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UKRAINIAN-AMERICAN CONCORDIA UNIVERSITY**

Faculty of Management and Business  
Department of International Economic Relations, Business & Management

**Bachelor's Qualification Work**

**The external environment of the organization and evaluation of the  
factors of environment (based on "RAMZAY" case)**

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## **Abstract**

### **The external environment of the organization and evaluation of the factors of environment (based on "RAMZAY" case)**

This thesis conducts a comprehensive examination of the external environment of RAMZAY, a company operating in the volatile defence and technology industry. Using a case study approach, the research explores the complex nature of the external factors that influence RAMZAY, engaging the PESTEL analysis and Porter's Five Forces framework to provide a thorough understanding of the macro-environmental and competitive forces affecting the company.

The study reveals the major impact of the PESTEL factors on RAMZAY, particularly highlighting the challenges and opportunities posed by the ongoing war in Ukraine, economic instabilities, and rapid technological advancements. The thesis also identifies intense competitive rivalry, substantial supplier power, and moderate threats from new entrants and substitutes as key factors shaping RAMZAY's market dynamics.

In response to the limitations of traditional models in capturing the complexities of modern industries, the thesis introduces two additional forces—Innovation Power and Complementary Products. These new forces improve the analytical framework by providing deeper insights into RAMZAY's ability to innovate and integrate with complementary products and services, thus offering a more nuanced understanding of its competitive landscape.

The findings also stress the importance of continuous innovation and strategic partnerships in maintaining competitiveness. The enhanced framework supplemented by additional quantitative data can help directors to make more informed strategic decisions, allowing RAMZAY to navigate its challenging external environment effectively.

This research contributes to the strategic management literature by demonstrating the importance of integrating traditional analytical tools with new, industry-specific forces to achieve a more holistic understanding of an organization's external environment.

The thesis concludes with strategic recommendations for RAMZAY and similar organizations, looking to optimize their external environment management for sustained competitive advantage.

**Keywords:** External environment, Organization, RAMZAY, Case study, PESTEL analysis, Porter's Five Forces, Competitive forces, Innovation Power, Complementary Products, Strategic management

### **Анотація**

#### **Зовнішнє середовище організації та оцінка факторів середовища (за матеріалами компанії "RAMZAY").**

Ця дисертація проводить комплексне дослідження зовнішнього середовища RAMZAY, компанії, що працює в нестабільній оборонній та технологічній промисловості. Використовуючи підхід тематичного дослідження, дослідження вивчає складну природу зовнішніх факторів, які впливають на RAMZAY, залучаючи аналіз PESTEL і систему п'яти сил Портера, щоб забезпечити повне розуміння макросередовища та конкурентних сил, що впливають на компанію.

Дослідження показує великий вплив факторів PESTEL на RAMZAY, особливо підкреслюючи виклики та можливості, пов'язані з триваючою війною в Україні, економічною нестабільністю та швидким технологічним прогресом. У дисертації також визначено інтенсивне конкурентне суперництво, значну владу постачальників і помірні загрози з боку нових учасників і заміників як ключові фактори, що формують ринкову динаміку RAMZAY.

У відповідь на обмеження традиційних моделей у відображенні складності сучасних галузей, дисертація вводить дві додаткові сили — інноваційну силу та додаткові продукти. Ці нові сили вдосконалюють аналітичну структуру, забезпечуючи глибше розуміння здатності RAMZAY впроваджувати інновації та інтегрувати додаткові продукти та послуги, таким чином пропонуючи більш детальне розуміння її конкурентного середовища.

Результати також підкреслюють важливість постійних інновацій і стратегічного партнерства для підтримки конкурентоспроможності. Покращена структура, доповнена додатковими кількісними даними, може допомогти

директорам приймати більш обґрунтовані стратегічні рішення, дозволяючи RAMZAY ефективно орієнтуватися в складному зовнішньому середовищі.

Це дослідження робить внесок у літературу зі стратегічного менеджменту, демонструючи важливість інтеграції традиційних аналітичних інструментів з новими галузевими силами для досягнення більш цілісного розуміння зовнішнього середовища організації.

Дисертація завершується стратегічними рекомендаціями для RAMZAY та подібних організацій, які прагнуть оптимізувати управління своїм зовнішнім середовищем для стійкої конкурентної переваги.

**Ключові слова:** Зовнішнє середовище, Організація, RAMZAY, тематичні дослідження, аналіз PESTEL, П'ять сил Портера, Конкурентні сили, Сила інновацій, Додаткові продукти, Стратегічне управління

**PHEE-institute «Ukrainian-American Concordia University»**

**Faculty of Management and Business**

**Department of International Economic Relations, Business and Management**

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**APPROVED**

Head of Department \_\_\_\_\_

**Prof. Zharova L.V.** \_\_\_\_\_

“ ” 20 \_\_\_\_\_

**TASK**

**FOR BACHELOR’S QUALIFICATION WORK OF STUDENT**

**Vladyslav Miroshnichenko**

1. Topic of the bachelor’s qualification work

**The external environment of the organization and evaluation  
of the factors of environment (based on "RAMZAY" case)**

**Supervisor of the bachelor’s qualification work** **Natalya Amalian, Ph.D. in  
Economics**

**Which was approved by Order of University from “25” September 2023 № 25-  
09/2023-1k**

2. Deadline for bachelor’s qualification work submission **“25” April 2024.**

3. Data-out to the bachelor’s qualification work

*Materials from internship received during consultation with representatives of  
the company. Information from open resources in the Internet, official reporting of  
financial and economic activities of the enterprise.*

4. Contents of the explanatory note (list of issues to be developed)

***There are three main topics a student should develop in this work:***

- 1. Theoretical aspects of the external organization environment***
- 2. Ramzay and its external environment***

**3. Advantages and disadvantages of using PESTEL and Porter's frameworks in RAMZAY case**

5. List of graphic material (with exact indication of any mandatory drawings)

*Graphs and figures for analysis of economical and statistical information on the company and its development, visualization of mechanism of development, etc.*

6. Date of issue of the assignment December 4, 2023

Time Schedule

№	The title of the parts of the qualification paper (work)	Deadlines	Notes
1.	I part of bachelor thesis	10.12.2023	In time
2.	II part of bachelor thesis	27.02.2024	In time
3.	Introduction, conclusions, summary	25.04.2024	In time
4.	Pre-defense of the thesis	30.04.2024	In time

Student: Vladyslav Miroshnichenko



(signature)

Supervisor



**Conclusions:** *The bachelor qualification work was designed according to the requirements: it contains all necessary parts of scientific research with the practical recommendations. The paper was written on the basis of deep investigation of specific aspects of the operations of RAMZAY company. The study provides a thorough analysis of the relations between business and its environment, which the author analyzes using PESTEL and Porter's Five forces analysis. Practical recommendations, including the analyses of advantages and disadvantages of PESTEL and Porter's investigation in RAMZAY case, are formulated correctly, focused on the main goal and tasks of the work and are accompanied by calculation of their approximate economic efficiency.*

*In general, if successful defense, the thesis can claim to be "excellent".*

Supervisor



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## INTRODUCTION

In the present business landscape, the external environment plays a massive role in shaping the strategic direction of organisations. It encompasses all factors outside of the direct control of a company that can significantly influence its performance, decision-making processes and sustainability. As such, it is vital that businesses comprehend the challenges posed by their external environments, particularly those operating in highly volatile and innovation-driven sectors.

The purpose of the thesis is to explore and analyse the multifaceted nature of the external environments that businesses operate in, adopting a case study approach centred on the evaluation of "RAMZAY", a company that operates within a dynamic defence and technology industry. The object of the research is the external environment of RAMZAY and the subject of the research is RAMZAY itself.

This study aims to demonstrate how various external factors, such as economic shifts and technological advancements, influence a company like RAMZAY that operates in a sector that is both highly innovative and sensitive to geopolitical changes. It uses a mixed-methods approach, that combines qualitative and quantitative analyses, to capture the depth and breadth of insights necessary to examine RAMZAY's external environment.

The structure of the thesis consists of three main chapters. Chapter 1 introduces the theory behind the external organization environment research, including the relationship between a business and its environment, the PESTEL analysis, and Porter's Five Forces framework. Chapter 2 provides an overview of RAMZAY, its financial performance, and a SWOT analysis. Chapter 3 covers the application of the PESTEL analysis and Porter's Five Forces framework to RAMZAY, as well as an evaluation of the effectiveness of the analytical tools.

The research itself is structured into nine tasks, each corresponding to a subchapter that either explores specific aspects of the external environment affecting RAMZAY or explores RAMZAY itself. These tasks provide a comprehensive analysis of the external factors impacting the company and propose deliberate recommendations based on the discovered insights. The tasks go as follows:



1. The Relationship Between a Business and Its Environment:

Examine how external environmental factors influence business operations and strategic decisions.

2. Evaluating the General Environment – PESTEL Analysis:

- Explore how the factors of the PESTEL analysis impact organisations.

3. Evaluating the Industry Environment – Porter's Five Forces:

- Explore how Porter's Five Forces framework is able to assess the competitive dynamics within industries.

4. General Familiarization with RAMZAY:

- Introduce RAMZAY, its mission, financials, strengths, weaknesses, opportunities, and threats, and its agenda.

5. Financial Overview of RAMZAY:

- Analyse RAMZAY's financial performance in the 2021-2022 period.

6. RAMZAY SWOT Analysis:

- Conduct a SWOT analysis to identify RAMZAY's strengths, weaknesses, opportunities, and threats.

7. PESTEL Analysis of RAMZAY:

- Conduct a PESTEL analysis to identify the political, economic, social, technological, environmental, and legal factors that impact RAMZAY.

8. Porter's Five Forces Framework Analysis of RAMZAY:

- Apply Porter's Five Forces framework to assess the competitive dynamics within the defence and technology industry where RAMZAY operates.

9. Evaluation of the methods:

- Evaluate the effectiveness of the PESTEL analysis and Porter's Five Forces framework in understanding RAMZAY's external environment.

The findings of this research will contribute to a better understanding of the complex interactions between a business and its external environment and will aid organisations in navigating their external environments more effectively, leveraging

emerging opportunities, and mitigating potential risks. The recommendations provided in the study will serve as a guide for RAMZAY and similar organisations to enhance their competitiveness and profitability.

This study acknowledges that the external environment is constantly evolving, and the findings may be limited to the specific timeframe of the study. Additionally, the findings of the thesis are primarily sector-specific and may not be transferrable to businesses in other sectors without considering additional context. Lastly, the subjectivity involved in applying analytical frameworks and the potential for oversimplification of certain dynamics should be considered as limitations of the study as well.

