## FEUP | Academic Year 2024-2025

Course L.EGI031: OGE – Organização e Gestão de Empresas Organizational Design and Management

Organizational Environment: general and specific (FEV 2025)

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The contents presented here has been collected from different sources (Books: Organizational theory, design and change (Gareth R.Jones); Modern Management (Certo); Managment and Organizations (Robbins Coultler) and lectures notes from several origins). Several additions, modifications and updates have been made by Américo Azevedo (ala@fe.up.pt) in order to support the learning process defined in the context of OGE program.

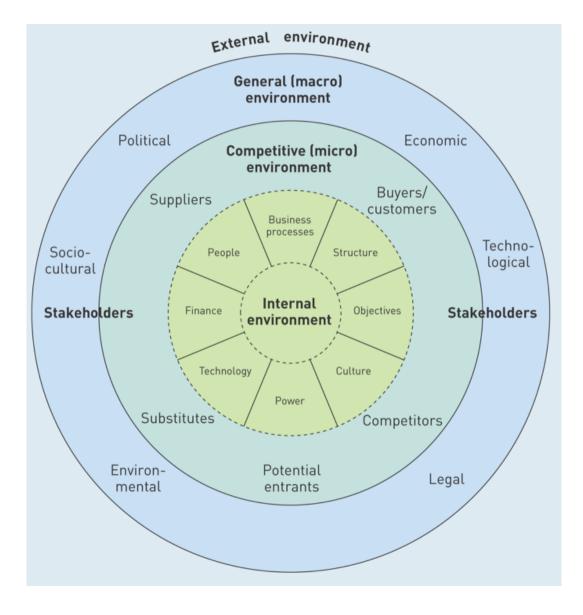
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After studying this class, you should be able to:

- Understand and describe the organizational environment:
  - Use PESTEL tool to analyse an organisation's general environment
  - Use Porter's five forces model to analyse an organisation's competitive environment

#### The Organizational Environment

The environment creates both opportunities and threats for organisations.



Managers should analyze the organisational environment periodically and identify sources of uncertainty

General Environment: The macro-environment consists of broad environmental factors that impact to a greater or lesser extent many organisations, industries and sectors.

## Analyzing the Environment

- Managers should analyse the organizational environment periodically and identify sources of uncertainty.
- To manage transactions with the organizational environment effectively, managers should chart the forces in the organization's specific and general environments, noting

(a) the number of forces that will affect the organization,

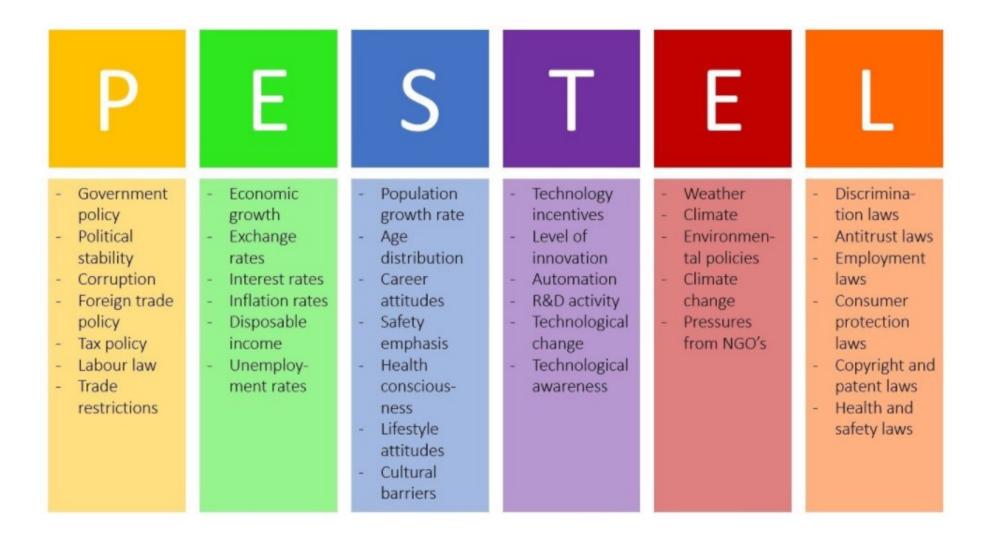
- (b) the pattern of interconnectedness or linkages between these forces,
- (c) how rapidly these forces change, and

(d) the extent and nature of competition, which affects how rich or poor the environment is.

