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Cultural Harmony in Defense Industry: A Case Study on Innovative Intercultural Communication

Savunma Sanayide Kültürel Uyum: Yenilikçi Kültürlerarası İletişim Üzerine Bir Vaka Çalışması

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Abstract

In the contemporary global landscape, marked by interconnectedness, cultural diversity represents a significant factor that influences multinational organizations, particularly within the defense industry. This article centers on the pivotal role of intercultural communication within multinational defense corporations, with a specific focus on its profound impact on open innovation. Drawing upon real-world examples and existing research, it examines how Rheinmetall's open innovation strategies are shaped by the dynamics of intercultural communication. This study illuminates how Rheinmetall effectively navigates cultural disparities, adapts communication methods, and fosters a collaborative environment conducive to innovation. It underscores the transformative power of intercultural communication within Rheinmetall, enabling the organization to harness diverse perspectives, expand global networks, and spearhead innovations within the defense sector. Furthermore, this article acknowledges the challenges posed by cultural diversity in the defense industry and offers practical strategies for Rheinmetall and other defense corporations to establish inclusive and cooperative environments. Its distinctive contribution lies in its comprehensive examination of how intercultural communication intricately influences open innovation within the defense sector, exemplified through the Rheinmetall case study. This research provides valuable insights and pragmatic solutions for navigating the complexities of cultural diversity in multinational organizations. As conclusion, intercultural communication is the cornerstone of open innovation at Rheinmetall, enabling knowledge exchange, creativity, and groundbreaking innovations while addressing challenges of cultural diversity in a multinational defense industry context.

Keywords: Intercultural Communication, Multinational Organizations, Open Innovation,

Öz

Günümüz küresel manzarasında, bağlantılılıkla işaretlenen kültürel çeşitlilik, özellikle savunma endüstrisi içinde çok uluslu organizasyonları etkileyen önemli bir faktörü temsil ediyor. Makale, çok uluslu savunma şirketlerinde kültürlerarası iletişimin kilit rolüne odaklanırken, özellikle açık inovasyon üzerinde derin bir etkisi olduğunu vurgulamaktadır. Gerçek dünya örneklerine ve mevcut araştırmalara dayanarak, Rheinmetall'ın açık inovasyon stratejilerinin kültürlerarası iletişimin dinamikleri tarafından nasıl şekillendiğini incelemektedir. Çalışma, Rheinmetall'ın kültürel farklılıkları etkin bir şekilde yönlendirdiği, iletişim yöntemlerini adapte ettiği ve inovasyon için uygun işbirlikçi bir ortamı teşvik ettiği şekilde nasıl aydınlatmaktadır. Rheinmetall'ın savunma sektöründe çeşitli perspektifleri kullanarak küresel ağları genişlettiği ve inovasyonu öncülük ettiği görülmektedir. Ayrıca, makale, savunma endüstrisindeki kültürel çeşitlilik tarafından ortaya çıkan zorlukları kabul eder ve Rheinmetall ve diğer savunma şirketlerinin kapsayıcı ve işbirlikçi ortamlar kurmaları için pratik stratejiler sunar. Makalenin önemli katkısı, kültürlerarası iletişimin savunma sektöründeki açık inovasyonu nasıl karmaşık bir şekilde etkilediğine dair kapsamlı bir incelemesinde yatar, Rheinmetall vaka çalışması örneklenmiştir. Bu araştırma, çok uluslu organizasyonlardaki kültürel çeşitlilik karmaşıklıklarını gezmenin değerli içgörülerini ve pragmatik çözümlerini sunmaktadır. Sonuç olarak, Rheinmetall'in açık inovasyon çabalarının temel taşı olan kültürlerarası iletişim, bilgi paylaşımını, yaratıcılığı ve çığır açan yenilikleri mümkün kılarken, çok uluslu savunma sanayii bağlamında kültürel çeşitliliğin zorluklarını da ele almaktadır.

Anahtar Kelimeler: Kültürlerarası İletişim, Çok Uluslu Örgütler, Açık İnovasyon

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Introduction

In today's interconnected and rapidly changing global landscape, multinational organizations are increasingly adopting open innovation strategies to maintain competitiveness and stimulate growth. In an era characterized by globalization, these organizations have become more culturally diverse, with employees representing various backgrounds working together toward common objectives (Seo et al., 2023). While this diversity offers substantial opportunities for innovation and expansion, it also presents unique challenges, particularly in the domain of intercultural communication. Effective communication is essential for cultivating collaboration and mutual understanding among team members, and it becomes even more critical when exploring the perspective of open innovation (Slavkovic et al., 2016).

Intercultural communication encompasses the exchange of information and ideas among individuals from different cultural backgrounds. It involves both verbal and nonverbal communication, as well as the comprehension and interpretation of cultural nuances, values, and norms. In multinational organizations, where teams comprise individuals from diverse cultural backgrounds, effective intercultural communication plays a pivotal role in achieving organizational goals and fostering innovation (Chaochotechuang et al., 2019). Open innovation, a concept popularized by Henry Chesbrough, involves collaborating with external partners, including customers, suppliers, and even competitors, to co-create and share knowledge, ideas, and technologies. It emphasizes the importance of seeking external inputs and leveraging the collective intelligence of diverse stakeholders. In the context of multinational organizations, intercultural communication becomes a critical enabler for the success of open innovation (Uteshova, 2022).

When employees from diverse cultural backgrounds come together, they bring unique perspectives, experiences, and problem-solving approaches. Intercultural communication facilitates the cross-fertilization of these ideas, enabling the synthesis of diverse insights and promoting creative thinking. Effective communication allows individuals to articulate their viewpoints, challenge assumptions, and contribute to the generation of innovative solutions. Trust forms the foundation of successful collaboration, but in multinational organizations where team members may come from contrasting cultural contexts, building trust can be more challenging due to differences in communication styles, language barriers, and varying levels of cultural awareness. Intercultural communication bridges these gaps by fostering understanding, empathy, and respect. It allows team members to establish meaningful relationships, break down stereotypes, and develop trust in each other's abilities, ultimately leading to more effective collaboration and knowledge sharing.

Language and cultural differences can significantly impede effective communication in multinational organizations. Misinterpretations, misunderstandings, and miscommunications can arise when individuals from different cultural backgrounds use different idioms, nonverbal cues, or adhere to varying communication norms (Lichtenthaler & Ernst, 2009).). Intercultural communication empowers employees to overcome language and cultural barriers by promoting active listening, clarifying intentions, and adapting communication styles to suit diverse audiences. This adaptability enhances the quality of interactions and reduces the likelihood of miscommunication, thereby facilitating open innovation (Pedraza-Martinez et al., 2020).