Lastly, the thesis makes use of tables and figures to present the findings of the SWOT and PESTEL analyses, Porter's Five Forces framework, and the supplementary data that enhances the analytical tools. Moreover, the thesis draws from a wide range of literature sources, including academic journals, industry reports, and online resources, to provide a comprehensive and well-grounded analysis of the topic.

# **CHAPTER 1. THEORETICAL ASPECTS OF THE EXTERNAL ORGANISATION ENVIRONMENT**

## **1.1 The Relationship Between a Business and Its Environment**

### **What is an Environment?**

Every business no matter the size is affected by its external environment – this includes all of the factors that are outside of the entire reach and influence of a business which can affect its operations (External Environment, 2023). These factors dictate and determine a major part of a business's strategy, objectives, choices, opportunities and risks, making the external environment a subject of crucial focus for every company and every decision-maker within it. The very concept of an external environment is defined by its inherent level of unpredictability, emphasizing the dynamic and ever-changing nature of countless factors that impact every organisation.

However, this shouldn't make the external environment something that businesses fear and avoid, but instead see it simply as a part of the overall business equation, which at different times may mean different things. In more concrete terms, by embracing the external environment a business may uncover both opportunities and risks which it can act upon, whether to maximise profit, increase reach and better its reputation, or to minimise loss, mitigate damage and reduce negative impacts on its operations.

The environment should be thought of as made up of two components – the general environment or macroenvironment, and the industry or competitive environment. The general environment refers to current or projected societal trends and events such as technological and social trends, economic and political conditions, demographics and others. Whereas the competitive environment includes several organisations that all compete with each other by providing similar products or services (Saylor Academy, 2012).

Although a business has no complete control over its environment, it may take actions that change the world around it to some degree, such as changing its price point and marketing strategy, diversifying its product offerings, forging strategic partnerships and adapting to emerging technologies. Very few organisations are able to have influence

outside of their industry where they can affect the general environment, with the majority merely reacting to major trends dictated by the giants around them. All in all, companies have far less influence on the environment, than the environment has on the companies.

### **Why does the Environment matter?**

Firstly, since no organisation is self-sufficient, it is important to recognise that the environment provides the resources necessary to create its product offerings. Every organisation needs labour, money, raw materials, supply chains and various other inputs that must be sourced from outside (Kaplinsky, R. and M. Morris, 2001). Therefore, recognizing and strategically managing these dependencies is crucial for sustainable operations and successful value creation.

Secondly, by being conscious of the environment that surrounds the organisation, executives can appropriately act upon the opportunities and the threats it presents. Opportunities in business are favourable external factors or situations that can be leveraged by a company to achieve its objectives. On the other hand, threats in business represent external factors or challenges that can negatively impact a company's performance, competitiveness, or existence.

Of course, certain trends will be of benefit to some organisations and a hindrance to others. Thus, as terrifying and destructive as war can be to a country's economy and the majority of businesses, it also presents opportunities for some businesses to provide products and services to satisfy the needs that have been displaced or put in jeopardy by a war.

Third, the environment places certain limitations and constraints on goals a business may have, as it shapes the strategic choices and decisions that directors are able to make as they navigate their organisations (Saylor Academy, 2012). For example, a company might set a goal to expand its international market presence by entering new regions. However, the geopolitical landscape, trade policies, and international relations can challenge and restrict such expansion plans. Or it might set a goal to increase annual sales by 40%, which it might struggle to achieve during a recession or if multiple new competitors enter the market.

Fourth, the environment has a great impact on the regulatory landscape that businesses operate within. Changes in government policies, regulations, and legal frameworks can have profound effects on how companies conduct their operations (TutorChase, 2023).

Fifth, the environment plays a crucial role in shaping consumer preferences and behaviours (Bloor, 2023). Market trends, societal attitudes, and cultural shifts directly influence what customers demand and how they make purchasing decisions.

In summary, the environment matters to businesses because it provides essential resources, presents opportunities and threats, puts restraints on strategic decisions, shapes the regulatory landscape, and influences consumer behaviour. Recognising the many-sided impact of the external environment allows organisations to pick their battles, respond to challenges, capitalize on opportunities, and navigate through the factors that shape their operational context.

## 1.2 Evaluating the General Environment – PESTEL Analysis

A business' environment consists of factors that it can have some control over, as well as other factors that lay beyond its influence – with the second category existing within the **general environment**. Even though the environment is different for virtually every company, certain factors affect every business without exception. Such factors include **economic, financial, geographical, social, legal, political, institutional, technological, and market** influences (UKEssays, 2018). Therefore, as the general environment has significant effects on the success of an organisation, directors must find ways to make sense of the unpredictable nature of the environment by tracking trends and events, their evolution and development in order to anticipate their impact.

PESTEL analysis is one of the most valuable tools for businesses to use to systematically assess and understand the general environment.

Although there isn't a directly credited inventor of the PESTEL analysis, there is a credited founder of its foundation and beginnings. Almost 60 years ago, an American

Harvard Business School professor Francis J. Aguilar released a pivotal novel called "Scanning the Business Environment" in which the analysis was initially introduced, but at first was simply ETPS, encompassing broad factors of the environment: Economic, Technical, Political and Social influences (Frue, 2020). Since then, the acronym has changed many times to STEP, STEPE, STEEPLE and others, however, PESTEL or PESTLE emerged victorious and most widely used. Nowadays, PESTEL is an anagram that stands for **Political, Economic, Social, Technological, Environmental, and Legal** factors that influence a business. It provides a structured framework for examining external influences on an organisation and helping directors to make informed strategic decisions (Chewa, 2021).

**The political segment** encompasses the impact and the role of government policies, regulations, and political stability on a business. It includes factors like tax policies, deregulation, trade restrictions and tariffs, corruption, employment laws, and the overall stability of a government. For example, even immigration policies can determine many variable costs for a business, as it often means cheaper labour.

**The economic segment** consists of the economic conditions within which a business functions. Gross Domestic Product, inflation, interest and exchange rates, economic growth, levels of unemployment, bank failures, consumer spending and income, and the overall health of the economy all fall under this segment. For example, the 2008 economic crisis has had an immense worldwide effect on virtually all businesses. Higher unemployment levels meant consumers felt less inclined to buy nonessential, more expensive products and bank failures led to tightening of credit markets (Weltman, 2023). At the same time, some businesses still managed to find success during the crisis by acknowledging and acting on the rising customer bases who sought ways to spend less money.

**The social segment** includes sociocultural environmental trends, such as different generations' values, beliefs, attitudes, customs and traditions, habits, lifestyles, and current tastes, as well as trends in demographics such as age, religion, education, language, and others (Masovic, 2018). Sometimes changes in the social segment arise from unexpected sources such as the COVID-19 pandemic, which triggered significant

social changes, including remote work and virtual collaboration becoming more prevalent, altering societal norms and work cultures.

**The technological segment** evaluates the influence of advancements in technology and innovation on a business. The quality, speed, sustainability, flexibility and price of products and services are factors of businesses' competitive advantage. Companies in the field can no longer exist without using the Internet, information technologies, social media, and sophisticated software in marketing, finance, sales and R&D. To manage and use big data in all these functional areas, organisations rely on technology (Bright & Cortes, 2019).

**The environmental segment** refers to the surrounding conditions within which an organisation operates which can include sustainability laws, energy supply, carbon emissions and pollution, natural disasters and weather patterns. Reducing pollution and carbon emissions, for example, has become a selling point and a strength for many modern businesses. Whereas the havoc and destruction that natural disasters bring with them can devastate entire industries.

**The legal segment** is about the influence of courts and legal considerations regarding business activity. Some examples of legal factors are trade policies, health and safety regulations, antitrust laws, legislative structures, employment legislation, foreign trade regulations and discrimination laws. As different politicians and political parties come and go, so do the policies that they create.

This affects businesses in every industry differently, meaning that directors must pay close attention to the current legislative environment to prepare for any potential changes that will force the company to modify their processes to comply with new rules and regulations (Indeed Editorial Team, 2023).

### **1.3 Evaluating the Industry Environment – Porter's Five Forces**

Porter's five forces analysis is an analytical tool used to assess and understand the industry within which a business operates in order to make more informed strategic

decisions (Bruin, 2016). It was created by Harvard Business School professor Michael Porter in 1979 and since then has been one of the most utilised business strategy tools. In his Harvard Business Review article, 'How Competitive Forces Shape Strategy', he pointed out that businesses tend to have a strategic tunnel vision, focusing too much on their competitors, thereby missing other factors that are in play in their wider business environment (Mind Tools Content Team, 2020).

To help businesses gain perspective of their environment and competitive pressures, the five forces analysis not only considers the interactions between the competitors, but also the threat of new entrants to the industry, potential substitutes for the industry's offerings, change and power of the suppliers in the industry, and the power of industry's buyers (Ancliff, 2023) as seen in Figure 1.



Figure 1 Porters Five Forces

(based on: Porter, Michael E. How Competitive Forces Shape Strategy, p. 6, 1979)



Importantly, the five forces analysis shouldn't be mixed up and confused with more fleeting factors such as economic downturns, industry growth rates, fluctuations in consumer demand and government interventions, because they are temporary factors, while the five forces make up the permanent structure of an industry (Lawrence, 2024).

Understanding the forces influencing an industry allows businesses to steer their strategy to boost profitability and stay ahead of competitors, as well as capitalise on strong positions and avoid wrong turns in the future.

Another way that five forces analysis can be used is to identify how much potential profit can be made in a given industry (Gratton, 2024). For example, if none of the five forces work to bring down profits in the industry, then the profit potential is high. Whereas, if all of the forces work to undermine profits, then the profit potential is weak. Understandably, the majority of industries fall in the middle of the extremes. For instance, it could be that all five forces are providing a business with a small amount of help, or only 1 force working towards profit while the others are undermining it. Once the amount of potential profit within an industry is figured out, executives can make more informed decisions regarding the direction of the business, whether that means pursuing a specific strategy or cutting their losses and exiting the industry.

**Competitive rivalry:** Competitive rivalry focuses on the intensity and dynamics of competition among existing players in the industry (Martin, 2019). Competitors are businesses that produce similar offerings. They use different moves at their disposal such as price manipulation, marketing, advertisement and differentiation to gain an edge over one another.

This dimension of the analysis considers factors such as the number of competitors, their intensity, size and diversity, and competitive strategies used, with high levels of competition implying a crowded market, where companies fiercely fight for market share, customers, and profitability.

Aggressive price wars, for instance, consist of competing based on price, where as the rivalry gets more intense, the prices and profit margin follow a downward spiral with the profit potential decreasing for everyone involved (Fontinelle, 2023). If, however, the

industry was less crowded and more differentiated, there would be a lower level of rivalry, allowing established firms to maintain stable market positions and have higher profit margins.

