Machine Translated by Google
RCMOS - Multidisciplinary Scientific Journal of Knowledge.
ISSN: 2675-9128. Sao Paulo-SP.

Year IV, v.1, n.1, Jan/July 2025. | submission: 10/12/2024 | accepted: 10/14/2024 | publication: 10/16/2024

Military entrepreneurship: strategic analysis of the tactical and defense products industry in Brazil

Military entrepreneurship: strategic analysis of the tactical and defense products industry in Brazil

Mauro Lieutenant

Summary

This scientific article aims to analyze military entrepreneurship in Brazil, highlighting its strategic importance, regulatory challenges, market opportunities and specific characteristics of business operations in this sector. The tactical and defense products industry has shown significant growth, driven by the increased demand for public and private security, as well as by the repositioning of the Armed Forces in the contemporary geopolitical context. The methodology used includes a literature review, analysis of secondary data and a case study with companies operating in the sector. The results indicate that military entrepreneurship requires a high degree of technical specialization, robust investments in innovation and a deep knowledge of national and international legislation. The article contributes to the understanding of the role of the Defense Industrial Base (BID) in national economic development and proposes guidelines for the consolidation of a military innovation ecosystem in the country.

Keywords: military entrepreneurship; tactical products; defense industry; Defense Industrial Base; technological innovation.

1. Introduction

Military entrepreneurship, understood as business activity focused on the creation, production and commercialization of technological and tactical solutions for military and security use, represents a strategic field for both national sovereignty and economic development (BRASIL, 2023). In Brazil, the so-called Defense Industrial Base (BID) has been gaining prominence, as the country seeks technological autonomy, generation of qualified jobs and insertion in global production chains with high added value (ABIMDE, 2023).

The growing interest in this type of entrepreneurship can be explained by multiple factors: urban insecurity, geopolitical conflicts, increased state investment in defense, the emergence of hybrid threats, and the appreciation of security as a social good (FENAVIST, 2023). The sector, however, is highly regulated and requires great adaptability on the part of entrepreneurs (DORNELAS, 2018).

This is an Open Access article distributed under the terms of the CreativeCommons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Machine Translated by Google

2. Theoretical Framework

2.1 Entrepreneurship in Strategic Sectors

According to Schumpeter (1982), an entrepreneur is someone who promotes “creative destruction” by breaking with traditional models and innovating. In the military sector, this innovation is intrinsically linked to technology, logistics and performance under pressure. For Dornelas (2018), a successful entrepreneur is someone who is able to identify opportunities, gather resources and develop solutions that meet a real need – a concept widely applicable to the defense industry.

2.2 The Defense Industry in Brazil

The IDB is made up of companies authorized to produce and sell Army Controlled Products (PCEs). According to data from the Ministry of Defense (BRASIL, 2023), the IDB represents more than 4% of Brazil's Gross Domestic Product and is responsible for more than 2.9 million direct and indirect jobs. Its operations range from weapons and ammunition to uniforms, armored vehicles, aircraft, monitoring software, and artificial intelligence applied to security.

2.3 Technological Innovation as a Strategic Pillar

Innovation is an essential condition for competitiveness in the military sector. Tidd and Bessant (2018) state that sectors with high technological demand, such as the military, depend on constant cycles of research, development and field testing. Equipment such as encrypted radios, drones, exoskeletons and command and control systems are examples of innovative products with high added value (MOREIRA, 2019).

2.4 Security, Sovereignty and Economy

National defense and the economy are interconnected. A country with a strong defense industry has a greater capacity to respond to external threats and less dependence on sensitive imports. Investment in military innovation, in addition, can generate civilian spin-offs, such as GPS, the internet, and technological fabrics – originally created for military purposes, but later incorporated into the civilian market (MOREIRA, 2019).

3. Methodology

This article uses a qualitative and exploratory approach. The methodology adopted combines:

This is an Open Access article distributed under the terms of the CreativeCommons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Machine Translated by Google

- **Bibliographic review,** based on classical and contemporary authors of the entrepreneurship and the defense industry;

- **Document analysis,** with data extracted from the Ministry of Defense (BRAZIL, 2023), ABIMDE (2023), FENAVIST (2023), among others;

- **Case study** with three Brazilian companies in the sector: a manufacturer of ballistic vests, a developer of intelligence software and a supplier of customized tactical equipment for police forces.

4. Results and Discussion

4.1 IDB Company Profile

The companies analyzed demonstrated a high level of technical specialization. Most are formed by former military personnel or engineers with specific training in defense (ABIMDE, 2023). The average initial capital was over R$800 thousand, indicating a high entry barrier. All operate under authorization from the Army, with active registrations in the Controlled Products Inspection System (SFPC) (BRASIL, 2023).

Condor Non-Lethal Technologies

Condor is a 100% Brazilian company, founded in 1985, headquartered in Nova Iguaçu (RJ). Specialized in non-lethal technologies, it is a world reference in the development of controlled impact grenades, pepper sprays, rubber ammunition and anti-personnel systems.
riot control. It exports to more than 70 countries, including UN organizations. Its business model prioritizes continuous innovation and legal compliance, with a strong focus on research and development (R&D) (CONDOR, 2023).