Multinational organizations inherently benefit from cultural diversity. Different cultures bring distinct knowledge systems, problem-solving approaches, and alternative ways of thinking (Šešić & Stefanović, 2017). Intercultural communication empowers organizations to

harness this diversity by facilitating knowledge exchange, encouraging cross-cultural learning, and integrating diverse perspectives into the innovation process (Byrd, 2023). By leveraging the collective intelligence of culturally diverse teams, multinational organizations can generate more innovative ideas and solutions.

In open innovation, understanding the needs, preferences, and expectations of external partners, including customers and suppliers, is crucial. Intercultural communication enables multinational organizations to navigate different markets and effectively engage with stakeholders from various cultural backgrounds. It allows organizations to adapt their innovation strategies, products, and services to cater to diverse consumer demands (Busco & Quattrone, 2018). By actively listening to and understanding the cultural nuances of different markets, organizations can gain a competitive edge and drive innovation that aligns with local requirements.

To promote effective intercultural communication within multinational organizations, various strategies can be adopted:

- Cultural Training and Awareness Programs: Multinational organizations can implement programs that offer cultural training and raise awareness among employees. Gaining insights into diverse cultures, communication styles, and norms enables individuals to develop the cultural intelligence needed to navigate intercultural interactions successfully.
- Language Support: Bridging language barriers is essential for improved communication among team members (Barendsen et al., 2021). Providing language support through training or translation services can facilitate understanding and enhance overall communication effectiveness.
- Technology Tools: Leveraging modern technology tools, such as video conferencing, instant messaging platforms, and project management systems, can facilitate seamless communication and collaboration across geographical boundaries. Realtime interactions and document sharing help overcome time zone differences and enhance intercultural communication.
- Team-Building Activities: Encouraging team-building activities that promote crosscultural interactions and collaboration can strengthen relationships and trust among team members. These activities provide valuable opportunities for individuals to gain a deeper understanding and appreciation of different cultural perspectives, fostering an environment of open innovation (Schneckenberg, 2015).

In conclusion, intercultural communication plays a pivotal role in multinational organizations seeking to embrace open innovation. By recognizing and leveraging the strengths of diverse cultural backgrounds, organizations can create an environment that encourages collaboration, knowledge sharing, and innovation. Embracing effective intercultural communication strategies enables multinational organizations to harness the power of cultural diversity, overcome communication barriers, and unlock the full potential of open innovation. This book chapter proposal aims to examine the dynamics of intercultural communication in multinational organizations from an open innovation perspective, highlighting its significance and offering insights into effective practices, taking into account the following objectives.

1. Open Innovation in Multinational Organizations

In today's rapidly evolving global business landscape, innovation has emerged as a critical driver of success and competitiveness for organizations across various industries. To maintain a competitive edge, many companies have transitioned from traditional, closed innovation models to more collaborative and open approaches (Standing et al., 2018). One such approach gaining significant traction is open innovation. While open innovation is applicable to organizations of all types, its implications for multinational organizations are particularly profound (Barendsen et al., 2021). Coined by Henry Chesbrough, open innovation involves leveraging external sources of knowledge, ideas, and expertise to fuel innovation (Schneckenberg, 2015). This paradigm shift acknowledges that valuable insights and resources exist beyond the organization's boundaries, necessitating collaboration with diverse partners, including customers, suppliers, universities, research institutions, and even competitors (Standing et al., 2018). Open innovation challenges the conventional closed innovation model that relied predominantly on internal research and development efforts (Zynga et al., 2018).

Multinational organizations, by their very nature, operate across borders, cultures, and markets, affording them access to an extensive pool of knowledge and resources from diverse geographical locations (Kim & Shin, 2022). Embracing open innovation allows these organizations to harness the collective expertise and ideas within their global network, thereby accelerating the pace of innovation. However, realizing the full potential of open innovation within a multinational context demands meticulous attention to intercultural dynamics, communication complexities, and effective collaboration across borders (Tripathi, 2016). Open innovation offers several key benefits for multinational organizations:

Access to Diverse Knowledge and Expertise: Open innovation empowers multinational organizations to tap into a wide spectrum of knowledge and expertise spanning various markets and cultural contexts (Standing et al., 2018). This diverse resource pool provides fresh perspectives, alternative approaches, and a more comprehensive understanding of customer needs and preferences. Access to a broad range of ideas and expertise fuels breakthrough innovations, keeping organizations competitive in the global landscape (Busco & Quattrone, 2018).

Increased Speed and Agility: Open innovation enables multinational organizations to tap into external resources, swiftly responding to market trends and customer demands (Oliveira et al., 2021). Collaborating with external partners allows organizations to leverage specialized knowledge, technologies, and capabilities, reducing the time required to develop and launch new products or services (Jun & Kim, 2022). This enhanced agility provides a competitive advantage in rapidly evolving markets.

Risk Mitigation: Pursuing innovation inherently involves risks, such as substantial investments in ideas that may not yield the desired outcomes (Byrd, 2023). Open innovation allows multinational organizations to share these risks by collaborating with external partners. By distributing the innovation process across multiple entities, organizations can mitigate the potential negative impacts of failed ideas or projects while increasing the likelihood of successful innovations (Cascio, 2014).

Enhanced Market and Customer Understanding: Multinational organizations operate in diverse markets characterized by varying cultural, social, and economic contexts. Open innovation facilitates engagement with external partners, including customers, enabling organizations to gain deeper insights into local markets, customer preferences, and emerging

trends (Shubert, 2021). This heightened market understanding helps tailor products, services, and business strategies to specific market needs, enhancing customer satisfaction and market success (McHargue, 2003).

However, implementing and managing open innovation initiatives in multinational organizations comes with distinct challenges:

Intercultural Dynamics: Multinational organizations bring together employees from diverse cultural backgrounds, each with their unique communication styles, norms, and work approaches (Jun & Kim, 2022). Managing intercultural dynamics and fostering effective communication and collaboration can be complex. It necessitates investments in intercultural training, cross-cultural team-building activities, and the development of cultural intelligence among employees (Barker, 2015).

Intellectual Property Protection: Collaborating with external partners exposes organizations to potential intellectual property (IP) risks. Safeguarding and managing IP becomes crucial when engaging in open innovation, especially in multinational contexts where IP laws and regulations may vary (Dreyfuss, 2010). Establishing clear agreements, contracts, and legal frameworks to protect intellectual property rights is essential for fostering trust and ensuring the security of innovations (Hauck, 2021).