 Taking that analysis, managers should plan how to deal with contingencies. Designing inter-organizational strategies to control and secure access to scarce and valuable resources in the environment in which they operate is the first stage in this process.

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PESTEL Analysis: helps to determine how external factors will affect the performance and activities of the business in the long-term.



## PESTEL aims & methodology

- covers all macro environment forces affecting an organization
- identify the external factors that may change in the future;
- to exploit the changes (opportunities) or defend against them (threats) better than competitors would do.
- Methodology:
  - Step 1. Gathering information about political, economic, social, technological changes, Environmental, Legal.
  - Step 2. Identifying which of the PESTEL factors represent opportunities or threats.
  - Step 3. Rate importance and likelihood
  - Step4. Consider implications

## PESTEL Analysis: gathering information (I)

Political factors	Economic factors	Socio-cultural factors	Technological factors
<ul> <li>Government stability and likely changes</li> <li>Bureaucracy</li> <li>Corruption level</li> <li>Tax policy (rates and incentives)</li> <li>Freedom of press</li> <li>Regulation/de-regulation</li> <li>Trade control</li> <li>Import restrictions (quality and quantity)</li> <li>Tariffs</li> <li>Competition regulation</li> <li>Government involvement in trade unions and agreements</li> <li>Environmental Law</li> <li>Education Law</li> <li>Anti-trust law</li> <li>Discrimination law</li> <li>Consumer protection and e-commerce</li> <li>Employment law</li> <li>Health and safety law</li> <li>Data protection law</li> <li>Laws regulating environment pollution</li> </ul>	<ul> <li>Growth rates</li> <li>Inflation rate</li> <li>Interest rates</li> <li>Exchange rates</li> <li>Unemployment trends</li> <li>Labor costs</li> <li>Stage of business cycle</li> <li>Credit availability</li> <li>Trade flows and patterns</li> <li>Level of consumers' disposable income</li> <li>Monetary policies</li> <li>Fiscal policies</li> <li>Price fluctuations</li> <li>Stock market trends</li> <li>Weather</li> <li>Climate change</li> </ul>	<ul> <li>Health consciousness</li> <li>Education level</li> <li>Attitudes toward imported goods and services</li> <li>Attitudes toward work, leisure, career and retirement</li> <li>Attitudes toward product quality and customer service</li> <li>Attitudes toward saving and investing</li> <li>Emphasis on safety</li> <li>Lifestyles</li> <li>Buying habits</li> <li>Religion and beliefs</li> <li>Attitudes toward and support for renewable energy</li> <li>Population growth rate</li> <li>Immigration and emigration rates</li> <li>Age distribution</li> <li>Average disposable income level</li> <li>Social classes</li> <li>Family size and structure</li> <li>Minorities</li> </ul>	<ul> <li>Basic infrastructure level</li> <li>Rate of technological change</li> <li>Spending on research &amp; development</li> <li>Technology incentives</li> <li>Legislation regarding technology</li> <li>Technology level in your industry</li> <li>Communication infrastructure</li> <li>Access to newest technology</li> <li>Internet infrastructure and penetration</li> </ul>

## PESTEL Analysis: gathering information (II)

Environmental (ecological)	Legal
<ul> <li>Weather</li> <li>Climate change</li> <li>Laws regulating environment pollution</li> <li>Air and water pollution</li> <li>Recycling</li> <li>Waste management</li> <li>Attitudes toward "green" or ecological products</li> <li>Endangered species</li> <li>Attitudes toward and support for renewable energy</li> </ul>	<ul> <li>Anti-trust law</li> <li>Discrimination law</li> <li>Copyright, patents / Intellectual property law</li> <li>Consumer protection and e- commerce</li> <li>Employment law</li> <li>Health and safety law</li> <li>Data Protection</li> </ul>

