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lessons: Enterprise Economic

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INDEX

General Introduction

The Centrality of the Enterprise in the Economic Fabric

The modern world is in effect a system created and maintained by the use of economic enterprises. Most of the infrastructure that supports our cities and the complex supply chains to bring food to our tables in El Oued; practically all facets of daily life have been mediated by the action of these production units. For this reason, the academic study of "project economics" (more broadly referred to as "the economics of the enterprise") should not be viewed as a merely technical requirement for academic credit; rather it represents our basic means of investigating the "engine" of cooperation among humans; how humans allocate resources; and how humans create and build wealth. Understanding the enterprise also means understanding the living "cell" of the economic "organism", the one unit at which all three factors of production (capital, labour and information) affect the performance of an enterprise in producing value.

This study has a special significance for the students attending El Oued University. The continuing evolution of our region, from being a historically traditional agricultural economy to becoming an economic centre of agricultural production, business services and emerging industrial sectors; has produced an increased need for students to possess an advanced understanding of economics. The fundamental first step in transforming from the traditional method of making management decisions based on intuition to using the scientific method of developing management policies based on data, is the bridge between the past; and the future—riches from entrepreneurship—will be the result of knowledge: the bridge to wealth is education. Thus, this Scientific publication is intended to be both an academic text as well as a reference work. Not only will it provide readers with the descriptive and technical definitions necessary to understand the enterprise; but it will also provide readers with the mental framework to adequately assess and evaluate the ways in which enterprises are created, operate in a hostile environment and develop and flourish as they adapt to challenges presented by the 21st Century.

Methodological Framework: A Systemic Approach

Completing a comprehensive text about the economics of enterprise poses a unique pedagogic problem on how to combine economics rigid and universal law, and the managerial experiences fluid and context-dependent. This Scientific publication will use a Systemic Approach to accomplish that. As opposed to viewing the enterprise as a collection of separate functions (e.g., marketing in one place and finance in another), we will represent the enterprise as an open dynamic system continuously interacting with its environment. This methodology thinks of the enterprise being a living organisation that takes in resources (inputs), transforms those resources through its internal processes and sends value (outputs) back to society, and makes use of feedback loops to adapt and survive.

Secondly, we believe that economic principles are universal; however, their application is local. Therefore, this text will draw from global best practices, but will consistently require students to apply these principles in their own legal and economic environment and in this case, the one that exists in Algeria. Our goal is to prepare graduates to become "glocal"—to be able to conceptualize using global standards while acting locally.

Roadmap of the Scientific publication

To put this systemic approach into practice, there are 11 distinct "Axes" in the structure of the Scientific publication with 360-degrees of coverage. The overall structure of the Scientific publication moves logically from abstract through concrete, from a historical perspective to a future orientation, and from an internal to an external perspective.

Foundations and Origins (Axes 1-2). The first step is to establish the ontological status of the subject. In Axes 1, we develop the theoretical boundaries of the subject according to a linguistic (or taxonomic), systemic, and economic approach. We will analyse the essential characteristics of the enterprise (e.g., legal personality and financial independence) and clarify its multiple objectives that go beyond simply making a profit; i.e., growth and survival. In Axis 2, we provide the historical context. Economic structures develop over time; and, therefore, an understanding of the modern corporation must begin with an understanding of its antecedents such as family-based production units, the household-based system of production, and the monumental societal changes brought about by the Industrial Revolution. The importance of history is to help establish that the enterprise has never been a static entity, rather it is a dynamic entity that is continually evolving, as it responds to the social and technological constraints of each stage of development.

Diagnosis and Environment (Axes 3-4). After the definition phase is complete, the next step is to go to the analysis phase. The enterprise exists in a state of tension between its internal ability to change and the external pressures. Axis 3 focuses on the internal environment of the enterprise, providing the analytical tools for assessing both the tangible and intangible resources.The concept of "Core Competencies" will be discussed here, as it is thought that Unique Internal Strengths give rise to Sustainable Competitive Advantages. Axis 4 will examine the external landscape through PESTEL - Policy, Economic, Social, Technological, Environmental and Legal - as well as the Competitive Landscape using Michael Porter's Five Forces model. This demonstrates that all Enterprises are presented with opportunities and threats from the Macro Environment (The Market), the State, and Society at Large.

