companies*. Taylor & Francis Group. https://doi.org/10.1201/9781032628783