When to use a PESTEL analysis

Launching a new product or service

Entering a new region or country

Considering a new route to your market

Working as part of a strategic project team

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**Political Factors** 

- **Government regulations and policies**: Strict emission standards (e.g., Euro 7, CAFE standards in the U.S.) force manufacturers to invest in cleaner technologies.
- Trade policies and tariffs: Import/export tariffs (e.g., U.S.-China trade tensions) impact global supply chains and pricing.
- Subsidies and incentives: Many governments offer subsidies for electric vehicles (EVs) to promote sustainability (e.g., Norway, Germany, China).
- **Geopolitical instability**: Wars, trade conflicts, and economic sanctions can disrupt supply chains (e.g., semiconductor shortages due to U.S.-China tensions).

#### Impact: Moderate to High

Policy changes can significantly affect costs, production, and consumer demand, making political stability a crucial factor.

#### Economic Factors

- Global economic cycles: The automotive industry is highly sensitive to economic downturns (e.g., COVID-19 recession).
- Inflation and interest rates: Higher interest rates make car financing more expensive, reducing demand.
- Fuel prices: Fluctuations in oil prices influence consumer preferences (e.g., high prices drive EV demand).
- **Supply chain disruptions**: The semiconductor crisis and raw material shortages have increased production costs.

### 👉 Impact: High

Economic conditions directly impact consumer spending and industry profitability.

Social Factors

- Changing consumer preferences: A shift toward sustainability and urban mobility reduces traditional car ownership in cities.
- Aging populations in developed markets: Older consumers may buy fewer new cars, shifting demand toward after-sales services.
- Urbanization and mobility trends: Growth of ride-sharing (Uber, Bolt) and car subscription models challenges traditional ownership.
- **Brand perception and trust**: Scandals (e.g., Volkswagen Dieselgate) affect consumer trust and buying behavior.

#### Impact: Moderate to High

Companies must adapt to changing social trends, focusing on sustainability, connectivity, and new ownership models.

#### **Technological Factors**

- **Rise of electric vehicles (EVs)**: Tesla, BYD, and traditional automakers are investing heavily in EVs to replace combustion engines.
- Autonomous and connected vehicles: AI-powered self-driving technologies (e.g., Waymo, Tesla FSD) are reshaping the industry.
- Advancements in battery technology: Innovations in solid-state batteries could make EVs cheaper and more efficient.
- **Digital transformation**: Al-driven production, Industry 4.0, and smart factories improve efficiency.

### Impact: Very High

Continuous innovation is essential for competitiveness.

Companies that fail to keep up with technology will lose market share.

#### **Environmental Factors**

- Climate change policies: Stricter emissions targets (e.g., EU ban on new ICE cars by 2035) push the industry toward EVs.
- **Sustainable manufacturing**: Companies are adopting circular economy principles (e.g., recycling batteries, reducing carbon footprints).
- Consumer demand for eco-friendly vehicles: Green-conscious consumers favor hybrids and EVs over traditional cars.
- **Resource scarcity**: Limited availability of lithium, cobalt, and rare earth metals impacts battery production and costs.

### 👉 Impact: High

Sustainability is a major driver of change.

Automakers must **invest in greener technologies** or risk regulatory fines and reputational damage.

Legal Factors

- **Strict safety regulations**: Crash tests, airbags, and ADAS (Advanced Driver Assistance Systems) are mandatory in most regions.
- Data protection laws: Connected cars collect vast data, requiring compliance with GDPR, CCPA, and other regulations.
- Intellectual property rights: Patents on autonomous driving and EV technologies create competitive advantages and legal battles.
- Labour laws: Strikes and union negotiations (e.g., UAW strikes in the U.S.) affect production and costs.

#### Impact: Moderate to High

Legal compliance adds complexity and costs but also protects established players from unfair competition.

Overall Industry Impact

#### Opportunities:

- Growth in EVs, Al-driven mobility, and digital transformation
- Government subsidies and green incentives
- Rising demand in emerging markets

#### X Challenges:

- High **regulatory pressures** on emissions and safety
- Supply chain disruptions and economic volatility
- Rapid technological changes requiring **constant reinvestment**

#### 📌 Final Verdict:

The automotive industry is transforming significantly due to sustainability, technology, and shifting consumer preferences.