The Anatomy and Classification of the Firm (Axes 5 and 6) will be subjected to analysis as the environment has been interpreted. Axis 5 will provide a classification framework for Enterprises by legal status, economic activity, ownership and size. Particular emphasis will be placed on the Specific Context of Algeria, thus grounding the Theoretical Classifications within the National Legal Framework of Algeria. Axis 6 will examine the interior of the Firm by analysing the Firm’s Structure/Organisation of the

Firm, by examining Hierarchical Principles and the Span of Control, including the Trade-Offs between Centralisation versus Decentralisation. This will illustrate that the Design of the Firm can in many instances determine the Economic Efficiency of the Firm.

If the Structure of the Firm is the Skeleton of the Firm, the Functions of the Firm are the Organs of the Firm. In this respect, Axis 7 will detail the Operational Departments of Human Resources, Production, Marketing, Finance, Supply Chain and Research and Development and how each of these Functions contribute to the Existence of the Enterprise by providing Primary Value. Axis 7 will provide the Measure of Success for the "Project" aspect of the Title and will cover items such as Cost Analysis, Breakeven Points and Productivity Indices and will transition the reader from qualitative descriptions to hard quantitative measurements through the use of Mathematical Formulas for the Economic Analysis.

Axis 8 will examine Historical and Human Dimensions of the Evolution and Dynamics of the Firm. As previously mentioned in this introduction, Axis 9 will treat the firm as a Dynamic Organisation with a Life Cycle. Axis 10 will expand on Axis 9 by addressing the Soft Side of the Economics of the Firm; namely, the Culture of the Firm and the Ethical Conduct of Employees. Organizational Culture has a significant impact on the Economic Performance of the Firm, Transaction Costs and Employee Behaviour. Ethical Standards of Conduct will be viewed as essential for long-term Sustainability of the Firm.

As previously noted, the last chapter of this text will explore the Future of the Firm as it relates to New Trends in the Discipline and the Culture of the Firm. Specifically, New Trends and Shifts in Value Creation will be explored in Edge Case 11 - The Knowledge Economy, as the use of Intellectual Capital becomes the Prevailing Value Creator as opposed to the use of Physical Capital to Create Value. Additionally, Total Quality Management (TQM) Strategies and Entrepreneurs will be examined with respect to the Transformation of the Firm. More importantly, the author will address the two Significant Challenges facing all Firms in the Future; namely, Sustainable Development (Green Economy) and Disruptive Technology (Artificial Intelligence). These two unique challenges will shape the Careers and Future of Students Seeking Employment in Business after Graduating from College or University.

Conclusion

The goal of this text is to be more than just a list of definitions; it will also function as a guide Scientific publication. Project and enterprise economics is an area of study requiring both analytical and practical thinking. The student must be part accountant, part sociologist, part historian, and part strategist.

All students at El Oued University, you will become the future builders of the national economy. The theories described in this text, including break-even analysis and the circular economy, will form the foundation of your projects and the method by which you will manage your employees, as well as facilitate the growth of your community through economic advancement. As you read, do not simply accept what is recorded in

this Scientific publication; instead, actively engage in economic discussions. Do not accept theoretical models without first testing them against the real world you live in. Use what you learn to take ideas and convert them into concrete economic value. Welcome to the field of enterprise study.