Coordination and Integration: Multinational organizations often have decentralized operations and dispersed innovation activities across various locations. Coordinating and integrating innovation efforts and knowledge sharing across borders can be challenging (Pedraza-Martinez et al., 2020). Establishing effective communication channels, leveraging technology platforms, and fostering a culture of collaboration and knowledge exchange are critical to overcoming these challenges (Slavkovic et al., 2016).

Overcoming Resistance to Change: Transitioning from a closed innovation model to open innovation requires a cultural transformation within the organization. Resistance to change from employees accustomed to traditional approaches can hinder the successful implementation of open innovation initiatives (Huang et al., 2013). Encouraging an open, collaborative, and experimental mindset and cultivating a supportive organizational culture are essential to overcoming resistance and driving a successful open innovation agenda (Zhong, 2019).

Open innovation presents significant opportunities for multinational organizations to enhance their innovation capabilities, access diverse knowledge and expertise, and remain competitive in the global marketplace (Byrd, 2023). Embracing open innovation allows organizations to tap into external resources, collaborate with a wide array of partners, and leverage the strength of global networks. Nevertheless, effective implementation and management of open innovation initiatives in a multinational context require addressing intercultural dynamics, intellectual property concerns, coordination challenges, and change management aspects (Busco & Quattrone, 2018). With the right strategies and a proactive approach, multinational organizations can harness the benefits of open innovation to drive sustainable growth and success in an ever-evolving world.

Open innovation is a collaborative and inclusive approach to innovation that emphasizes the use of external knowledge, resources, and ideas to complement and augment an organization's internal capabilities. It challenges the traditional closed innovation model, which relied solely on internal research and development efforts (Yunita Wijaya Handranata et al., 2020). Open innovation recognizes that valuable insights and expertise exist beyond the boundaries of an

organization. It encourages collaboration with external partners, including customers, suppliers, research institutions, universities, and even competitors. By engaging in strategic alliances, partnerships, and co-creation activities, organizations can access a broader pool of ideas, insights, and resources (Avans, 2017). Open innovation encourages organizations to be open and receptive to ideas from both internal and external sources. It emphasizes the importance of exploring and evaluating a wide range of ideas, regardless of their origin, and recognizing that innovation can come from unexpected places. This openness promotes a culture of innovation and continuous learning within the organization (Tranekjer, 2017).

Open innovation involves sharing and leveraging knowledge and expertise across organizational boundaries. It recognizes that knowledge is not a finite resource and sharing it can create value for all parties involved. By sharing intellectual property, best practices, and research findings, organizations can foster collaboration and create a mutually beneficial environment that drives innovation (Cho & Park, 2022). Technology plays a vital role in enabling open innovation. Organizations leverage digital platforms, such as online communities, innovation marketplaces, and crowdsourcing platforms, to facilitate the exchange of ideas, connect with external partners, and harness collective intelligence. These platforms provide a space for collaboration, idea generation, and the identification of potential opportunities for innovation (Yang & Han, 2021) Open innovation recognizes the value of involving users, customers, and stakeholders in the innovation process.

By engaging with end-users and incorporating their feedback and insights, organizations can better understand their needs, preferences, and pain points, leading to more customer-centric innovations. Co-creation activities, such as hackathons, innovation challenges, and user forums, enable organizations to tap into the creativity and expertise of external stakeholders (Dolińska, 2018). Open innovation embraces an iterative and agile approach to innovation. It encourages experimentation, learning from failures, and rapid iteration of ideas and prototypes. By adopting a fail-fast mentality and embracing a culture of continuous improvement, organizations can adapt quickly to changing market conditions and refine their innovations based on feedback and insights from internal and external sources (Bauer & S. Prado, 2020).

2. Strategic Integration of Intercultural Communication in Open Innovation

Open innovation, a collaborative approach to innovation that leverages external knowledge and resources, has gained prominence as a key driver of success for organizations worldwide. However, for multinational organizations, the effective integration of open innovation processes requires careful consideration of intercultural communication dynamics. Intercultural communication plays a pivotal role in fostering successful collaboration, knowledge sharing, and mutual understanding among diverse stakeholders, ultimately enhancing the outcomes of open innovation initiatives (Chaochotechuang et al., 2019). Here are essential aspects of integrating intercultural communication into open innovation processes:

Cultural Awareness and Sensitivity: Multinational organizations must promote cultural awareness and sensitivity among employees engaged in open innovation initiatives. This involves providing cultural training and education to develop an understanding of different cultural norms, values, communication styles, and behaviors. By fostering cultural sensitivity, organizations create an environment that values diversity and encourages respectful and inclusive interactions among team members (Šešić & Stefanović, 2017).

Clear Communication Channels: Effective communication is a cornerstone of successful open innovation. Multinational organizations should establish clear communication channels that facilitate open dialogue, knowledge exchange, and information sharing among diverse stakeholders. This may involve leveraging digital collaboration platforms, video conferencing tools, and other communication technologies to overcome geographical and cultural barriers. Clear communication channels ensure that all stakeholders have equal access to information, ideas, and insights, fostering a collaborative and inclusive innovation process (Siemens, 2020).

Language Considerations: Language diversity can pose significant challenges in multinational organizations. To overcome language barriers, organizations can provide language support, such as translation services or language training, to enable effective communication and understanding among team members. It is crucial to ensure that all stakeholders have the opportunity to express their ideas and perspectives in their preferred language, ensuring that language differences do not hinder the flow of communication and collaboration (Yang, 2008).

Active Listening and Empathy: Intercultural communication involves active listening and empathy, both of which are critical for understanding diverse viewpoints and building strong relationships. Encouraging active listening among team members promotes an inclusive environment where everyone's ideas and perspectives are valued. Empathy helps team members appreciate different cultural contexts, viewpoints, and communication styles, leading to better understanding and cooperation during the open innovation process (Haley et al., 2017).

Cultural Integration and Collaboration: Multinational organizations should strive to cultivate a culture of collaboration and integration, where individuals from different cultural backgrounds work together toward a shared goal. This can be achieved by creating opportunities for cross-cultural interactions, such as team-building activities, workshops, and social events. By encouraging collaboration and relationship-building across cultures, organizations can harness the strengths of cultural diversity and foster a sense of belonging and ownership among team members (Zhang et al., 2022).

Conflict Resolution and Mediation: Inevitably, conflicts and misunderstandings may arise during the open innovation process due to cultural differences. It is essential for organizations to have effective conflict resolution mechanisms and mediation processes in place. Training team members in conflict resolution skills, promoting open dialogue, and providing a supportive environment for addressing cultural misunderstandings can help resolve conflicts and maintain a positive and productive atmosphere for innovation (Cavus & Kumcagiz, 2014).