Condor invests heavily in national technology, including partnerships with universities and military laboratories. Its success demonstrates how military entrepreneurship can align technology, ethics and diplomacy (BRASIL, 2023).

IMBEL – Brazilian War Material Industry

Founded in 1808 and linked to the Ministry of Defense, IMBEL operates as a strategic public company, but also adopts market practices. It produces rifles, pistols, ammunition, encrypted radios, bulletproof vests and various products for the Armed Forces and public security agencies. It has five factories in Brazil and stands out for having international certifications and production with technological autonomy (IMBEL, 2023).

Although state-owned, IMBEL plays a fundamental role as a hub for innovation, by placing technological orders with private companies, facilitating the entry of new entrepreneurs into the military ecosystem (MOREIRA, 2019).

This is an Open Access article distributed under the terms of the CreativeCommons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Machine Translated by Google
RCMOS – Multidisciplinary Scientific Journal of Knowledge.
ISSN: 2675-9128. Sao Paulo-SP.

Invictus Tactical & Outdoor

Founded in 2011, headquartered in Florianópolis (SC), Invictus is a private company specialized in the production and sale of tactical equipment, military clothing, backpacks, flashlights, pocket knives and accessories aimed at special forces, private security and tactical lifestyle enthusiasts.

Invictus stands out for its modern branding, intense use of digital marketing, and partnerships with real operators from the Armed Forces and police. It is an example of military entrepreneurship that also interacts with the high-end civilian market (FENAVIST, 2023). Its accelerated growth and presence throughout the country demonstrate the viability of companies operating in the “tactical lifestyle” segment.

4.2 Regulatory and Bureaucratic Barriers

The legal requirements for undertaking business in the sector are strict: from registration with the SFPC to export authorizations, environmental licensing, inventory control and periodic inspections (BRASIL, 2023). In addition, it is very difficult to obtain private financing, given the sensitive nature of the sector. BNDES offers specific lines of credit, but with extensive bureaucracy and high risk analysis (DORNELAS, 2018).

4.3 Emerging Opportunities

The use of artificial intelligence, biometrics, nanotechnology and drones is creating new business frontiers. Private security, which generates more than R$35 billion per year in Brazil (FENAVIST, 2023), is also a relevant secondary market for products that were originally military. Another factor driving expansion is international contracts with developing countries, which are seeking alternative suppliers to the major global players (MOREIRA, 2019).

4.4 Innovation and Cooperation with Universities

IDB companies have demonstrated greater success when associated with research centers, universities or military innovation hubs (TIDD; BESSANT, 2018). This synergy favors access to dual-use technologies (civilian and military use) and accelerates the product development cycle (MOREIRA, 2019).

5. Final Considerations

Military entrepreneurship in Brazil is a highly complex activity that requires not only technical and managerial knowledge, but also political sensitivity, alignment with national defense strategies and strict compliance with regulations.

This is an Open Access article distributed under the terms of the CreativeCommons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Machine Translated by Google

Despite regulatory challenges and high capital requirements, the sector presents real and growing opportunities. Rising crime, geopolitical conflicts and the modernization of the Armed Forces expand the potential market for tactical products and high-tech security solutions (BRASIL, 2023; FENAVIST, 2023).

Furthermore, strengthening the IDB directly contributes to national sovereignty, reduces dependence on strategic imports and positions Brazil as an exporter of military solutions. To this end, it is essential to:

- Strengthen public policies to promote military innovation;
- Stimulate partnerships between universities, startups and defense agencies;
- Create business incubators and accelerators focused on the tactical sector;
- Expand access to credit, streamline processes and offer tax incentives.

In the long term, military entrepreneurship can become one of the pillars of the national economy, promoting dual-use innovation, the generation of skilled jobs and high value-added exports. With strategic vision, well-structured state policies and entrepreneurs committed to excellence, Brazil can transform its Defense Industrial Base into a global reference for technology, efficiency and sovereignty.

References

ABIMDE. Brazilian Association of Defense and Security Materials Industries. **Activity Report.** São Paulo: ABIMDE, 2023.

BRAZIL. Ministry of Defense. **Defense and Security Industrial Base: data and perspectives.** Brasília: Ministry of Defense, 2023.

DORNELAS, JCA **Entrepreneurship: transforming ideas into business.** 6th ed. Rio de Janeiro: Elsevier, 2018.

FENAVIST. National Federation of Security and Valuables Transportation Companies. **Private Security Yearbook.** Brasília: FENAVIST, 2023.

MOREIRA, RL **Military technology and dual innovation: the Brazilian case.** Journal of Strategic Studies, v. 7, n. 2, p. 120-140, 2019.

SCHUMPETER, J. A. **Theory of economic development.** São Paulo: Abril Cultural, 1982.

TIDD, J.; BESSANT, J. **Innovation management.** 6th ed. Porto Alegre: Bookman, 2018.

This is an Open Access article distributed under the terms of the CreativeCommons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.