Axis 1:

Concept of the Enterprise

1. Approaches to Defining the Economic Enterprise

The Business or an Economic Enterprise is the recognisable foundation of Capitalism and the prime producing unit of modern life as we know it. The business is located in all parts of the economy. Businesses are found in every corner of our society, and defining business from a scientific point of view has become an enigma of sorts. Businesses can be defined as multiples of a single product that intersects with economics, legal concepts, sociology, and management science. To fully appreciate the concept of a Business and to broaden our understanding beyond that of the definition understood in the dictionary, we can look to three different yet complementary definitions for 'business' and/or an 'economic enterprise,' including, a linguistic definition (of an entrepreneur's view), an economic (productive/financial) definition (of the employer's view), and a systemic definition (of society's view).

1.1 The Linguistic and Entrepreneurial Perspective

Research indicates that finding the root of the term 'enterprise' will help define the concept's relationship to humanity and entrepreneurship. Etymologically, 'enterprise' derives from the French verb 'entreprendre' (to undertake). Thus, the term 'enterprise' signifies a conscious act of will undertaken by an entrepreneur to initiate an idea or project. Here, the concept of an enterprise cannot be separated from an entrepreneur as the individual that generates the idea and assumes the risks associated with executing the project.

Drucker (2008), one of the leading theorists in management, believed that an enterprise is not a natural phenomenon; it is specifically an organ of society. Drucker (2008) maintained that business cannot be defined by profit; instead, it must be defined by its purpose. Drucker (2008) stated that an enterprise exists only to make a customer (p61). This shift in how business and the enterprise are defined has significant implications for the focus of business activity; specifically, the enterprise is a dynamic vehicle for producing and delivering services to society through the creation of new and innovative products; therefore, businesses are not simply buildings housing employees.

Based on a review of this literature, the following statement is provided to summarize the notion of an enterprise: An enterprise is defined as "a project or undertaking that is difficult, complex, or risky, undertaken by an entrepreneur, to create value".

1.2 The Economic and Productive Approach

The traditional economic approach, which emphasizes transformation and efficiency, diverges significantly from the linguistic approach, which focuses on initiating action.

Classical and neoclassical economic theory often portray the organization as a "black box" or production function, acting as a rational agent combining fragmented factors of production to create utility.

According to Samuelson and Nordhaus (2010), the organization (or firm) is a specialised entity whose purpose is to manage the production process. They propose that the production process is handled within firms because it generally requires extensive economies of scale, substantial financing needed to raise production resources, and carefully managed operations to ensure the smooth coordination of all ongoing activities (p. 108).

In this sense, the organization is considered to perform a technical alchemy, purchasing factors (land, labour and capital) from the factor market and then processing them through a technological transformation process to yield products (goods and/or services) for sale to consumers in the consumption market.

The New Institutional Economics approach significantly enhanced the neoclassical approach to the organisation through the work of Ronald Coase. Coase challenges the neoclassical view that the pricing mechanism organizes all economic activity, arguing that firms exist because using the pricing mechanism to organize economic activity is costly; costs are incurred to find out what the prices are and to negotiate contracts. Consequently, Coase (1937) defined the organisation, or firm, as "a system of relationships which develops when the direction of resources will be determined by the entrepreneur". The organisation or firm offers more than just a manner to produce; it is characterised by its ability to lower transaction costs via an internal hierarchy.

Therefore, the organisation/firmin economic terms can be defined as follows: "An organisation/firmin economic theory will be defined as a rational economic agent which will use the factors of production (inputs) to generate a product (goods and/or services) for trade in the market for the purpose of maximising profit and minimising transaction costs."

1.3 The Systemic Approach: The Enterprise as an Organism

To be successful in a modern global marketplace, a company must take into account more than simply the mechanical or traditional "input-output" model of business. The establishment of an organization as an open system is a living entity that has input and interactions with its environment.

Daft (2021) refers to a company as a social system that is goal-oriented, specifically designed as a structured and coordinated activity system that interacts with the environment. Andrew states that an "open system must interact with its environment to survive....uses resources...by consuming them and exporting (to) its environment....and cannot isolate itself from the external environment." (p. 14).