Continuous Learning and Improvement: Intercultural communication in open innovation is an ongoing process that requires continuous learning and improvement. Multinational organizations should encourage a culture of learning and reflection, where team members can share their experiences, lessons learned, and best practices in intercultural communication. Regular feedback and evaluation of communication processes and practices can help identify areas for improvement and enable organizations to refine their intercultural communication strategies over time (Oliveira et al., 2021).

By integrating these intercultural communication practices into open innovation processes, multinational organizations can harness the power of cultural diversity, enhance collaboration, and maximize the value generated from their innovation initiatives. Effective intercultural communication fosters understanding, trust, and mutual respect among diverse

stakeholders, leading to more innovative outcomes and sustainable success in the global marketplace.

3. Harnessing Diversity for Effective Collaboration and Global Success

Intercultural communication holds a pivotal role within the realm of open innovation, serving as a linchpin for effective collaboration and the maximization of diverse perspectives and expertise. In this section, we delve into specific considerations and strategies for intercultural communication in the context of open innovation (Najar, 2015).

Cultural Sensitivity and Awareness: Multinational organizations engaged in open innovation often collaborate with external partners from diverse cultural backgrounds. It is imperative for these organizations to promote cultural sensitivity and awareness among their employees. This entails understanding the cultural norms, values, communication styles, and business practices of external partners. Cultural sensitivity equips individuals with the ability to navigate cultural differences respectfully and adapt their communication approaches accordingly (Frese, 2015).

Language Considerations: Language is a significant facet of intercultural communication. In multinational open innovation projects, team members may speak different languages or possess varying proficiency levels. Organizations should consider language challenges and provide language support or translation services to ensure effective communication. It is equally important to be mindful of different communication styles, such as direct versus indirect communication, and adjust communication approaches to accommodate diverse cultural preferences (Kavalir & Chudoba, 2020).

Cross-Cultural Training and Education: Offering cross-cultural training and education to employees involved in open innovation projects is crucial. This training should focus on enhancing cultural intelligence, promoting an understanding of cultural nuances, and developing intercultural communication skills. By equipping employees with the necessary knowledge and skills, organizations can reduce misunderstandings, overcome cultural barriers, and foster effective collaboration (Tranekjer, 2017).

Leveraging Technology for Intercultural Communication: Open innovation often involves virtual communication and collaboration across geographical distances. Multinational organizations should make use of technology platforms and virtual communication tools to facilitate intercultural communication. These tools can include video conferencing, instant messaging, and virtual project management systems. Technology enables real-time interactions, document sharing, and visual cues, which are essential for effective intercultural communication in virtual environments (Standing et al., 2018).

Active Listening and Clarification: Misunderstandings can arise due to cultural differences in communication styles, nonverbal cues, or language proficiency. It is important to practice active listening and encourage team members to seek clarification when needed. Clarifying intentions, paraphrasing, and confirming understanding can help ensure that messages are interpreted correctly and minimize miscommunication (Kim & Shin, 2022).

Building Trust Across Cultures: Trust is vital for successful open innovation collaboration. In an intercultural context, building trust may require additional effort due to cultural differences and varying levels of familiarity. Organizations should focus on relationship-building activities,

such as team-building exercises, social events, and cultural exchanges, to create a foundation of trust and mutual respect among team members (Holton, 2001).

Conflict Resolution and Mediation: Cultural differences can occasionally lead to conflicts or misunderstandings. Organizations should establish effective conflict resolution mechanisms and mediation processes to address intercultural conflicts constructively. Mediators or facilitators with intercultural expertise can help navigate conflicts, promote understanding, and find mutually beneficial solutions (Euwema & Van Emmerik, 2007).

Cultural Diversity as a Catalyst for Innovation: Cultural diversity within organizations can be a catalyst for innovation. When individuals from different cultural backgrounds come together, diverse perspectives, knowledge, and problem-solving approaches are brought to the table. Embracing diversity and inclusion in innovation processes allows organizations to tap into a rich pool of ideas and fosters creativity and innovation through the blending of different cultural perspectives (Kattayeva, 2022).

Culture and Adaptability: Culture profoundly influences an organization's ability to adapt to change and embrace new ideas. Cultures that value stability, tradition, and the status quo may resist change and innovation. In contrast, cultures that embrace change, flexibility, and continuous improvement are more likely to foster a climate conducive to innovation. Building a culture of adaptability and embracing a growth mindset is essential for organizations to navigate rapidly changing business environments and drive innovation (Uteshova, 2022).

External Cultural Influences: Culture is not solely shaped by internal factors within organizations but is also influenced by the external environment. National, regional, and societal cultures can impact innovation processes through factors such as government policies, educational systems, and societal attitudes towards entrepreneurship and innovation. Organizations operating in different cultural contexts must navigate these external cultural influences and adapt their innovation strategies accordingly (Euwema & Van Emmerik, 2007).

Understanding the intricate interplay between culture and innovation empowers organizations to leverage cultural strengths, address cultural barriers, and create an environment conducive to innovation. By recognizing and embracing cultural factors, organizations can shape their innovation strategies, cultivate an innovation culture, and drive successful and sustainable innovation outcomes (Jensen, 2011).

3.1. Leveraging cultural diversity for open collaboration and idea sharing

Leveraging cultural diversity for open collaboration and idea sharing is a powerful strategy that can drive innovation and creativity within organizations. Cultural diversity brings together individuals with different perspectives, knowledge, and problem-solving approaches, which can lead to novel insights and innovative solutions (Deshmukh, 2020). To create an inclusive and empowering environment where cultural diversity is celebrated and harnessed for innovation, consider the following key strategies:

Promote Open Communication: Encourage team members to express their ideas and opinions openly, creating an atmosphere of trust and respect. Emphasize the importance of active listening and valuing each person's perspective, regardless of their cultural background (Oliveira et al., 2021).

Embrace Diversity of Thought: Recognize that cultural diversity brings different viewpoints and approaches to problem-solving. Encourage team members to share their unique

perspectives and challenge assumptions, viewing diversity as an asset that can lead to more creative and innovative solutions (Najar, 2015).

Facilitate Knowledge Sharing: Provide platforms and opportunities for cross-cultural knowledge sharing. This can include formal sessions, workshops, or informal gatherings where team members can exchange insights, experiences, and best practices from their respective cultures (Haley et al., 2017).

Encourage Collaborative Learning: Foster a culture of continuous learning by encouraging team members to seek guidance and support from colleagues with different perspectives. This promotes a deeper understanding of various cultural approaches to problemsolving and innovation (Euwema & Van Emmerik, 2007).

Form Diverse Teams: Intentionally assemble teams that consist of individuals from diverse cultural backgrounds. Diverse teams can enhance creativity and collaboration, leading to more robust and inclusive solutions (Cascio, 2014).