Although no industry is the same, it is possible to foresee the degree of rivalry that may occur by identifying some general characteristics that lead up to it. One of them is the extent of growth of demand for the products and services within the industry. This means that if there are very few new customers within the industry, it drives firms to solely fight over the existing customers, rather than focus their efforts on chasing leads. Another characteristic is the lack of differentiation between firms or their offerings, leading to the aforementioned price wars. High fixed costs could also lead to a higher degree of rivalry as businesses will fight to have enough profit to be able to cover those costs. Lastly, the ease of exiting the industry can also add to the competitiveness, with firms choosing to fight it out rather than leaving the industry gracelessly. In such situations, emotion can play a big part in a business's strategy, where avoiding bad publicity is a priority (Simister, 2020).

Industry concentration is determined by how dominant a small number of businesses are within an industry (Kitov, 2023). For example, in the phone industry, concentration can vary significantly depending on the segment. In the smartphone market, for instance, industry concentration is quite high, with a few dominant players controlling a greater portion of the market share. Apple, Samsung, Google and Huawei are the leaders who have a large share of global smartphone sales while having considerable influence over industry trends and consumer preferences. Of course, low concentration does not guarantee profitability, but a lower level of rivalry does increase focus and profit potential. As a result, barriers to entry for new competitors are very high, making it almost impossible for smaller firms to gain traction and compete effectively.

On the other hand, in more fragmented industries such as telecommunication equipment or mobile network operators, industry concentration may fluctuate based on region, current regulations and technological advancements. This means that some markets may be dominated by a few major operators, while others by numerous smaller players. In such industries, some firms will inevitably attempt to win over customers from

other firms by differentiating or lowering prices, but any competitive move by one of the firms will always be matched by others (Saylor Academy, Chapter 3 evaluating the external environment).

**Threat of New Entry:** Every business wants to compete in a highly profitable industry; however, it is impossible to do without bringing unwanted attention. As such, a business's standing can be affected by the ability of potential new rivals to enter the industry. Potential new rivals are simply firms that do not compete in the market yet but may do so in the future. Therefore, if an industry made up of 8 companies is penetrated by 4 other companies, it means that now 12 firms are fighting over the same number of customers. This increases competitiveness and reduces the profitability of the industry, so directors must be able to analyse and foresee the possibility of potential rivals entering their industry in order to prevent that. However, it is not only about who enters, but how they enter the industry, with certain identifiable patterns worth discussing.

New rivals can be start-ups, foreign companies expanding internationally, existing companies diversifying into new markets, suppliers entering their buyers' markets and buyers entering their suppliers' markets – each bringing its own challenges and opportunities for existing companies in the industry.

**Start-ups** are usually driven by innovation, threatening established companies that adapt slower to changing market conditions. They disrupt traditional business models and capture market share by coming up with innovative products or services at competitive prices. **Foreign companies and existing companies** expanding internationally leverage their vast resources and expertise to establish a presence in new markets. Their entry intensifies competition and forces existing businesses to protect their market position. **Suppliers entering their buyers' markets and buyers entering their suppliers' markets** can disrupt established supply chains and distribution networks. This leads to shifts in bargaining power and pricing dynamics, which reduces profitability for both suppliers and buyers. Overall, the entry of new rivals into an industry can significantly impact competitive dynamics, profitability, and market structure.

Some general factors help to predict whether businesses feel more inclined to join an industry. These characteristics include barriers to entry, economies of scale, brand loyalty, capital requirements, and access to distribution channels.

- **Barriers to entry** refer to the obstacles that new entrants face when entering an industry (Hayes, 2023). They can include high start-up costs, government regulations, patents held by existing businesses, established brands and a degree of retaliation from other players. Industries with high barriers to entry are less attractive for new entrants as they will struggle to establish themselves and compete effectively.
- **Economies of scale** occur when the cost per unit of production decreases as a company produces more units. Industries with major economies of scale are difficult for new entrants to penetrate because existing businesses benefit from lower average costs (Kenton, 2024).
- **Brand loyalty** plays a crucial role in many industries, particularly those where consumers have strong preferences for specific brands or products. In such cases, established brands have a loyal customer base that will unlikely switch to something new, making it hard for newcomers to gain traction in the market (Mackeviciute, 2023).
- **Capital requirements** refer to the amount of financial resources needed to enter and compete in a particular industry. Industries such as aerospace or technology can discourage businesses that lack the necessary funding to invest in research, development, and infrastructure.
- Lastly, established companies have **well-developed distribution networks** and relationships with retailers or distributors, giving them a major advantage over new entrants who will struggle to access key distribution channels.

Overall, industries with such factors in play are harder to penetrate for new entrants, allowing existing businesses to preserve and take advantage of a more favourable position.

**Threat of Substitution:** Substitution refers to the potential of customers switching from one offering to another that satisfies the same needs or wants. It happens when

customers find alternatives that are comparable in terms of quality, price or feel, making them viable substitutes to the industry's offerings (Threat of substitutes (one of Porter's five forces), 2013). Thus, businesses must consider several factors that influence customers' desires to switch to alternatives, such as the availability of substitute products or services, their prices and performance, switching costs, and the level of differentiation between the offerings.

For instance, while Apple and Samsung dominate the smartphone industry, various features of the smartphone face competition from different substitutes. One such feature is the smartphone's camera. For example, in cases where consumers prioritise image quality over convenience, traditional digital cameras serve as substitutes for smartphone cameras. There are compact action cameras such as GoPro and DJI Osmo Pocket that offer alternative ways to capture media that the smartphone could never do. Finally, there are also smartphone photography applications and accessories that undermine the smartphone camera's features. This availability of substitutes limits how much manufacturers can charge for a smartphone, as consumers have alternatives to consider if prices rise too high which restrains the profit potential of the smartphone industry.

In other cases, viable substitutes may not be readily available. One example of such offering is the operating system software market monopolised by Microsoft's Windows OS, where it has a major grip on the personal computer, laptop and desktop segments. Despite the existence of alternatives such as Linux and macOS, Windows' ease of adoption and compatibility with a wide range of software and hardware help it maintain a monopoly over its competitors.

All in all, the threat of substitution can erode market share and reduce profitability and competitive advantage. However, by actively monitoring and addressing changing customer preferences, businesses can better position themselves to withstand competitive pressures and maintain their market position.

**Supplier Power:** Suppliers provide inputs such as raw materials, marketing, labour and distribution to businesses so that they can create goods and services for consumers to purchase. They can be divided into four main groups including manufacturers, distributors/wholesalers, importer suppliers and independent suppliers. Supplier power

refers to the influence and control that suppliers have over the prices, delivery times, availability as well as terms, and conditions of the goods or services they provide to businesses. In a nutshell, the presence of powerful suppliers reduces the profit potential, increases costs and affects the quality and availability within an industry (Badgujar, 2022).

Certain factors can be identified that determine how powerful or weak the suppliers within an industry are: whether the industry is the main priority of the supplier; whether the supplier group is threatened by substitutes; whether the supplier group is made up of relatively few companies, and is more concentrated than the industry it supplies; whether the supplier group's offerings are an integral part of the industry it supplies; whether the supplier group's products are differentiated; whether switching to other suppliers carries built-in costs (Kitov, 2023).

There are a number of ways a business can reduce the bargaining power of a supplier:

- **Diversifying the supply chain** reduces a business' reliance on a single vendor. This allows it to develop resilience to withstand economic and political instabilities.
- **Centralising procurement** can be vital if a business has multiple sectors that all independently obtain materials from the same supplier. By creating a single point of procurement all purchases become centralised, giving the business more bargaining power and forcing the supplier to either give in or lose all orders (Badgujar, 2022).
- A business may work on developing a **strategic partnership agreement** with a supplier if, for example, the business is a big bulk buyer. In such a case, the business can negotiate terms and conditions and sign an exclusivity agreement. The agreement could promise exclusivity within the industry, but not binding outside of it. This would lower the risk of the supplier competing against the business.
- A business may be able to secure concessions and discounts if **offering new opportunities and value** to a supplier. For example, the business may wish to

expand geographically, where other suppliers have failed to penetrate, presenting an offer for a new market for the supplier.

- **Integrating backwards** can allow a company to produce its own key materials, eliminating reliance on suppliers.
- **Using substitutes** that have the same function and quality reduces the supplier's power.

**Buyer Power:** The bargaining power of buyers refers to the influence and control that consumers have over businesses within an industry. It assesses the ability of buyers to demand better quality, service, or lower prices, dictate terms, and affect the profitability and competitiveness of businesses.

Five main factors determine the bargaining power of buyers:

1. **Number of consumers relative to businesses** – if there are relatively few businesses compared to consumers, buyer's power will be stronger. In such cases, businesses need to offer competitive pricing, superior quality or other incentives.
2. **Consumer's dependence on a specific supplier** – if the consumer has access to similar offerings from other businesses, they would depend less on a particular business, which gives the consumer more power. The business has to focus on delivering value and differentiation.
3. **Switching costs** – if there are not many alternative suppliers available, the cost of switching is high and the buyer has less power.
4. **Price sensitivity** – if the buyers are highly price-sensitive, they are more likely to look for competitive prices and will be more willing to switch suppliers, giving them more power.
5. **Information access** – if the buyers are well informed about product features, pricing and market trends, they are more likely to negotiate favourable terms and make informed purchasing decisions.

An example of buyer power in the tech sector is in the market for smartphones. As there are various options for buyers to choose from (Apple, Samsung, Google, and Huawei), buyers have significant power due to multiple reasons.

Firstly, since there is a high level of similarity between the products, with most features and specifications being shared, consumers can easily compare different models and choose the one that suits their preferences and budget best.

Secondly, the businesses in this market have a technological race for innovation between each other, meaning that new and improved phones are released almost every single year, greatly reducing their products' life cycles. As a result, consumers often choose to delay purchasing a new phone, knowing that a newer model with better features will come out soon.

Lastly, the availability of social media and online reviews provides consumers with information and insights about different phone brands and models. They can research almost everything about any phone, such as product specifications, user reviews, trends and opinions and compare prices across various websites before making a decision. Due to high buyer power, smartphone manufacturers are forced to continuously innovate, differentiate and price their products appropriately to attract and retain customers. In sum, high buyer power can greatly impact businesses by reducing their pricing flexibility, profit margins, and overall market share.

Certainly, none of the forces within Porter's Five Forces framework singlehandedly determine the overall attractiveness of an industry. Instead, it is the collective influence and interaction of these forces that shape the competitive dynamics and attractiveness of an industry.



## CHAPTER 2. RAMZAY AND ITS EXTERNAL ENVIRONMENT

### Competitive Dynamics

Competitive dynamics are the interactions among competitors within an industry that include a wide range of activities, strategies, and behaviours that firms undertake to gain an advantage over competitors. Understanding the competitive dynamics within industries allows businesses to navigate complex market landscapes, anticipate strategic challenges, and take advantage of emerging opportunities (Giachetti & Dagnino, 2021). The PESTEL analysis and Michael Porter's Five Forces (PFF) framework are prominent tools for analysing these dynamics by evaluating the broader external factors that shape industry dynamics and examining the forces that shape industry competitiveness and profitability. Each dimension of the PESTEL analysis offers valuable insights into the macro-environmental forces impacting industry competitiveness and sets the context for understanding the interplay of Porter's Five Forces.