Companies that **adapt quickly** will thrive, while those that fail to innovate will struggle.

Example PESTEL analysis: Expanding the cork-stopper industry into Brazil involves navigating a complex external environment (I)

#### **Political Factors:**

- Stability and Governance: Brazil's political landscape has fluctuated, impacting business confidence and investment. It's crucial to monitor political stability and policies toward foreign businesses.
- **Trade Policies**: Brazil's participation in trade blocs like MERCOSUR could influence tariffs and trade agreements, affecting import and export conditions for cork stoppers.

#### **Economic Factors:**

- Economic Growth: Assessing Brazil's economic growth trends will help gauge the market's potential. While Brazil has faced economic challenges, it remains a significant economy in Latin America.
- **Exchange Rates**: Fluctuations in the Brazilian Real can affect the cost of importing raw materials and pricing competitiveness for the local market.

Example PESTEL analysis: Expanding the cork-stopper industry into Brazil involves navigating a complex external environment (II)

#### Social Factors:

- **Consumer Preferences**: Understanding Brazilian consumers' preferences regarding wine and environmental sustainability can inform marketing strategies. There's a growing awareness of sustainable products in Brazil, potentially favouring cork stoppers.
- **Demographics**: Brazil's large and diverse population presents a broad market. Identifying key consumer segments, such as wine enthusiasts or environmentally conscious consumers, is vital.

#### Technological Factors:

- Manufacturing Technology: Advances in manufacturing technology could reduce costs or improve the quality of cork stoppers. Assessing local technological capabilities and infrastructure is crucial.
- **Digital Marketing**: Utilizing digital platforms for marketing can be effective in Brazil, a country with high social media engagement and internet penetration.

Example PESTEL analysis: Expanding the cork-stopper industry into Brazil involves navigating a complex external environment (III)

#### **Environmental Factors:**

- **Sustainability Concerns**: Brazil's heightened awareness of environmental issues can be an advantage for cork stoppers, which are perceived as more sustainable than synthetic alternatives.
- Climate and Agriculture: While not directly affecting cork production (as cork oaks are not native to Brazil), understanding local agricultural practices and climate can inform potential sustainability initiatives or partnerships.

#### Factors:

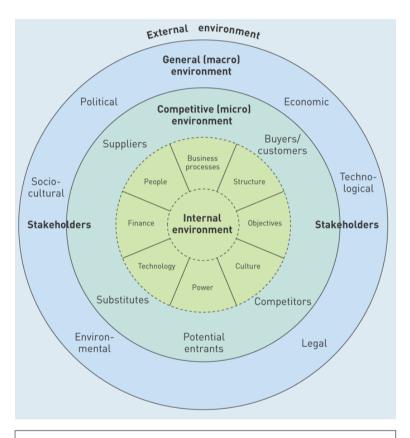
- **Regulatory Environment**: Navigating Brazil's regulatory environment, including import taxes, business registration processes, and environmental regulations, is crucial for smooth operations.
- Intellectual Property Rights: Ensuring the protection of any proprietary technology or designs related to cork stopper manufacturing in Brazil is essential.

# Specific Environment (competitive environment)

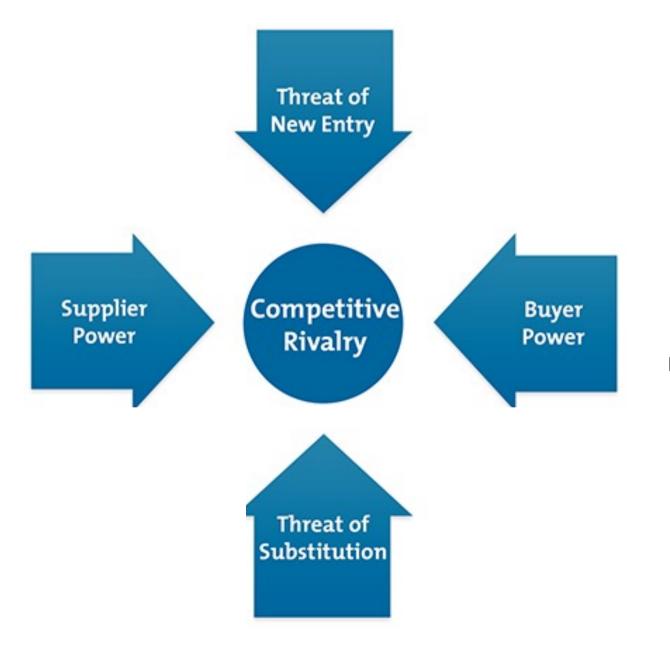
Those external **forces** that have a **direct** and immediate **impact** on managers' **decisions** and **actions** and are relevant to the achievement of the organization's goals.