Offer Intercultural Training: Provide intercultural training and education programs to team members. These programs enhance cultural intelligence, promote understanding of different cultural norms and communication styles, and equip team members with the tools for effective collaboration in a multicultural environment (Jensen, 2011).

Build Trust and Respect: Foster a culture of mutual understanding and appreciation among team members. Encourage individuals to value and respect different cultural perspectives and promote empathy, active listening, and open-mindedness in collaboration (Kavalir & Chudoba, 2020).

Address Biases and Stereotypes: Be vigilant about addressing biases or stereotypes that may arise in a multicultural environment. Encourage team members to challenge their own biases and assumptions, promoting equal opportunities for all (Yang & Han, 2021).

By implementing these strategies, organizations can create an environment where individuals from diverse cultural backgrounds feel valued and empowered to contribute their ideas and perspectives. This inclusive and formal approach to leveraging cultural diversity fosters a culture of innovation and collaboration, leading to more creative and successful outcomes for the organization.

4. Methodology

In today's globalized defense industry landscape, multinational corporations frequently encounter complex challenges related to intercultural communication. This case study delves into the interplay between intercultural communication challenges and innovative strategies within multinational defense industry leader Rheinmetall, illustrating how these dynamics impact the company's operations. Rheinmetall, a prominent player in the defense industry, has a rich history of innovation and excellence in the field. As the company expanded its global presence and sought to foster international collaboration, it recognized the necessity of adopting innovative strategies. This recognition led Rheinmetall to initiate a series of global collaboration projects aimed at harnessing external expertise and ideas (Augen geradeaus, 2023).

While these initiatives were instrumental in advancing Rheinmetall's innovation landscape, they also brought forth a set of intercultural communication challenges that necessitated careful consideration and strategic solutions. This case study embarks on an exploration of the intercultural communication challenges faced by Rheinmetall during its

transition from a traditional innovation model to a collaborative and internationally-inclusive strategy. The global collaboration initiatives, with a particular focus on the most significant projects, symbolize Rheinmetall's commitment to leveraging external talents and ideas for sustained innovation and growth in the defense industry. By delving into the intricacies of Rheinmetall's journey, we aim to shed light on the complex dynamics of intercultural communication within multinational defense industry corporations, especially in the context of pioneering global collaboration efforts (Rheinmetall,2023 a).

The subsequent sections of this case study will provide a comprehensive analysis of the challenges posed by intercultural communication within Rheinmetall's global collaboration initiatives. Through real-world anecdotes, observations, and insights, we will explore how Rheinmetall effectively managed cultural differences, adapted communication styles, and overcame collaboration barriers. By revealing the strategies employed and the lessons learned, this case study aims to contribute to a holistic understanding of the role of intercultural communication in shaping innovative practices within multinational defense industry corporations. Within the realm of multinational defense industry corporations, intercultural communication challenges significantly influence the implementation and success of innovative strategies. A prime example of this is Rheinmetall's embrace of global collaboration initiatives, which have transformed its innovation approach. This case study underscores the pivotal role that intercultural communication dynamics play in shaping Rheinmetall's innovative strategies and global collaborations (Rheinmetall,2023 b).

4.1. Background and Context

Rheinmetall, a leading multinational corporation in the defense industry, boasts a storied history of research and development excellence. As the company expanded its operations on a global scale, amassing a substantial presence and a significant annual revenue of billions of euros, it came to a critical juncture in its innovation journey. The prevailing approach centered around an internally-focused Research and Development (R&D) framework, embodying the traditional "invent-it-ourselves" ethos that had served the company well for decades. Nevertheless, the evolving global defense landscape and the rapid pace of technological advancements presented compelling reasons to reevaluate this conventional strategy (Rheinmetall,2023 a).

In a dynamic environment characterized by geopolitical shifts and transformative technological breakthroughs, Rheinmetall recognized the need for a fresh and innovative approach to sustain its competitive edge in the defense industry. The company's reliance on internal R&D, while historically successful, was increasingly insufficient in meeting the demands of an interconnected world. As Rheinmetall aimed to remain at the forefront of defense technology, it became evident that a shift towards a more collaborative and externally-engaged innovation model was essential.

This pivotal moment in Rheinmetall's history prompted the company to embark on a series of global collaboration initiatives, designed to tap into external expertise and novel ideas from a diverse array of sources. By doing so, Rheinmetall sought to transcend the limitations of its traditional innovation model and embrace a more open and inclusive approach to innovation. In this new era, intercultural communication challenges would emerge as a significant factor influencing the success of these initiatives (Rheinmetall,2023 b).

As Rheinmetall embarked on this transformative journey, it was confronted not only with the necessity of fostering collaboration across cultural boundaries but also with the need to

adapt its communication strategies to effectively engage with external partners and stakeholders. In navigating these intercultural communication challenges, Rheinmetall aimed to harness the full potential of its global collaborations, ultimately driving innovation and growth in the everevolving defense industry landscape. This case study delves into the intricacies of Rheinmetall's approach to intercultural communication within the context of its global collaboration initiatives, shedding light on the crucial role it plays in shaping the company's innovative practices and international partnerships.

4.2. Global Collaboration Initiatives

In response to these challenges, Rheinmetall initiated a series of ambitious global collaboration initiatives. Foremost among these was the establishment of a framework that promoted collaborative innovation by engaging external partners, thereby transcending the confines of traditional internal Research and Development (R&D) practices.

This transformative endeavor recognized the tremendous value of tapping into external sources of knowledge and expertise. Rheinmetall's global collaboration initiatives encompassed a wide spectrum of potential collaborators, including startups, universities, small and midsize enterprises (SMEs), and even strategic competitors within the defense industry. This marked a profound departure from the conventional "invent-it-ourselves" mindset that had historically characterized the company's innovation approach.

The global collaboration initiatives became the linchpin of Rheinmetall's innovation strategy, enabling the corporation to harness the collective wisdom and creativity of a diverse range of stakeholders. Through these initiatives, Rheinmetall aimed to remain at the forefront of defense technology by leveraging the innovative capabilities of external partners. This shift towards open and inclusive innovation signaled a departure from the insular R&D model that had served as the foundation of the company's success.

In adapting to this new paradigm, Rheinmetall recognized the need to address the multifaceted challenges of intercultural communication. The success of these global collaboration initiatives hinged not only on effective collaboration across cultural boundaries but also on the ability to adjust communication strategies to resonate with a broad spectrum of partners, each with their unique cultural nuances and communication preferences. This case study delves into the intricate dynamics of Rheinmetall's approach to intercultural communication within the context of its global collaboration initiatives, highlighting the pivotal role it plays in shaping the company's innovative practices and international partnerships (Bryce,2017).