This study uses a mixed methods approach that combines qualitative and quantitative methodologies to capture both the depth and breadth of insights necessary to analyse the external environment and competitive dynamics of a specific organisation – RAMZAY. Qualitative methods, like case studies (internship), focus on the nuances of external factors, such as regulatory environments and market trends, providing a greater understanding of the market dynamics (Smith, 2023). Quantitative methods, on the other hand, offer empirical evidence and statistical analysis to quantify the influence of external factors on industry competitiveness and profitability (Kenton, 2023).

By analysing soft data, industry data and financial metrics, the study aims to identify patterns and trends within specific industries, showcasing the value of Porter's Five Forces framework and the PESTEL analysis in studying the external environments of organisations.

In conclusion, the plan is to familiarise the reader with RAMZAY, its activity and mission, financials, strengths, weaknesses, opportunities, threats, and agenda before applying the PESTEL analysis and PFF framework.

## **2.1 General familiarization with RAMZAY**

RAMZAY is a private joint-stock company that was officially registered on 10.04.1995 with an identification code of the legal entity being "23386982" (RAMZAY, 2024). The enterprise specializes in the design, development, and production of advanced technical solutions that serve critical defence and security needs. The products are engineered to safeguard lives and enhance national security, setting a new standard for precision and reliability.

RAMZAY's foundation rests on a strong dedication to excellence, integrity, and innovation. The company's belief in the potential of advanced technology pushes it to consistently explore new horizons and provide products of unmatched quality that are able to empower clients with unparalleled capabilities.

This mission statement serves as a guide for the organisation, aligning all stakeholders towards a common vision and purpose.

The main types of activities of RAMZAY are 1. manufacturing of measuring tools and equipment, research and navigation, 2. research and experimental development in the field of other natural and technical sciences; 3. computer programming.

In more practical terms RAMZAY's production consists of air and space aircrafts; instruments and equipment for measurement; electrical distribution and control equipment, as well as other activities such as computer programming and computer installation management activities; research and navigation; repair and maintenance of electronic and optical equipment; installation and assembly of machines and equipment.

As the company expands and develops further, RAMZAY becomes ever-more dedicated to expanding its global operations and establishing lasting relationships with governments, defence agencies, and security organisations worldwide.

For example, the designers and engineers of the enterprise began cooperation with the Ministry of Defence of Ukraine and fulfilled a free contract for the study of the technical conditions of some products. The company also continued the development and implementation of the Scout civil helicopter project as per request of the government, research costs of which amounted to UAH 2,485.5 million.

## **Company's activity**

The main type of products sold throughout the 2022-2023 period have been **technical products**. Sales revenue for 2022 was 68 827 800 (UAH) without VAT, with a profit of 842 300 (UAH).

In 2022, the Company focused on the development and production of unique products. Designers and engineers of the enterprise have developed and produced a prototype of the civil helicopter project "Scout", which is at the stage of flight tests. Production of yet another two new prototypes began in 2019 and continued in 2021. RAMZAYS's specialists have also developed and are constantly improving the 524P guided weapons complex for Mi-8, Mi-17, Mi-24 rotorcraft, designed to solve the problems of round-the-clock inspection of the around-the-cabin space, detection and recognition of ground and air targets. Two of such complexes have been successfully implemented.

Screen-exhaust device (SEP) is another development of the enterprise. It is designed to reduce the infrared visibility of a helicopter, which significantly increases the capabilities of protecting the helicopter from modern high-precision means of destruction. This technology is currently at the test stage.

Finally, the company's specialists are also developing fundamentally new research work on the development of high-energy lasers based on solid-state active elements and there are a number of other promising developments and projects that are at testing stages.

## **Other information**

The average number of full-time staff is 76 people and 4 part-time workers on part-time conditions. The staff consists mainly of highly qualified designers and engineers with extensive work experience.

RAMZAY does not belong to any enterprise associations and the financing of the company's activities is done through the use of funds received from the financial and economic activities of the company.

The company's activities do not harm the environment in any way, and the company does not emit industrial emissions either into the air or into bodies of water.

All technical and scientific developments of the enterprise are carried out at its own expense and risk.

The sold products also have a unique character and it is not possible to compare price levels for them. The demand for sold products does not depend on seasonal changes.

### **Impact of the War**

Considering the major impact of the Russian invasion of Ukraine, RAMZAY's operations have been affected in different ways. Primarily, the conflict has brought a range of issues, including disruptions to the supply chain and economic uncertainties in RAMZAY's areas of operation. This has forced the company to re-evaluate its strategies for procurement, production, and distribution. On the other hand, RAMZAY's specialized products in the defence and intelligence sector have seen an increase in demand, which is an opportunity for RAMZAY to not only meet the current needs of security agencies but also to solidify its position as a trusted provider of defence solutions.

## **2.2 Financial Overview of RAMZAY**

The figures in Table 1 provide a brief overview of RAMZAY's financial situation.

The revenue of 68,827,800 (UAH) indicates a strong sales performance, however, a relatively low profit of 842,300 suggests either a low profit margin or an increase in expenses. The company also possesses a great number of assets, indicating a solid foundation. With liabilities amounting to 102,256,400 UAH, the company's financial obligations are well-managed, demonstrating a healthy balance between assets and liabilities.

Overall, the company is in a stable financial position with high revenue and a healthy asset/liability ratio. However, there is room for improvement in terms of profit margins, which will be addressed in later sections.

Table 1 Financial Overview of RAMZAY

	2022
Revenue (UAH)	68,827,800
Profit	842,300
Assets	121,133,300
Liabilities	102,256,400

Source: Created by the Author

### Income statement

This section provides an analysis of the income statement for the current period in 2022 compared to the same period in year 2021 as seen in Table 2 (in thousands UAH).

The total income for the current period in 2022 was 3.2 times higher compared to the same period the year before. This growth can be attributed mostly to a higher demand for RAMZAY's products due to the war in Ukraine, which resulted in a dramatic increase in sales.

All the while, there was 4.56 times increase in total expenses compared to the same period the year before. This spike in expenses can be attributed to COGS and other operating expenses.

The net profit for the current period in 2022 was 7.47 smaller compared to the same period in 2021, reflecting a variance of (5,445.8). This tremendous drop in profit can be primarily attributed to the surge in total expenses, which diminished the increase in total income.

While the substantial increase in total income is a positive sign for the company's growth, the simultaneous surge in total expenses led to an overall decrease in net profit compared to the same period last year. Although it may have been caused by the war, addressing this issue is vital in ensuring sustainable profitability in the future.

Table 2 Income Statement

Statement (2021-2022)	Row number	For the reporting period	For the same period of the previous year
-----------------------	------------	--------------------------	--

1	2	3	4
Net income from the sale of products	2000	65920.5	20232.2
Other operating income	2120	2907.3	1277.2
Other income	2240	--	27.3
Total income (2000 + 2120 + 2240)	2280	68827.8	21536.7
Cost of sold products	2050	( 24993.4 )	( 1396.7 )
Other operating expenses	2180	( 42807.2 )	( 13461.4 )
Other expenses	2270	( -- )	( 19.2 )
Total expenses (2050 + 2180 + 2270)	2285	( 67800.6 )	( 14877.3 )
Financial result before taxation (2280 – 2285)	2290	1027.2	6659.4
Income tax	2300	( 184.9 )	( 371.3 )
Net profit (loss)	2350	842.3	6288.1

Source: Created by the Author

One of the things that RAMZAY can do is identify areas where cost-saving measures can be implemented without compromising operational efficiency. For instance, RAMZAY could improve its supply chains processes by identify opportunities for streamlining operations and negotiating better terms with suppliers through the establishment of long-term contracts that would secure better prices and terms for critical components and materials. The company could also invest in energy-efficient technologies and implement waste reduction strategies that would lead to long-term cost savings in utilities and resource consumption.

Additionally, the company could consider diversifying its revenue streams to soften the blow of rising expenses. One way to achieve this is to offer complementary services such as maintenance, repair, training, and consulting services related to

RAMZAY's existing offerings. This could also open a door for the creation of strategic partnerships with complementary companies. This move would not only open up new market segments, but would also allow RAMZAY to enjoy the benefits of sharing resources and expertise, and create opportunities for bundling products and services.

## 2.3 RAMZAY SWOT Analysis

### Strengths:

1. **Reputation for Quality and Innovation:** RAMZAY is known for its high-quality technical products, a strive for innovation and constant development. This reputation contributes to customer trust and loyalty.
2. **Skilled Workforce:** RAMZAY's skilled and motivated workforce with expertise in various technical fields keeps providing the development and delivery of top-tier products.
3. **Efficient Operations:** The company has demonstrated operational efficiency, and the ability to streamline production processes while maintaining cost-effective manufacturing practices.
4. **Strong R&D Capabilities:** The company's focus on research and development allows it to stay ahead of the competition and regularly introduce new and improved products to the market.

### Weaknesses:

1. **Dependency on Third-Party Suppliers:** RAMZAY relies heavily on certain third-party suppliers for critical components, which has exposed the company's supply chain to vulnerabilities, especially during the war.
2. **Limited Geographical Presence:** The company has focused its market presence in specific regions, leaving it vulnerable to economic fluctuations and geopolitical risks in those areas.
3. **Need for Continued Investment:** Constant investment is required to maintain competitive advantage, especially in R&D and the acquisition of advanced manufacturing technologies.

4. **Exposure to Geopolitical Risks:** Operating during an ongoing war exposes RAMZAY to geopolitical risks, political instability, economic uncertainties, and potential disruptions to operations.

### **Opportunities:**

1. **International Market Expansion:** RAMZAY can leverage its reputation and product quality to enter new international markets, tapping into the growing demand for defence mechanisms.
2. **Diversification into Services:** The company has the potential to diversify its product range by providing related technical services and creating additional revenue streams.
3. **Emerging Technologies:** RAMZAY can capitalize on emerging technologies (e.g., AI, IoT) by developing products aligned with market trends and customer demands.
4. **Strategic Relationships:** Forming strategic partnerships or collaborations with complementary companies can open up new market segments and create opportunities for cross-selling products.

### **Threats:**

1. **Intense Market Competition:** The technical products market is highly competitive, with established players and new entrants fighting for market share.
2. **Rapid Technological Advancements:** The rapid pace of technological change requires continuous innovation to stay ahead and remain relevant to customers.
3. **Economic Uncertainties:** Economic downturns or global events can affect consumer spending habits, potentially impacting the demand for technical products.
4. **Regulatory and Legal Challenges:** Changes in regulations, trade policies, or legal frameworks related to the defence and technology industries may create compliance challenges or restrict RAMZAY's operations in certain markets.