- **Customers**. They represent potential uncertainty to an organization.
  - Their taste can change, they can become dissatisfied with organization's product or service.
- **Competitors**: Organizations can not ignore its competitors.
  - Managers must be prepared to respond to competitors policies regarding pricing new products, services offered, ....
- **Suppliers**: Any party that provides input for the business.
- Industry regulation





An industry is a group of firms producing products and services that are essentially the same Porter's Five forces: helps to analyse an industry and identify the attractiveness of it in terms of five competitive forces



The weaker these forces are, the more attractive an industry or company becomes.

Competitive analysis allows a company to make strategic decisions regarding the best defendable and most economically attractive position.

#### Porter's Five Forces Factors

Threat of new entrants	Bargaining power of suppliers	Bargaining power of buyers	Threat of substitute products or services	Rivalry among existing competitors
<ul> <li>Barriers to entry</li> <li>Economies of scale</li> <li>Brand loyalty</li> <li>Capital requirements</li> <li>Cumulative experience</li> <li>Government policies</li> <li>Access to distribution channels</li> <li>Switching costs</li> </ul>	<ul> <li>Number of suppliers</li> <li>Size of suppliers</li> <li>Uniqueness of each supplier's product or service</li> <li>Focal company's ability to substitute</li> <li>Switching costs</li> </ul>	<ul> <li>Number of customers</li> <li>Size of each customer order</li> <li>Differences between competitors</li> <li>Price sensitivity</li> <li>Buyer's ability to substitute</li> <li>Buyer's information availability</li> <li>Switching costs</li> </ul>	<ul> <li>Number of substitute products available</li> <li>Buyer propensity to substitute</li> <li>Relative price performance of substitute</li> <li>Perceived level of product differentiation</li> <li>Switching costs</li> </ul>	<ul> <li>Number of competitors</li> <li>Diversity of competitors</li> <li>Industry concentration</li> <li>Industry growth</li> <li>Quality differences</li> <li>Brand loyalty</li> <li>Barriers to exit</li> <li>Switching costs</li> </ul>

## For each of the five forces, conduct a detailed analysis

- Suppliers:
  - Consider the number of suppliers, uniqueness of service or product, cost of switching suppliers, and the threat of forward integration.
- Buyers:
  - Evaluate the number of buyers, the importance of each buyer to the industry, the cost to switch to competitors, and the threat of backward integration.
- New Entrants:
  - Assess entry barriers such as capital requirements, economies of scale, access to distribution channels, regulatory policies, and brand loyalty.
- Substitutes:
  - Identify substitute products or services, compare their performance and price to industry products, and analyse trends that might increase the threat of substitutes.
- Rivalry:
  - Look at the number of competitors, industry growth rate, product differentiation, switching costs, and fixed costs.

#### Threat of New Entrants (Low)

- **High barriers to entry**: Entering the automotive industry requires massive capital investments in factories, R&D, and distribution networks.
- **Economies of scale**: Established manufacturers benefit from large-scale production, making it difficult for newcomers to compete on cost.
- **Regulatory hurdles**: Strict environmental and safety regulations increase compliance costs for new players.
- **Brand loyalty**: Well-established brands like Toyota, BMW, and Tesla enjoy strong customer loyalty, making it harder for new entrants to gain traction.
- **Conclusion**: The low threat of new entrants makes the industry more attractive for existing players, as they face limited disruption from new competitors.