4.3. Intercultural Communication Challenges in Rheinmetall's Global Collaboration Initiatives

Diverse Global Landscape: As Rheinmetall embarked on its global collaboration initiatives, the corporation found itself engaging with a wide-ranging spectrum of external partners, each representing distinct cultures, languages, and business practices. The imperative of effective intercultural communication became paramount in bridging the gap between Rheinmetall's internal corporate culture and the myriad cultures of its external collaborators.

Communication Styles: Rheinmetall's interactions with a diverse set of individuals, startups, universities, and industry peers around the globe exposed the company to a rich tapestry of communication styles. Adapting to these varied styles became an essential challenge, as it determined the efficacy of conveying ideas and information in a meaningful manner.

Cultural Norms and Values: Collaboration with partners hailing from different cultural backgrounds brought into focus the presence of disparate norms, values, and expectations. To maintain fruitful relationships, Rheinmetall needed to navigate these differences with cultural sensitivity and awareness, ensuring that interactions aligned with the partners' cultural contexts.

Global Time Zone Coordination: Rheinmetall's worldwide presence meant that collaboration efforts spanned multiple time zones. Coordinating communication and collaboration activities effectively necessitated meticulous planning, taking into account time differences and the associated scheduling challenges.

Conflict Resolution Across Cultures: Intercultural communication challenges could manifest during conflict resolution processes, primarily due to variations in how conflicts are perceived and resolved across different cultures. The ability to find common ground and reach mutually acceptable solutions demanded adept and culturally-informed communication.

Overcoming "Not Invented Here" Mindsets: Rheinmetall's shift from an internally-focused innovation model to one that embraced external ideas required a cultural transformation within the organization. One of the central communication challenges was overcoming biases against external ideas and fostering enthusiasm for innovations originating from external sources. This necessitated effective communication strategies to cultivate a culture of openness, collaboration, and appreciation for external innovations.

In Rheinmetall's pursuit of global collaboration and innovation, these intercultural communication challenges played a pivotal role in shaping the company's ability to effectively leverage external expertise and ideas. Navigating these complexities with finesse was essential for Rheinmetall to capitalize on the full potential of its global collaborations and remain at the forefront of the dynamic defense industry.

4.4. Results and Successes in Rheinmetall's Global Collaboration Initiatives

Despite the formidable intercultural communication challenges encountered, Rheinmetall's global collaboration initiatives yielded remarkable successes. The corporation's steadfast commitment to addressing these challenges enabled it to harness a wealth of global talent, innovative ideas, and cutting-edge technologies. Through adeptly bridging cultural divides, adapting communication strategies, and nurturing an ethos of openness and collaboration, Rheinmetall significantly enhanced its innovation capabilities and solidified its position as a frontrunner in the defense industry.

Expanded Knowledge and Expertise: Rheinmetall's global collaborations brought a wealth of external knowledge and expertise into the company. By effectively navigating intercultural communication challenges, Rheinmetall tapped into a global pool of talent, incorporating diverse perspectives and experiences into its innovation processes.

Enhanced Innovation: The ability to bridge cultural gaps and adapt communication styles facilitated the exchange of innovative ideas across borders. Rheinmetall's openness to external input led to the development of groundbreaking technologies and solutions, strengthening its position as an innovation leader in the defense industry.

Global Reach and Market Expansion: Rheinmetall's successful intercultural communication strategies enabled the company to expand its market reach globally. By fostering strong relationships with diverse partners, Rheinmetall gained access to new markets and opportunities, further bolstering its international presence.

Effective Conflict Resolution: Rheinmetall's adept handling of conflicts stemming from cultural differences resulted in quicker and more harmonious resolutions. The ability to find common ground and reach mutually acceptable solutions improved collaboration with external partners and reduced potential disruptions.

Cultural Sensitivity and Awareness: Rheinmetall's commitment to cultural sensitivity and awareness not only improved intercultural communication but also enhanced its reputation as a respectful and globally-conscious corporation. This resonated positively with partners and stakeholders worldwide.

Organizational Transformation: The company's shift from a traditional, internally-focused innovation model to one embracing external contributions signaled a profound organizational transformation. Rheinmetall's success in cultivating a culture of openness and collaboration within the company itself became a testament to its dedication to intercultural communication excellence.

As a summary, Rheinmetall's concerted efforts to address intercultural communication challenges within the context of its global collaboration initiatives bore fruit. The company's ability to effectively engage with diverse partners, adapt communication styles, and foster a culture of openness propelled its innovation capabilities to new heights. In the competitive landscape of the defense industry, Rheinmetall's achievements serve as a testament to the power of intercultural communication in driving success, growth, and innovation on a global scale.

5. Conclusion

In the context of Rheinmetall's global collaboration initiatives, intercultural communication emerges as a linchpin in driving success and effectiveness in open innovation endeavors. This conclusion delves into the transformative impact of intercultural communication, elucidating its crucial role in facilitating knowledge exchange, fostering creativity, and catalyzing breakthrough innovations within a multinational defense industry leader. As the business landscape continues to be shaped by globalization, cultural diversity stands as a defining characteristic of organizations like Rheinmetall. Embracing this diversity and recognizing its potential as a catalyst for innovation becomes instrumental in securing a competitive advantage in the dynamic defense industry. Open innovation, characterized by the collaboration of a multitude of entities, heavily relies on the efficacy of intercultural communication to unlock the collective intelligence and creative prowess of its participants.

This conclusion strives to underscore the vital convergence of intercultural communication and open innovation within multinational defense corporations like Rheinmetall. By harnessing the power of cultural diversity, organizations can cultivate a dynamic open innovation ecosystem that encourages collaboration, nurtures creativity, and fortifies sustainable competitive advantages. This concluding chapter not only imparts valuable insights and practical strategies but also offers tangible real-world examples, serving as a guiding beacon for researchers, practitioners, and organizational leaders in navigating intercultural communication within an open innovation framework.

From our exploration of this topic, it is abundantly clear that adept intercultural communication in multinational defense organizations is instrumental in expediting product development and heightening market responsiveness. By capitalizing on the diverse perspectives and expertise of team members, organizations like Rheinmetall can swiftly adapt to evolving market demands, leading to accelerated time-to-market and enhanced customer satisfaction.

Additionally, intercultural communication augments the capacity of such organizations to extend their global networks and access a wide array of knowledge sources. The ability to tap into a rich tapestry of ideas, experiences, and solutions from varying cultural backgrounds propels the organization's innovation engine, enriching its comprehension of global markets, cutting-edge technologies, and evolving consumer preferences. Another substantial outcome of successful intercultural communication in multinational defense organizations is the driving force behind technological advancements and groundbreaking innovations. The crosspollination of ideas, facilitated by adept communication practices, cultivates an atmosphere of creativity and collaboration, paving the way for the development of disruptive technologies and innovative solutions to intricate challenges.