Figure 2 RAMZAY SWOT Analysis Diagram

Created by the Author

This SWOT analysis provides a more comprehensive understanding of RAMZAY's internal and external environment, helping the company make more informed strategic decisions.

RAMZAY possesses significant strengths that position it as one of the leaders in its industry. By identifying its core strengths, including R&D capabilities and solid reputation, RAMZAY can leverage these advantages to capitalize on emerging opportunities such as prioritising the development and implementation of emerging technologies, and international market expansion.

However, the analysis also highlights the importance of addressing key weaknesses and threats, especially those related to geopolitical risks and regulatory challenges. RAMZAY should prioritize developing contingency plans and risk mitigation strategies

to ensure business longevity and compliance in the face of potential disruptions or changes in the regulatory landscape.

Lastly, pursuing strategic partnerships and collaborations to leverage complementary resources and expertise can expand the company's market reach, enhance its product offerings, and strengthen its competitive position.

Overall, the analysis provides a solid foundation for RAMZAY to develop and refine its strategic plans, aiding the company in operating in the dynamic defence and technology industry more effectively.

## **CHAPTER 3. Advantages and disadvantages of using PESTEL and Porter's frameworks in the RAMZAY case**

### **3.1 PESTEL Analysis of RAMZAY**

#### **Political Factors**

**Geopolitical Tensions and Government Contracts:** RAMZAY, being located in Ukraine, is and has been heavily influenced by the ongoing war with Russia. As such, the company suffers from continuous instability and disruptions to its operations, supply chain and market dynamics. Changes in government policies particularly those related to defence spending, trade agreements, and investment incentives, significantly impact RAMZAY's strategic planning and business operations. For example, shifts in Ukraine's defence procurement priorities – supplying the government with what they need, can create opportunities for the company to secure favourable contracts or develop new products aligned with current national security needs. On the other hand, changes in trade regulations or economic sanctions imposed by Ukraine or its allies could restrict RAMZAY's access to critical markets or increase the cost of imports and exports.

**Government Support for Innovation:** Government initiatives and funding for R&D play a huge part in RAMZAY's ability to strive towards innovation. Political decisions regarding R&D funding, tax incentives for innovation and general policies regarding the defence industry heavily influence RAMZAY's ability to invest in new technologies, fund research projects and stay competitive in the market.

**International Relations and Trade Policies:** RAMZAY's aspirations for expansion into foreign markets expose it to fluctuations in international relations and trade policies. Changes in tariffs, export controls, trade agreements and Ukraine's diplomatic disputes can easily impact RAMZAY's ability to access international markets, collaborate with foreign partners, or buy essential components and materials.

#### **Economic Factors**

The overall economic stability of Ukraine directly affects RAMZAY's ability to conduct business efficiently. On paper, economic downturns and recessions can lead to reduced consumer and government spending, impacting demand for RAMZAY's

offerings. High inflation rates, currency fluctuations and exchange rate volatility will also decrease purchasing power, increase production costs and reduce profit margins, thereby eroding RAMZAY's overall competitiveness

In reality, entering into the third year of war, Russia's invasion of Ukraine has had immense human and economic impacts, setting the country back 15 years of development gains and increasing poverty (WorldBank, 2024). At the start of 2023, Ukraine's economy had contracted by 30 percent relative to pre-war levels, unemployment was at an all-time high of 26 percent, and Ukraine's infrastructure had suffered damages worth more than \$143 billion (Kravchenko et al., 2023). The biggest hurdles that the recovering Ukrainian businesses have had to face are the insufficient numbers of clients in internal national/regional markets, absence of capital and lack of access to low-interest loans, destroyed/damaged supply chains, and the unstable situation of the Ukrainian and other markets (Darmoris, 2023).

However, throughout 2023, Ukraine's Gross Domestic Product began its recovery due to strong public consumption demand, expected to expand by 3.5% by the end of the year, and has had slight growth in sectors supporting the war economy, with growth turning positive for the first time since the start of the Russian invasion. Restrictive monetary policy has stagnated inflation, declining it to 8.6% Year-Over-Year (YoY) at the end of August and public expenditure grew by 67% YoY in the first quarter of 2023 (Worldbank, 2023).

The outlook of the future remains highly uncertain, with economic growth projected to be 3.2 percent in 2024 and 6.5 percent in 2025. However, every projected scenario is subject to be undermined by active hostilities worsening the security and overall macroeconomic environment of the country (WorldBank, 2024).

## **Social Factors**

One of the more pressing factors of the social environment affecting RAMZAY is the ginormous humanitarian cost of the full-scale invasion of Ukraine by Russia, which has led to massive destruction of infrastructure and has forced millions of people to flee

their homes for safety (OECDiLibrary, Economic and Social Impacts and Policy Implications of the War in Ukraine).

Since February 2022, 8.1 million refugees from Ukraine have escaped to neighbouring countries, with Germany, Poland, the Czech Republic, the United Kingdom and Spain taking in the most refugees and almost 7 million Ukrainians have been displaced within the country seeking protection and support (Ukraine refugee situation 2024). More than 150,000 residential buildings (approximately 1.2 million households), 3,170 educational institutions and 1,216 medical institutions have been damaged or destroyed, with Ukraine's electricity generation capacity being reduced to half its prewar levels (Kravchenko et al., 2023). Furthermore, men of conscription age, aged 18 to 60, were banned from leaving Ukraine after the Russian invasion on 24 February, however, despite that, up to 650,000 men of military age have left the country since then (O'Donoghue, 2023).

Logically, RAMZAY being a company that greatly relies on its highly skilled, male-dominated workforce, has found it challenging to retain its staff and recruit new prospects. These circumstances have challenged the very core of the organisation and have had a major impact on the mental health and well-being of the employees, leading to increased stress, and reduced productivity, morale and overall job satisfaction.

However, despite these challenges, RAMZAY's workforce has remained resilient and continued its operations. Since then the company has implemented various measures to support its employees, including offering flexible work arrangements and ensuring clear communication about the company's situation and plans.

### **Technological factors**

As technology continues to advance rapidly, new revolutionary innovations are created that most successful companies rely on every day to boost their products and services. Failing to use the right technology, or keep it up to date, could influence a business' performance and operations and end up hurting it more than helping it (Indeed editorial team, 2022).

Like many others in its industry, RAMZAY's technological environment profoundly shapes its business landscape, offering opportunities for innovation, increased efficiency, and growth, while also creating challenges related to cybersecurity, digital transformation, and adaptation to industry disruptions.

The following are the technologies that have had a significant impact on RAMZAY's innovations and offerings:

- **Drone Technology Advancements:** One of the products that RAMZAY has been focusing on innovating more than ever is drones. The company is working on enhancing its capabilities for military applications, such as surveillance and reconnaissance, and developing drones with advanced auto-navigation, longer flight times, and improved payload capacities. The company has also concentrated its resources on developing technology that allows drones to operate in coordinated swarms for improved coverage, such as more efficient area surveillance and execute specialised tasks, such as search-and-rescue missions.
- **AI-Powered Systems:** Programmers at RAMZAY have also been trying to implement Artificial Intelligence in various existing products to enhance their decision-making, automation, and data analysis capabilities. For example, by infusing this technology into the aforementioned drones, they can gain the ability to autonomously identify and track objects of specified interest. AI can also be applied to machine learning algorithms that can detect anomalies or irregularities in data generated by RAMZAY's products and equipment.
- **Cybersecurity Solutions:** Developing advanced cybersecurity measures to protect RAMZAY's defence systems from cyber threats and attacks is yet another vital area of focus for the company. For example, remotely controlled drones and helicopters must have strong integrated cybersecurity systems that provide strong end-to-end protection from outside threats in order to be reliable.
- **3D Printing:** Although already heavily utilised within the company, staying updated with newer technologies allows RAMZAY to revolutionize the production process, allowing for quick prototyping and customization of specific components.

This tech makes manufacturing complex, lightweight components for drones and defence equipment an easy process that needs minimal outside interference.

### **Environmental factors**

Environmental factors are external conditions that are becoming ever-more important in decision-making processes for their immediate effect on operations, as well as for their long-term impact on the sustainability, reputation and profitability of organisations. (Bush, 2024).

Sustainability especially has gained a lot more weight in the eyes of both the public and businesses in virtually every sector, which has created strategic opportunities for organisations that are willing to adapt it into their business models. This allows companies to create competitive advantages over competitors that aren't as keen on changing their ways. Naturally, this movement has also encouraged governments worldwide to implement various laws and regulations that encourage or enforce more sustainable practices.

For RAMZAY, this means multiple things: Considering environmental factors in decision-making processes is crucial for ensuring RAMZAY's longevity. By making it a priority to actively address environmental concerns the company can address emerging issues early, future-proof its operations, reduce risks associated with resource scarcity and build resilience and flexibility against evolving market dynamics.

The increasing importance of sustainability will drive innovation within RAMZAY and it is an opportunity to make its operations more environmentally friendly. Incorporating sustainable practices such as reducing carbon emissions of its production, promoting energy efficiency, and switching to more eco-friendly manufacturing processes will benefit the environment, open doors to new business opportunities, and create potential cost savings and revenue streams for the company.

Complying with environmental regulations and laws concerning environmental pollution, recycling, waste management, emissions, and hazardous materials handling in the countries in which RAMZAY operates is also vital. This will allow the company to

avoid penalties and fines, potentially receive tax breaks for operating in the renewable sector and ensure overall long-term operational sustainability

In conclusion, all of the mentioned factors will undoubtedly enhance RAMZAY's reputation and brand image, allowing RAMZAY to differentiate itself and appeal to a growing segment of environmentally conscious customers.

## **Legal factors**

The legal environment surrounding RAMZAY is comprised of factors like regulatory compliance, intellectual property protection, contract agreements, and labour laws. Managing these factors effectively is critical to ensure the company's long-term sustainability in the industry.

First of all, RAMZAY must conform to the legal and regulatory frameworks in the defence and technology sector, as well as to the standards related to product safety, intellectual property rights, export controls, and government contracts. Non-compliance can lead to legal trouble, fines, and loss of business opportunities.

Additionally, considering the company's focus and reliance on innovation and development of cutting-edge technologies, RAMZAY must safeguard its intellectual property to protect its designs, inventions, proprietary information and competitive advantages. This means having up-to-date knowledge in areas related to patents, trademarks and copyrights to prevent illegal use of RAMZAY's intellectual property both nationally and internationally. This also means that RAMZAY must have contractual agreements with everyone it does business with that state the rights, responsibilities, and liabilities, and outline ways to solve disputes. This would ensure the enforceability of contracts made to protect RAMZAY's interests.