#### Bargaining Power of Suppliers (Moderate)

- **Dependence on key suppliers**: Some components, such as semiconductors and EV batteries, have a limited number of global suppliers, giving them bargaining power.
- Leverage of major automakers: Large manufacturers (e.g., Volkswagen, Ford) negotiate better pricing due to high purchase volumes.
- Vertical integration: Some automakers (e.g., Tesla) are reducing supplier power by producing critical components in-house.

**Conclusion**: While supplier power is moderate, shortages (e.g., the semiconductor crisis) can disrupt production and increase costs. This adds **moderate risk** to the industry's attractiveness.

Bargaining Power of Buyers (Moderate to High)

- Information transparency: Customers can easily compare prices, features, and reviews online, increasing their negotiation power.
- Plenty of alternatives: Consumers can choose from numerous brands and models, strengthening their leverage.
- **Brand loyalty and switching costs**: While some customers stick to a specific brand, many are willing to switch for better deals or new technologies.

Conclusion: The high bargaining power of customers puts pressure on margins and profitability, making the industry less attractive from a competitive standpoint.

Threat of Substitutes (Moderate)

- Public transportation and ride-sharing: In urban areas, efficient public transit, car-sharing, and ride-hailing services (e.g., Uber, Bolt) reduce the need for car ownership.
- Electric vehicles (EVs) vs. internal combustion engine (ICE) vehicles: EVs are a substitute for traditional cars, but they still belong to the same industry.
- **Changing consumer behavior**: Younger generations prioritize sustainability and access over ownership, impacting car sales.

**Conclusion**: The threat of substitutes is **moderate**, as alternative transportation solutions can limit market growth, especially in urban environments.

Industry Rivalry (High)

- Intense competition: The industry is highly competitive, with major players launching new models and innovations continuously.
- **Price wars and discount strategies**: Automakers often compete through aggressive pricing, financing deals, and incentives.
- Short product life cycles: The need for continuous innovation in design, fuel efficiency, and technology keeps pressure on all players.

Conclusion: The high level of rivalry reduces profitability and forces companies to invest heavily in innovation and marketing, making the industry less attractive in terms of long-term profitability.

## **Overall Industry Attractiveness**

## **Positives**:

- High entry barriers protect incumbents.
- Vertical integration strategies can reduce supplier dependence.
- Strong global demand for vehicles, especially in emerging markets.

### × Negatives:

- Intense competition limits profitability.
- High customer bargaining power forces aggressive pricing.
- Technological shifts (EVs, autonomous driving) require constant reinvestment.

## 📌 Final Verdict:

The automotive industry is **moderately attractive**, but success depends on **scale**, **innovation**, **and operational efficiency**. Companies that can **differentiate through technology**, **sustainability**, **and customer experience** will have a competitive edge.

## Let's analyze the <u>airline industry</u> using Porter's Five Forces (I)

#### 1. Bargaining Power of Suppliers: High

- The airline industry depends on a few major suppliers for aircraft (Boeing and Airbus), fuel, and labour. This concentration of suppliers means they can exert significant power over airlines.
- Aircraft and fuel costs significantly affect airlines' operating costs. Labour unions also have considerable bargaining power, as strikes or labour disputes can disrupt airline operations.

#### 2. Bargaining Power of Buyers: Medium to High

- Customers can choose from various airlines for their travel needs, making price, service quality, and flight schedules important competitive factors.
- Corporate clients, who purchase tickets in bulk and frequent flyers, have higher bargaining power due to their volume of purchases. The rise of online travel agencies and comparison sites has also increased customers' bargaining power by making price comparisons easier.

## Let's analyze the <u>airline industry</u> using Porter's Five Forces (II)

#### 3. Threat of New Entrants: Low

- Entering the airline industry requires a significant capital investment in aircraft, staff training, and technology.
- Additionally, regulatory barriers, airport access limitations, and the need for slots at crowded airports add to the difficulty of new entrants. However, in some regions, low-cost carriers have successfully entered the market by targeting underserved routes or focusing on cost efficiency, indicating that while barriers are high, entry is not impossible.