To fully realize the potential benefits of intercultural communication in the realm of open innovation, multinational defense organizations must actively nurture a supportive environment for cross-cultural ideation and experimentation. This encompasses championing cultural awareness and sensitivity, offering cross-cultural training programs, and promoting open and transparent communication channels. While intercultural communication presents undeniable advantages, it does come with its share of challenges. Language barriers, varying communication norms, and potential misunderstandings may pose hurdles to the collaboration process. Nonetheless, these challenges can be surmounted through ongoing efforts to enhance cultural intelligence and foster an inclusive culture that places value on diverse perspectives and contributions.

In conclusion, Rheinmetall's foray into a global collaboration model exemplifies how intercultural communication challenges can be deftly addressed to invigorate innovation within a multinational defense industry leader. By recognizing the significance of effective communication, cultural sensitivity, and adaptability, Rheinmetall has successfully leveraged external partnerships to drive growth and innovation. This case study serves as a testament to the critical role of intercultural communication in shaping innovative strategies within the context of multinational defense corporations.

In summation, the role of intercultural communication in multinational defense organizations remains integral when viewed through the lens of open innovation. Embracing cultural diversity, fostering effective communication practices, and creating an environment that nourishes collaboration are essential steps toward unlocking the full potential of open innovation. As organizations like Rheinmetall strive to maintain their competitive edge and spur innovation in the dynamic global landscape, mastery of intercultural communication will undoubtedly stand as a defining factor in determining their success and their ability to enact transformative change.

References

- Augen geradeaus! (2023, April). Verteidigungsministerium stellt Weichen für Fuchs-Nachfolge. https://augengeradeaus.net/2023/04/verteidigungsministerium-stellt-weichen-fuer-fuchs-nachfolge/
- Avans, F. S. (2017). The Co-Innovation Alliance Scan, Tool for Effective Collaboration with External Partners. *Journal on Innovation and Sustainability*, 8(2), 170. https://doi.org/10.24212/2179-3565. 2017v8i2p170-179
- Barker, G. G. (2015). Cross-Cultural Perspectives on Intercultural Communication Competence. *Journal of Intercultural Communication Research*, 45(1), 13–30. https://doi.org/10.1080/17475759.2 015.1104376
- Barendsen, W., Muß, A. C., & Silvius, G. (2021, December). Exploring team members' perceptions of internal sustainability communication in sustainable project management. *Project Leadership and Society*, *2*, 100015. https://doi.org/10.1016/j.plas.2021.100015
- Bauer, J. M., & Prado, T. S. (2020). Digital Platforms and Innovation: Lessons for Innovation Policy and Regulation. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3749670
- Busco, C., & Quattrone, P. (2018, May). Performing business and social innovation through accounting inscriptions: An introduction. *Accounting, Organizations and Society, 67*, 15–19. https://doi.org/10.1016/j.aos.2018.03.002
- Bryce, Uzay ve Teknoloji. (2017). Global Space Strategies and Best Practices. Avusturya Hükümeti Endüstri, Inovasyon ve Bilim Bakanlığı. Arastırma Makalesi.
- Byrd, M. Y. (2023). Revisiting: Developing Leaders in Racially Diverse Organizations. *Advances in Developing Human Resources*, 25(3), 139–140. https://doi.org/10.1177/15234223231176772
- Cascio, W. F. (2014). Investing in HRD in Uncertain Times Now and in the Future. *Advances in Developing Human Resources*, 16(1), 108–122. https://doi.org/10.1177/1523422313509578
- Cavus Kasik, N., & Kumcagiz, H. (2014). The effects of the conflict resolution and peer mediation training program on self-esteem and conflict resolution skills. *International Journal of Academic Research*, 6(1), 179–186. https://doi.org/10.7813/2075-4124.2014/6-1/b.25
- Chaochotechuang, P., Daneshgar, F., & Mariano, S. (2019). External knowledge search paths in open innovation processes of small and medium enterprises. *European Journal of Innovation Management*, 23(3), 524–550. https://doi.org/10.1108/ejim-01-2019-0013
- Cho, A., & Park, S. (2022, December). Exploring the Global Innovation Systems Perspective by Applying Openness Index to National Systems of Innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(4), 181. https://doi.org/10.3390/joitmc8040181
- Deshmukh, R. (2020). Understanding the Cultural Factors to Build Innovation in Organizations. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3687709
- Dolińska, M. (2018). Services of open innovation creation by users of crowdsourcing platforms. *European Journal of Service Management*, 26, 45–51. https://doi.org/10.18276/ejsm.2018.26-06
- Dreyfuss, R. C. (2010). Does IP Need IP? Accommodating Intellectual Production Outside the Intellectual Property Paradigm. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1639590
- Euwema, M. C., & Van Emmerik, I. H. (2007). Intercultural competencies and conglomerated conflict behaviors in intercultural conflicts. *International Journal of Intercultural Relations*, 31(4), 427–441. https://doi.org/10.1016/j.ijintrel.2006.11.001
- Frese, M. (2015). Cultural Practices, Norms, and Values. *Journal of Cross-Cultural Psychology, 46*(10), 1327–1330. https://doi.org/10.1177/0022022115600267
- Haley, B., Heo, S., Wright, P., Barone, C., Rao Rettiganti, M., & Anders, M. (2017). Relationships among active listening, self-awareness, empathy, and patient-centered care in associate and baccalaureate degree nursing students. *NursingPlus Open*, *3*, 11–16. https://doi.org/10.1016/j.npls.2017.05.001
- Hauck, R. (2021). Blockchain, Smart Contracts and Intellectual Property. Using distributed ledger technology to protect, license and enforce intellectual property rights. *Legal Issues in the Digital Age, 1*(1), 17–41. https://doi.org/10.17323/2713-2749.2021.1.17.41