Lastly, complying with labour laws regarding employment practices, employee rights and workplace safety is essential for RAMZAY's human resource management, as it reduces legal risks related to employment disputes.

In conclusion, RAMZAY's environment is complicated and dynamic, impacting the company's operations and competitiveness. The analysis highlights the following key points:



**Political factors:** RAMZAY's operations in Ukraine expose it to an ongoing war and political instability, which is disrupting its operations. Changes in government policies related to defence spending and trade agreements, create both opportunities and challenges for the company.

**Economic Factors:** The overall economic stability of Ukraine influences RAMZAY's ability to conduct business effectively. Economic shifts, high inflation rates, and currency fluctuations reduce the company's competitiveness and have a significant impact on the demand for its offerings.

**Social Factors:** The war in Ukraine has had a ginormous humanitarian cost, including massive destruction of infrastructure, displacement of people, and a significant impact on the mental health and well-being of the workforce. This has challenged RAMZAY's ability to retain staff and maintain productivity.

**Technological Factors:** Advancements in areas of drone technology, AI systems, cybersecurity, and 3D printing present opportunities for innovation and growth, but also pose challenges related to digital transformation.

**Environmental Factors:** Increasing awareness of sustainability creates opportunities for RAMZAY to differentiate itself and appeal to eco-conscious customers. Complying with environmental regulations is also essential to avoid penalties and fines.

**Legal Factors:** RAMZAY must comply with laws and regulations governing the defence and technology industry, protect its intellectual property, and ensure contractual agreements are enforceable.

### 3.2 Porter's Five Forces Framework Analysis of RAMZAY

#### Competitive Rivalry

RAMZAY is a part of the defence industry, the growth rate of which is directly linked to external geopolitical events, government spending/incentives and innovation cycles. The industry itself is saturated and diverse, where the competitors range from large multinational corporations to niche firms which increases the level of competition

the company faces. Considering that Ukraine has been at war for over two years now and the technology sector has seen unprecedented advancements in artificial intelligence and machine learning, it is clear that the industry is growing fast, giving all of the firms within the industry expansion possibilities, alleviating some competitive pressures on RAMZAY.

The degree to which RAMZAY can differentiate its offerings by relying on unique features, superior quality, and specialized services affects its competitive advantage. Given that RAMZAY's unique offerings are driven by the skilled personnel of its research and development department, replicating the company's products would be challenging. This means that RAMZAY does not need to engage in aggressive price wars to win over customers. Moreover, the strength of RAMZAY's brand and reputation for reliability significantly contribute to a strong competitive position, acting as a barrier to competition.

### **Threat of New Entry**

Being successful in the defence industry means having access to substantial capital and investing in R&D, manufacturing facilities and skilled human capital among other things. You must follow strict regulations and security requirements, and build up a brand that stakeholders can rely on.

This makes RAMZAY's existing infrastructure, sophisticated distribution networks and partnerships, and a strong reputation for delivering high-quality products and solutions, act as a substantial barrier for new entrants.

So, while **start-ups** do introduce innovative technologies that can shake up the market, their entry is limited by the lack of experience and sufficient investment, as well as a reputation of reliability that a company needs to secure government contracts, which RAMZAY already has.

This is where **international firms** may seek to enter the Ukrainian market, bringing with them established reputations and economies of scale. RAMZAY should be much more cautious of this type of entrants, as they can make use of their experience and resources to compete effectively. At the same time, due to the current volatile geopolitical

situation in Ukraine, foreign businesses aren't keen on establishing long-term operations in the country due to all of the inferred risks.

Companies from **related sectors** may also choose to diversify into the defence and security sector, pulled in by the demand driven by the war. However, even though RAMZAY's established presence and specialisation can serve as a deterrent to these firms, it must maintain its competitive advantages and not lose sight of its goals to feel stable.

Lastly, **suppliers or buyers** may choose to integrate vertically to control more of the supply chain or distribution network. For those reasons, RAMZAY has to focus on building strategic partnerships to mitigate this threat by establishing mutual dependence and alignment of interests with its suppliers and buyers.

### **Threat of Substitution**

The defence industry, being heavily tied to the technology industry is constantly evolving, with new inventions and breakthroughs having the potential to replace some of RAMZAY's offerings. However, RAMZAY's focus on specialized products including military-grade unmanned, remote-controlled drones, guided weapon complexes, screen-exhaust devices that reduce the visibility of helicopters and high-energy lasers based on solid-state active elements significantly reduces the availability of direct substitutes.

The company is also involved in computer programming and developing IT systems that offer integrated solutions for their products. This creates a unique value proposition, as customers will always be reliant on RAMZAY for newly updated software/hardware, and implementing new features. Additionally, the use of 3D printing technology for quick prototyping and customization of components allows RAMZAY to tailor its products to specific customer needs.

The complexity of defence and security systems, where products must integrate seamlessly with existing platforms, creates high switching costs. RAMZAY's emphasis on compatibility and the provision of additional solutions, including repair and maintenance services, makes it challenging for customers to adopt substitutes without taking on significant costs.

In sum, the specialized nature of RAMZAY's products and services, paired with high switching costs, an established reputation and long-term partnerships limits the potential for substitution.

### **Supplier Power**

RAMZAY uses a mix of components they get from suppliers, as well as components they produce from purchased raw materials. Considering RAMZAY's focus on producing advanced defence technologies, it relies heavily on suppliers that provide specialized components and materials.

More often than not, there aren't readily available substitutes for the materials and components that RAMZAY needs, and the materials and components themselves often must meet strict specifications or are patented. Transitioning to different suppliers also carries high switching costs, and adapting to new components would likely mean further unwanted expenses. These factors increase procurement costs and significantly increase supplier power.

However, as RAMZAY specialises in producing several different products, each needing different components also means that the company's needs do not represent a significant portion of any single supplier's business. Moreover, since RAMZAY produces a lot of its essential parts and components, it gives suppliers even less leverage in negotiations.

### **Buyer Power**

In the defence and technology sectors, the number of buyers who are interested in high-value products like military-grade remote-controlled drones and cybersecurity solutions is mostly limited to large organisations and government entities. Such concentration of buyers increases their bargaining power, as each buyer may represent a large chunk of RAMZAY's revenue. Buyers in the defence sector may also choose to have less dependence on a specific supplier such as RAMZAY to lessen risks and diversify their product portfolio.

On the other hand, RAMZAY's specialization and reputation for quality and innovation could potentially create a scenario where buyers heavily rely on RAMZAY for specific, high-tech solutions, which would weaken the buyer's bargaining power. Furthermore, high switching costs associated with transitioning to different suppliers, especially for specialized products would be unfavourable for buyers. Paired with RAMZAY's ability to integrate its products with existing systems and offer post-sale support and maintenance significantly increases these switching costs, reducing buyer power even further.

Finally, RAMZAY must be wary of well-informed buyers, who follow market trends, product features and pricing trends and can negotiate more favourable terms. Although the defence sector's reliance on classified information limits the amount of publicly available information, industry experts can still provide buyers with valuable insights, strengthening their bargaining position.

## **Conclusion**

While the defence industry is saturated and diverse, with intense rivalry among existing businesses, RAMZAY's unique offerings, driven by its skilled R&D personnel, and its strong brand reputation for reliability, differentiate the company and create barriers to competition. Of course, the company must still remain cautious of any potential new entrants, especially international firms who have established reputations and economies of scale.

RAMZAY's focus on specialized products significantly reduces the threat of substitution, and the company's emphasis on compatibility and post-sale support further increases switching costs for customers, making them less inclined to switch to substitutes. Although RAMZAY's reliance on specialized suppliers for critical components and materials increases supplier power, the company's diversified product portfolio and in-house production help to mitigate this risk.

On the buyer side, the concentration of buyers in the defence and technology sectors, primarily government entities and large organisations, increases their bargaining power. However, RAMZAY's specialization, reputation for quality and innovation, and

the high switching costs associated with its products weaken buyer power. Lastly, the company must remain cautious of well-informed buyers with access to industry experts who can negotiate more favourable terms.

### **3.3 Evaluation of the methods**

#### **Evaluating PESTEL Analysis**

The PESTEL analysis painted a comprehensive picture of RAMZAY's external environment and allowed for an objective understanding and assessment of the macro-environmental factors that affect the business. The analysis of each of the factors has been the key to identifying opportunities for growth and threats to its operations, helping managers to make more informed strategic decisions by aligning their strategies with the external environment and anticipating future trends and challenges.

However, the analysis did not account for certain crucial elements that greatly affect RAMZAY's business. This shallowness can lead to an incomplete understanding of the external environment, and thus, the strategic decisions that are made may not fully take into account the complexities of RAMZAY's business context.

For example, the PESTEL analysis examined each factor (political, economic, social, technological, environmental, and legal) in isolation, without fully considering the interdependencies and interactions between them. In reality, these factors are often interconnected and can have snowballing effects on a company's operations and performance, which if not recognised promptly can lead to strategic decisions that do not represent the complete impact of the external environment on the business (Frue, 2020).

Additionally, while the analysis did have a logical structure for classifying and categorizing the external factors, it did not develop a framework for quantifying the impact and the importance of each factor, making it difficult to prioritize and allocate resources effectively when developing strategic plans.

Lastly, the external environment can change quickly as a result of various factors like technological advancements, market trends, geopolitical tensions and regulatory

changes evolving at a fast pace. The PESTEL analysis, being a static tool, does not capture these dynamic changes, unless updated frequently, which takes constant monitoring and resources, leading to strategic decisions that become outdated or ineffective (CIPD, 2021).

### Propositions

**Supplementary Data:** To overcome those limitations the analysis can be strengthened with additional information that adds relevancy and perspective to the findings that PESTEL provides.

The following tool in the form of a complementary table, as seen in Table 3, paired with the PESTEL analysis provides additional information that will aid strategic decision making. It consists of 4 rankings, with each one based on the level of impact that a given external factor has on the overall operations and competitiveness of RAMZAY:

- **Importance:** This ranking is assigned relative to other factors of the PESTEL analysis and it shows the relative importance of each factor to RAMZAY in its current external environment.
- **Overall impact:** This ranking shows the impact that a factor has on RAMZAY on a scale of 1 through 10, with 1 and 10 being the least and most impactful respectively. It grants perspective on each of the factors relative to the previous ranking, as although a factor may be of the least importance relative to other factors, its impact may still be significant on RAMZAY.
- **Interdependence:** This ranking refers to the level of interconnectedness between a given factor and other factors. It exists to show the level of impact a given factor has on other factors.
- **Volatility:** This ranking refers to the level of instability and unpredictability a given factor has in the current external environment of RAMZAY.