#### 4. Threat of Substitute Products or Services: Medium to High

- The threat of substitutes varies by geographic location and the nature of the travel. Alternatives such as high-speed trains, buses, and cars can be viable and often more convenient or cost-effective for short to medium distances.
- Technological substitutes like video conferencing tools can also reduce the need for business travel. However, the airline industry faces less threat from substitutes for long-haul flights.

## Let's analyze the <u>airline industry</u> using Porter's Five Forces (III)

#### 5. Competitive Rivalry among Existing Competitors: High

- The airline industry is characterised by intense competition.
- Airlines compete on pricing, flight routes, schedules, in-flight services, loyalty programs, and more. Price wars are common, especially on popular routes, and profitability can be challenging due to the fixed operation costs.
- The competition is intensified because customers can easily switch airlines based on price and service offerings.

#### Conclusion

The airline industry operates within a challenging competitive landscape, marked by high supplier power, considerable buyer power, significant barriers to new entrants, a varying threat of substitutes, and intense rivalry among existing players. Success in this industry requires effective management of costs, differentiation in service offerings, strategic partnerships, and a focus on customer satisfaction and loyalty. Airlines must also navigate external factors such as fluctuating fuel prices, geopolitical events, and global economic conditions that can impact travel demand.

## Implications of the Competitive Forces

- The aim of the competitive force analysis is an <u>assessment of the</u> <u>attractiveness</u> of the industry and any possibilities to manage strategies in relation to the forces to promote long-term survival and competitive advantage.
- Where the <u>competitive forces are high and strong</u>, industries are <u>not</u> <u>attractive</u>
- Which industries to enter (or leave)?
  - managers should try to influence and exploit any weak forces to its advantage and neutralise any strong ones

"High" and "Low" refer to the intensity of each force and its impact on the overall attractiveness and profitability of an industry

- An industry with predominantly <u>High forces is generally considered</u> <u>less attractive</u> due to lower profitability potential.
- An industry with predominantly <u>Low forces is considered more</u> <u>attractive</u> due to its higher potential for profitability and growth.
- However, it's important to consider the relative strength of each force and how they interact. Even in an industry with some strong forces, strategic positioning and differentiation can create opportunities for success.

Organizational Stakeholders: they can affect what an organization does and how it operates.





### Stakeholders expectations

#### Shareholders

- Growth in dividend payments
- Growth in share price
- Growth in asset value

#### Suppliers

- Timely payment of debt
- Adequate liquidity
- Integrity of directors
- Trustworthy purchasing manager

#### Government

- Adhering to the country's laws
- Paying taxes
- Providing employment
- Value for money in using public funds

#### Customers

- Competitive price
- Quality product or service
- Guarantee provisions

#### Employees

- Good pay and benefits
- Job security
- Sense of purpose in the job
- Opportunities for personal development

#### Lenders

- Financial strength of the company
- Quality of management
- Quality of assets available for security
- Ability to repay interest and capital

#### Short case: The Company and its Environment

- Mark Taylor has just joined the Board of Directors (BoD) of PerfectShoes a medium-sized company located in Porto industrial district. PerfectShoes company is dedicated exclusively to the production of men's shoes.
- At the first meeting of the BoD, as none of the other directors are considered devoted to conduct analytical studies of the general and specific environment where the company operates, they managed to convince him to take responsibility for the definition and implementation of this study with the purpose to launch a program setting objectives and possibly strategic planning.
- Mark began arguing that his management experience had been acquired in the hospital sector, where he had been an administrator in public hospitals in the province's small towns. However, he accepted, albeit with an enigmatic smile, after one of his new colleague's administration have insisted!
- This BoD colleague said that recently in a management seminar he attended, the speaker (well renowned by the way) had argued that basically the fundamental problems of "environment and planning" are similar whether a profit or non profit organization. What is important is to check what are the environmental variables with the greatest impact on business performance.

#### Questions:

1. Do you agree with Mark Taylor's colleague? Justify.

2. In what sense is the environment of a public hospital in the province different from a shoe manufacturing company located in Porto? Justify.

3. How should Mark conduct their work?

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