- Holton, J. A. (2001). Building trust and collaboration in a virtual team. *Team Performance Management: An International Journal*, 7(3/4), 36–47. https://doi.org/10.1108/13527590110395621
- Huang, H. C., Lai, M. C., Lin, L. H., & Chen, C. T. (2013). Overcoming organizational inertia to strengthen business model innovation. *Journal of Organizational Change Management*, 26(6), 977–1002. https://doi.org/10.1108/jocm-04-2012-0047
- Jensen, K. R. (2011). Creating Global Innovation Opportunities through Cross-cultural Collaboration. *The International Journal of Knowledge, Culture, and Change Management: Annual Review,* 10(10), 33–42. https://doi.org/10.18848/1447-9524/cgp/v10i10/50047
- Jun, Y., & Kim, K. (2022). Developing an Open Innovation Attitude Assessment Framework for Organizations: Focusing on Open Innovation Role Perspective and Locus of Activity. *Behavioral Sciences*, 12(2), 46. https://doi.org/10.3390/bs12020046
- Kattayeva, F. (2022). Functions of socio-cultural competence in teaching fictional literature. *Ренессанс В Парадигме Новаций Образования И Технологий В XXI Веке, 1*, 194–195. https://doi.org/10.47689/innovations-in-edu-vol-iss1-pp194-195
- Kavalir, M., & Chudoba, G. (2020). Indirect literary translation and intercultural communication: crossing borders in the Neighbours with a Go-Between project. *Language and Intercultural Communication*, 20(6), 546–560. https://doi.org/10.1080/14708477.2020.1825462
- Kim, S., & Shin, M. (2022). Effective Leadership Differs Between Organizations: A Comparative Study of US and German Multinational Corporations in South Korea. *SAGE Open, 12*(2), 215824402210978. https://doi.org/10.1177/21582440221097890
- Lichtenthaler, U., & Ernst, H. (2009). Technology licensing strategies: the interaction of process and content characteristics. *Strategic Organization*, 7(2), 183-221. https://doi.org/10.1177/1476127009102672
- McHargue, S. K. (2003). Learning for Performance in Nonprofit Organizations. *Advances in Developing Human Resources*, 5(2), 196–204. https://doi.org/10.1177/1523422303005002007
- Najar, U. (2015). The 'intercultural field': interrogating context in intercultural education. *Language and Intercultural Communication*, 16(2), 148–163. https://doi.org/10.1080/14708477.2015.110 3248
- Oliveira, M., Sousa, M., Silva, R., & Santos, T. (2021). Strategy and Human Resources Management in Non-Profit Organizations: Its Interaction with Open Innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 7*(1), 75. https://doi.org/10.3390/joitmc7010075
- Pedraza-Martinez, A. J., Hasija, S., & Van Wassenhove, L. N. (2020). Fleet Coordination in Decentralized Humanitarian Operations Funded by Earmarked Donations. *Operations Research*, 68(4), 984–999. https://doi.org/10.1287/opre.2019.1941
- Rheinmetall. (2023 a). *History Overview*. https://www.rheinmetall.com/en/company/history/overview
- Rheinmetall. (2023 b). *125 Years Rheinmetall*. https://www.rheinmetall.com/en/company/histor-y/125-years-rheinmetall
- Schneckenberg, D. (2015). Open innovation and knowledge networking in a multinational corporation. *Journal of Business Strategy*, *36*(1), 14–24. https://doi.org/10.1108/jbs-08-2013-0066
- Seo, D., Bryson, J. M., & Crosby, B. C. (2023). How can collaboration deliver? A structurational approach to understanding collaboration process and effectiveness. *Nonprofit Management and Leadership*. https://doi.org/10.1002/nml.21571
- Šešić, M. D., & Stefanović, M. (2017). Leadership styles and values: the case of independent cultural organizations. *Cultural Management: Science and Education, 1*(1), 29–37. https://doi.org/10.30819/cmse.1-1.03
- Shubert, S. B. (2021). Editorial Commentary: Surgical Treatment of Shoulder Instability With Subcritical Glenoid Bone Loss Requires Innovation: Bankart May Risk Significant Recurrence and Latarjet May Risk Significant Complications. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*, 37(7), 2075–2076. https://doi.org/10.1016/j.arthro.2021.03.055

- Siemens, L. (2020). A Hole in the Wall: The Potential of Persistent Video-enabled Communication Channels to Facilitate Collaboration in Dispersed Teams. *Pop! Public. Open. Participatory, 02.* https://doi.org/10.54590/pop.2020.006
- Slavkovic, R., Jukic, J., & Nikolic, Z. (2016). Multinational operations: Experiences that have a price. *Vojno Delo*, 68(3), 172–184. https://doi.org/10.5937/vojdelo1603172s
- Standing, C., Mingers, J., & Standing, S. (2018). The Use of Social Media in Supporting the Development of Open Organizations for Innovation. *Systems Research and Behavioral Science*, 35(6), 838–855. https://doi.org/10.1002/sres.2521
- Tranekjer, T. L. (2017). Open innovation: effects from external knowledge sources on abandoned innovation projects. *Business Process Management Journal*, *23*(5), 918–935. https://doi.org/10.1108/bpmj-04-2016-0076
- Tripathi, S. (2016). Open Innovation in Indian Organizations: Types of Collaboration. *Technology Innovation Management Review, 6*(5), 15–23. https://doi.org/10.22215/timreview/987
- Uteshova, Z. (2022). Communication culture and speech etiquette. *Ренессанс В Парадигме Новаций Образования И Технологий В XXI Веке, 1*, 39–40. https://doi.org/10.47689/innovations-in-edu-vol-iss1-pp39-40.Vol.16, No: 2. 2007: 194
- Yang, M., & Han, C. (2021). Stimulating innovation: Managing peer interaction for idea generation on digital innovation platforms. *Journal of Business Research*, 125, 456–465. https://doi.org/10.1016/j.jbusres.2019.08.005
- Yang, Q. (2008). Extended-Calling Process Language: An Integrated-Communication-Services-Oriented Language. *Journal of Software*, 19(5), 1224–1233. https://doi.org/10.3724/sp.j.1001.2008.01224
- Yunita Wijaya Handranata et al., Y. W. H. E. A. (2020). The Impact of External Knowledge, Internal Innovation and R,D on the Performance of Open Innovation in an Organization, Empirical Evidence from Indonesian SMES. *International Journal of Mechanical and Production Engineering Research and Development*, 10(3), 2347–2356. https://doi.org/10.24247/ijmperdjun2020218
- Zhang, Z., Wang, X., & Chun, D. (2022). The Effect of Knowledge Sharing on Ambidextrous Innovation: Triadic Intellectual Capital as a Mediator. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(1), 25. https://doi.org/10.3390/joitmc8010025
- Zhong, C. S. (2019). Embracing the Clunk: Fostering Trust by Encouraging a "Growth Mindset." *Academic Medicine*, 94(5), 617–617. https://doi.org/10.1097/acm.00000000000000005
- Zynga, A., Diener, K., Ihl, C., Lüttgens, D., Piller, F., & Scherb, B. (2018). Making Open Innovation Stick: A Study of Open Innovation Implementation in 756 Global Organizations. *Research-Technology Management*, 61(4), 16–25. https://doi.org/10.1080/08956308.2018.1471273