Based on the information provided in Table 3, the following conclusions can be made:

- The "**Importance**" column indicates that the Political and Economic factors are considered the most important external factors impacting RAMZAY, and therefore should be prioritised in decision-making.
- However, the "**Overall Impact**" column shows that it is the Political and Technological factors that have the highest impact (scored 10 out of 10) on RAMZAY's operations and competitiveness, highlighting their critical importance (despite Technological factors being of less importance compared to Economic factors).
- The "**Interdependence**" column reveals that Political and Economic factors have a high level of interdependence with other factors, suggesting that changes in these areas can have significant effects on other aspects of RAMZAY's external environment.
- The "**Volatility**" column indicates that Political and Economic factors are highly volatile and unpredictable in RAMZAY's current external environment, potentially posing significant risks and challenges. Therefore, these factors must be updated most often to capture dynamic changes and prevent making outdated decisions.
- While the Social and Legal factors are ranked lower in importance, they still have a moderate overall impact (scored 8 and 6, respectively) on RAMZAY's operations, suggesting that they should not be overlooked in strategic planning.
- The Environmental factor, although ranked as the least important (6th), having a low overall impact (scored 4) and low volatility, indicates that it could present potential opportunities for RAMZAY to differentiate itself through sustainable practices and environmental responsibility.
- Lastly, seeing as the Legal and Environmental factors scored lowest in importance and volatility, as well as medium and low respectively in interconnectedness, managers at RAMZAY may choose not to monitor changes in these areas as closely in order to preserve resources.

Table 3 Data Supplementing PESTEL analysis



	Importance Ranked 1-6	Overall Impact 1/10	Interdependence (Low to High)	Volatility (Low to High)
Political	1	10	High	High
Economical	2	9	High	High
Technological	3	10	Medium	Medium
Social	4	8	Medium	Medium
Legal	5	6	Medium	Low
Environmental	6	5	Low	Low

Source: Created by the Author

By combining the PESTEL analysis with the additional information in the table, the overall analysis provides a more comprehensive and well-rounded view of RAMZAY's external environment. It not only identifies the factors but also assesses their relative importance, impact, interdependencies, and volatility.

The enhanced analysis, with its additional perspectives and quantifications, better informs strategic decision-making processes and allows RAMZAY's managers to prioritize and allocate resources more effectively, anticipate potential challenges, and develop strategies that account for the complexities and interconnectedness of the external environment.

### **Evaluating Porter's Five Forces Analysis**

By analysing the five forces, Porter's Five Forces framework provided valuable insights into the competitive dynamics within the defence industry and the specific factors that shape RAMZAY's competitive position. It highlighted the importance of maintaining RAMZAY's competitive advantages, including its skilled workforce, innovative capabilities, and strong brand reputation, while addressing potential threats from new entrants, substitutes, and shifts in supplier and buyer power dynamics. Overall, the PFF analysis helped the company to better understand its competitive landscape, anticipate strategic challenges, and make informed decisions to maintain its competitive advantage.

However, the analysis does have several drawbacks (some not dissimilar to the drawbacks of the PESTEL analysis) that affected the analysis of RAMZAY.

First of all, the framework oversimplified the complex dynamics within the industry as intricate as RAMZAY's by reducing them to just five forces, not accounting for the emerging nuances of the modern business landscape or the interconnectedness between the existing forces. In reality, RAMZAY's industry and competitive dynamics do not neatly fit into Porter's Five Forces analysis without losing accuracy and missing out on details.

Specifically, the PFF framework is primarily focused on analysing existing competitive forces within an established industry and does not account for the impact of disruptive innovations or emerging business models.

Furthermore, the PFF framework assumes that the industry being analysed is one that is clearly defined, which is not the case for RAMZAY. In fact, many modern industries are constantly evolving and converging to create new hybrid industries creating inaccuracies in the analysis.

Secondly, the framework is static, which does not accurately represent the dynamic and ever-changing nature of industries like RAMZAY's. As mentioned previously, the competitive forces in the defence and technology industry can shift quickly due to technological advancements, regulatory changes, or shifts in government priorities, which the PFF analysis does not account for.

Lastly, while the PFF framework did help to identify the competitive forces at play, it provided limited directions as to how RAMZAY should actually act upon identifying them and how it should position itself strategically within the industry. The analysis does not provide a framework for developing and implementing strategies that leverage RAMZAY's strengths, reduce weaknesses, and respond to the identified competitive forces.

## **Propositions**

### **Innovation Power – New Force**

Firstly, the thesis introduces Innovation Power as a new force within Porter's Five Forces framework, as it can provide additional insights into the competitive dynamics of industries that are influenced by technological advancements and innovation (Nilsson & Tingl f, 2010).

Namely, this force assesses the ability of firms to continuously innovate, develop new products or services, and adapt to changing market conditions, demands and technological disruptions. It evaluates the rate of innovation within an industry, the level of investment in R&D, and the ability of firms to commercialize and sell new technologies or products effectively. Finally, it also considers factors such as the availability of skilled talent, access to modern research facilities, and the presence of an innovation-driven culture within organisations.

The analysis would identify industries with high Innovation Power by frequent offering introductions, rapid technological advancements, and the constant threat of disruption from new entrants or substitutes, giving businesses with strong Innovation Power a competitive advantage, as they can meet changing customer demands and create new market segments.

Incorporating Innovation Power into the PFF analysis would provide a more comprehensive understanding of RAMZAY's competitive landscape and would shed light on the following aspects:

- Assessing the Innovation Power of RAMZAY's competitors would reveal their ability to introduce new offerings and disrupt the existing market dynamics.
- Companies with strong Innovation Power could pose a significant threat as new entrants, as they may introduce disruptive technologies or business models that challenge established companies like RAMZAY.
- Innovation Power would help to identify potential substitutes or alternative technologies that could make RAMZAY's existing offerings obsolete.
- Companies with high Innovation Power may have increased bargaining power with suppliers or buyers, as they can offer unique and differentiated offerings.

By considering the new factor, the PFF analysis would express the dynamic nature of the defence and technology industry better, as continuous innovation is crucial for keeping a competitive advantage. It would also highlight the importance of RAMZAY's investments in R&D and talent acquisition to stay ahead of the competition and make better strategic decisions.

### **Power of Complementary Products – New Force**

The thesis also introduces the "Power of Complementary Products" as a new force within Porter's Five Forces framework as it can significantly improve the analysis of competitive dynamics, especially in industries where products and services do not exist by themselves, but are a part of a broader environment.

Complementary Products are goods or services that add extra value to another product or service, making them more desirable or effective from the customer's perspective (Malczan, 2024). The new force examines the impact of offerings that enhance or are enhanced by the company's offerings, showing how these complementary relationships affect competitive advantage and market position. In the context of the PFF analysis, the force assesses the availability, quality, and impact of complementary products on the industry, the company's ability to take advantage of these complements, and the strategic partnerships that can be formed to enhance product offerings.

The following is the impact that the new force has on the analysis:

- The presence of strong and effective complementary products can make a market more attractive by increasing demand for the primary product.
- It encourages companies to explore strategic partnerships or alliances to offer a more comprehensive/holistic solution to customers.
- Understanding the role of complementary products can drive innovation, encourage companies to develop new products and improve existing products to integrate better with complementary offerings.
- The analysis of complementary products can influence the bargaining power of both suppliers and buyers. Suppliers of critical complementary products may have

increased bargaining power, while the availability of strong complements can enhance the company's value proposition to buyers.

In RAMZAY's case, complementary products could include software updates, and maintenance and support for drones and related products, as well as product customisations using 3D printing technology among other products and services.

The analysis of the new force would provide insights into:

- How well RAMZAY's products integrate with existing and emerging complementary products, affecting their usability and appeal in the market.
- Opportunities for RAMZAY to form relationships with suppliers of potential complementary products, expanding its range of offerings.
- Areas where RAMZAY could innovate or adapt its products to better align with or leverage complementary products, differentiating its offerings.

In conclusion, adding Complementary Products as a force in the PFF analysis provides a more nuanced understanding of the competitive landscape and how shifts in a company's offerings affect and shape its competitive advantage. For RAMZAY, this means recognizing and strategically leveraging complementary products and partnerships to improve its market position, drive innovation, and meet the ever-changing needs of its industry.

**Supplementary Data:** For the PFF analysis to be less static it could also benefit from and be strengthened by supplementary data that adds applicability and perspective to the discoveries that the analysis makes.

Identical to the table complementing the PESTEL analysis, Table 4 consists of 4 rankings that reflect the importance of each force in shaping RAMZAY's competitive dynamics, their overall impact on the company's operations, the level of interdependence with other forces, and the volatility or rate of change associated with each force.

- **Importance:** This ranking is based on the relative importance compared to other factors of the PFF analysis, this ranking expresses RAMZAY's prioritisation of each force in its current competitive environment.
- **Overall impact:** This ranking shows the impact that a given force has on RAMZAY on a scale of 1 through 10, with 1 and 10 being the least and most impactful respectively.
- **Interdependence:** This ranking refers to the level of interconnectedness between a given force and other forces. It shows the level of impact a given factor has on other factors.
- **Volatility:** Refers to the level of instability and unpredictability a given force has in the current competitive environment of RAMZAY.

#### Explanations:

- **1. Competitive Rivalry** (Importance 1, Impact 9, Interdependence H, Volatility H): The defence industry is saturated and highly competitive, with intense rivalry among the existing organisations. This force has a significant impact on RAMZAY's operations and is highly volatile due to factors like geopolitical tensions and technological advancements.
- **2. Innovation Power** (Importance 2, Impact 10, Interdependence High, Volatility High): Technological advancements are made every day in the defence and technology industry, making Innovation Power crucial for RAMZAY to maintain its competitive edge. It has the highest impact and is highly volatile because continuous innovation is vital to meet evolving customer needs and stay ahead of competitors.
- **3. Bargaining Power of Suppliers** (Importance 3, Impact 8, Interdependence High, Volatility Medium): RAMZAY's reliance on specialized suppliers for critical components and materials greatly increases their power. This force has a high impact on RAMZAY's operations and is moderately volatile due to factors like the availability of substitutes and the importance of RAMZAY's business to suppliers.

- **4. Threat of New Entrants** (Importance 4, Impact 7, Interdependence Medium, Volatility High): While there are significant barriers to entry in the defence industry, the threat of new entrants like international firms or companies from related sectors is moderate. This force has high volatility due to the potential creation of disruptive innovations or the emergence of new business models.
- **5. Complementary Products** (Importance 5, Impact 7, Interdependence Medium, Volatility Medium): The availability and integration of complementary products, such as software, cybersecurity solutions, and advanced materials, significantly enhances RAMZAY's offerings and competitive position.
- **6. Threat of Substitutes** (Importance 6, Impact 6, Interdependence Low, Volatility High): RAMZAY's focus on specialized products and services reduces the threat of direct substitutes. However, the rapid pace of technological advancements in the industry makes this force highly volatile, as new technologies could potentially enter the market.
- **7. Bargaining Power of Buyers** (Importance 7, Impact 5, Interdependence Medium, Volatility Low): While buyers in the defence sector are concentrated and have some bargaining power, RAMZAY's reputation, specialized offerings, and high switching costs weaken buyer power.

Table 4 Data Supplementing PFF analysis

	Importance Ranked 1-7	Overall Impact 1/10	Interdependence (Low to High)	Volatility (Low to High)
Competitive Rivalry	1	9	High	High
Innovation Power	2	10	High	High
Supplier Power	3	8	High	Medium
Threat of New Entry	4	7	Medium	High
Complementary Products	5	7	Medium	Medium

Threat of Substitution	6	6	Low	High
Buyer Power	7	5	Medium	Low

Source: Created by Author

The data from Table 4 can also be used to update the original PFF framework, as previously seen in Figure 1, into the adapted version of the PFF framework that includes Innovation Power and Complementary Products as new forces, providing a more comprehensive analysis of the competitive dynamics affecting RAMZAY. The adapted diagram also indicates the relative importance of each force by their size in the diagram, suggesting that forces with a larger representation are deemed more significant to the RAMZAY's competitive environment.

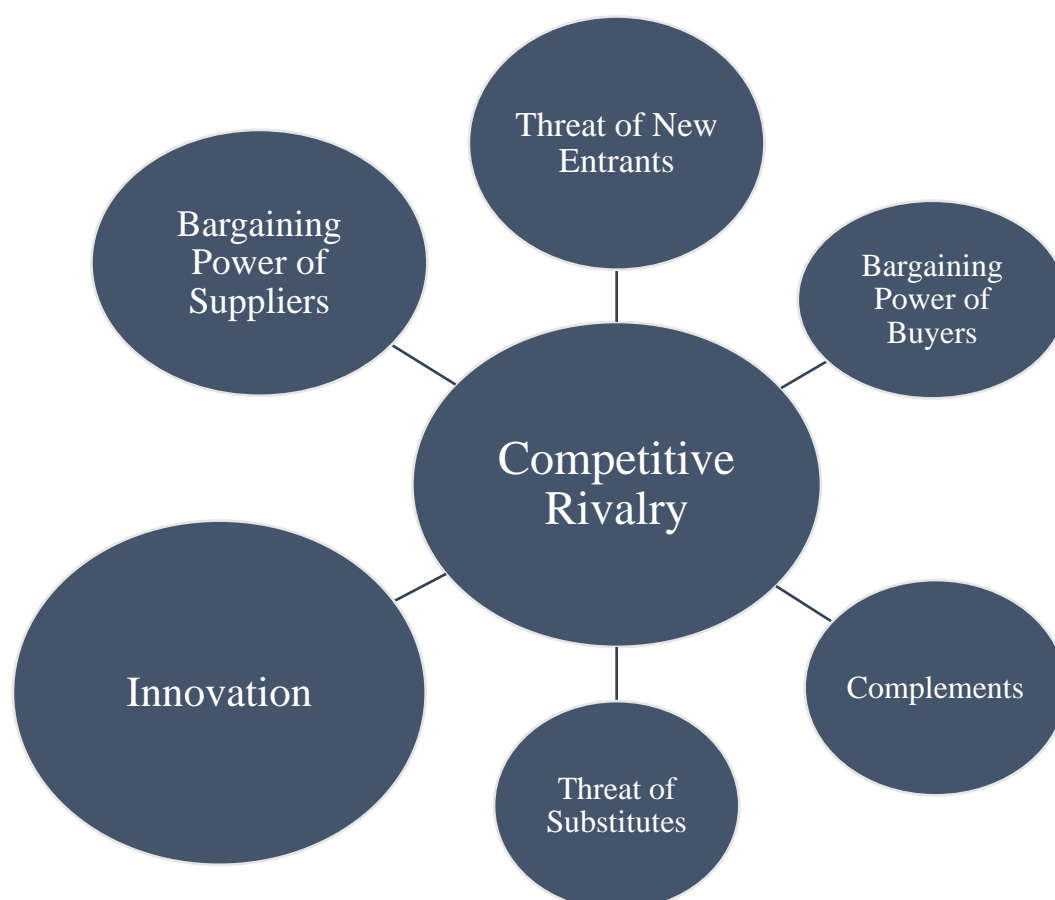


Figure 3 Updated Porters Five Forces



In sum, pairing the PFF analysis with the supplementary data in Table 4 enhances the analysis by adding quantitative measures, identifying interdependencies, assessing volatility, incorporating and visualising the impact of the forces, and ultimately providing a more comprehensive and actionable understanding of RAMZAY's competitive dynamics. This integrated approach enables RAMZAY to prioritise its strategic efforts and allocate resources more effectively, as well as anticipate potential challenges or opportunities arising from the interaction of the competitive forces in the defence and technology industry.

## CONCLUSION

This thesis aimed to conduct a comprehensive examination of the external environment of RAMZAY, a company operating in the volatile defence and technology industry.

**In the first section**, the thesis laid out the theoretical groundwork by defining the concept of the external environment and its significance to businesses. It explained and gave reasons as to why the environment matters, how it provides resources to businesses, presents opportunities and threats to capitalise on, imposes constraints on strategic choices, shapes the regulatory landscape and influences consumer behaviour.

The paper also made a clear distinction between general and industry environments. **The general environment** refers to current or projected societal trends and events, and it is evaluated through the **PESTEL** analysis, a tool that methodically assesses the political, economic, social, technological, environmental, and legal factors impacting a business. **The industry environment**, on the other hand, consists of several organisations competing with each other by providing similar offerings, and it is examined through **Michael Porter's Five Forces** framework, a model that evaluates the competitive forces shaping an industry's structure and profitability. It considers the intensity of competitive rivalry, the threat of new entrants, the bargaining power of suppliers and buyers, and the threat of substitutes.

**In the second section**, the focus of the thesis shifted to identifying a business example where political, economic, social, technological, environmental, and legal factors of the general environment, and competitive forces of the industry environment significantly impact the market structure and profitability of a said business, intending to later analyse and evaluate how well the chosen analytical tools capture that impact.

That business is **RAMZAY** – a business where I had an internship, after which I wrote a report on the experience. A summary of the company, its focus and activities, a breakdown of the company's financial situation and a SWOT analysis were all included in this paper to familiarise the reader with the firm.

RAMZAY proved to be an ideal candidate for testing the effectiveness of the PESTEL analysis and Porter's Five Forces framework due to its diverse operational landscape and strategic importance within the defence and technology industry. Operating within a dynamic external environment characterized by geopolitical tensions, technological advancements, and evolving market dynamics, many valuable insights were gained from the macroenvironmental forces shaping RAMZAY's industry competitiveness and the competitive forces influencing its market position and profitability.

The case of RAMZAY is particularly insightful as the company operates in a highly volatile environment within Ukraine, during an ongoing war that has significantly disrupted its operations, supply chains, and market dynamics. The conflict has exposed RAMZAY to constant political instability, economic uncertainties, and social challenges, making it an ideal case study to evaluate the effectiveness of the PESTEL analysis and Porter's Five Forces framework in capturing the complexities of a turbulent external environment like RAMZAY's.

**In the third section,** the thesis set out to evaluate the effectiveness, depth and quality of the PESTEL analysis and Porter's Five Forces framework in capturing the essence of RAMZAY's external environment. It identified the strengths and weaknesses of the analytical methods and proposed improvements to improve their applicability and depth, providing insights into how RAMZAY, and similar organisations, can navigate their external environments to maintain competitiveness and profitability.

Moreover, the thesis introduced two additional forces to Michael Porter's Framework — **Innovation Power and Complementary Products** to address the limitations of the original framework and better understand RAMZAY's competitive dynamics.

In the process, the thesis also considered the role of strategic management in interpreting and responding to the findings of the analyses, exploring how RAMZAY can use its understanding of the external environment to make informed strategic decisions, adapt to changing conditions, and capitalize on emerging opportunities.

Lastly, the thesis concludes with a mixture of findings, offering recommendations for RAMZAY and other organisations aiming to better understand their external environments.

**The Summary of Key Findings:** The PESTEL analysis revealed the substantial impact of political, economic, and technological factors on RAMZAY due to the ongoing war in Ukraine, economic instability, and constant technological advancements in the industry. The Porter's Five Forces analysis highlighted intense competitive rivalry, substantial supplier power, moderate threats from new entrants and substitutes, and relatively low buyer power.

The addition of Innovation Power further highlighted the vital role of continuous innovation in maintaining a competitive edge. While the introduction of Complementary Products showed that leveraging strategic partnerships and integrating complementary offerings can enhance value propositions.

**Implications and Importance:** This research reveals the value of merging traditional analytical frameworks with new, industry-specific forces to get a more whole, comprehensive understanding of an organisation's external environment. The enhanced analyses provide a refined perspective on the interdependencies and impacts of various external factors, aiding in making more informed strategic decisions.

Moreover, the thesis paired the analytical frameworks with supplementary data in the form of quantitative rankings and assessments. This data allowed for quantifying the relative importance, overall impact, interdependencies, and volatility of the various forces, providing a more comprehensive and actionable understanding of RAMZAY's competitive dynamics.

The findings have significant implications for RAMZAY and similar organisations operating in dynamic, innovation-driven industries. They show the importance of continuously adapting to changes in the political, economic, and technological landscapes, investing in R&D, fostering an innovation-driven culture, and looking for strategic partnerships to leverage complementary products.

**Limitations:** While this research provides valuable insights, it has its flaws. The analyses are based on a specific point in time and may not entirely capture the rapidly evolving nature of the external environment. Moreover, a level of inevitable subjectivity was likely involved in using analytical frameworks, as well as a possibility of oversimplifying certain factors and the overall situation of RAMZAY.

**Final Thoughts and Recommendations:** Based on the findings, it is recommended that RAMZAY should:

1. Continuously monitor and adapt to changes in the political, economic, and technological landscapes, as these factors have the highest impact on operations.
2. Invest in R&D and foster an innovation-driven culture to enhance their Innovation Power.
3. Explore and develop strategic partnerships to leverage Complementary Products, enhancing their product offerings and expanding their market reach.
4. Periodically make use of the enhanced PESTEL and Porter's Five Forces analyses to reassess their strategies and external environment, keeping their strategic decisions relevant and effective.

## **Concluding Statement**

In conclusion, this thesis has not only highlighted the critical importance of understanding the external environment for strategic management but has also improved the analytical tools available to do so. The integration of supplementary data with traditional frameworks provides a more comprehensive overview of the company and will aid RAMZAY and other organisations in comprehending and existing within their complex and dynamic environments, helping them to maintain competitiveness and profitability in an increasingly uncertain world.

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