Based on this definition of a company as a social system, the company is defined by the following events:

- Import of Energy: The organization obtains resources (raw materials, information, and human resources) from outside the environment;
- Throughput: Processing of the above resources through the company internally;
- Output: Exporting products or services back to the external environment;
- Feedback: The means by which a company learns from outside the company (e.g. sales revenue, customer service problems, etc.) to determine how to modify their future imports.

Thus, the systemic definition is that a company is "an open, social, technical system consisting of interrelated subsystems that convert resources from its environment into monetary and value-added outputs subject to a feedback mechanism that enables adaptation and survival."

1.4 The Social and Organizational Approach

To better understand an enterprise, it should be considered as a result of human creativity and that it is more than just buildings, equipment, or capital, but it is also composed of people who have a common goal (individually or through collective agreement) working under the same authority (an individual or group who has the right to exercise control).

Robbins and Coulter (2018) define the creation of an enterprise (organization) as a way to create an agreement or plan that outlines how the labor force will be managed as it relates to the accomplishment of the organizational goal(s) (a group of people working in concert to achieve specific goals).

This definition clarifies the internal description of an enterprise; specifically, it indicates the different parts of an organization, such as division of labor, hierarchy, and culture. The enterprise is, therefore, a social organization where individual goals must be aligned with the goals of an organization. This alignment can generally happen through both positive (rewards for achieving the organizational goal) and negative (penalties for not achieving the organizational goal) reinforcements.

1.5 Synthesis: A Comprehensive Definition

Based on the initiative of the linguistic approach, the effectiveness of the economic approach, the adaptability of the systemic approach, and the human component of the social approach, we create a complete understanding the student of economic organizations should have.

So we offer this definition composite "Economic enterprises are organisations that are independent, have a legal identity, and financial independence; they integrate, coordinate and optimise and combines resources (Human, Material, & Financial) within an organised structure to produce or exchange (sell) goods or services in a market with the primary goal of creating or providing Profit for long term sustainability through Adaptation".

2. Characteristics of the Economic Enterprise

To fully identify an enterprise you must not only understand its purpose but must also understand the structural characteristic and operational characteristic of that purpose that gives the enterprise its existence as a separate entity from other entities such as a family reunion or a casual social club. In order to provide formality to the enterprise's status in the economy there are a number of characteristics that differentiate a business enterprise from all other enterprises, however the primary two are: 1) The enterprise has a distinct legal personality and; 2) The enterprise has financial independence from all other enterprises.

2.1 The Principle of Legal Personality

The idea of legal personality is what defines a set of resources transforming into an institution in the eyes of the law; an incorporated business is not simply a bunch of machinery and people, but an artificial person separate and apart from it's owners or shareholders; this separation, or corporate veil, forms the foundation of modern capitalist society.

According to Cheeseman (2019), "A corporation is created pursuant to the laws of its state of incorporation and is a legal entity. Corporations are regarded as artificial persons who can sue and be sued in their own names, enter into and enforce contracts, hold title to and transfer property and be found civilly and/or criminally liable for violating laws" (p. 614).

The following are some of the important implications for an enterprise based upon this characteristic:

- Continuity of Existence - The enterprise survives its founders and has an indefinite life span, which exceeds the individual life spans of its shareholders/owners and/or managers.
- Ownership of Property - The enterprise owns its own assets; for example, the machinery in a factory belongs to the "company," rather than directly to the CEO or shareholders.
- Capacity to Contract - The enterprise enters into contracts under its own name; for example, when a supplier delivers raw materials, they are entering into a contract with the corporation not with the individual purchasing manager.

Although corporations are legally autonomous from their owners/shareholders, their autonomy is not universal based upon the type of business organization. Accordingly, while the owner's and business's identities are less distinct in sole proprietorship businesses, we will examine the "firm" and household as decision-making entities separate from one another for economic analysis. The firm's economic characteristics have no bearing on the legal entity; as noted by Samuelson and Nordhaus (2010), "the legal forms of business [may differ], but the firm's economic essence is the organizing of production, securing of capital resources, and managing the labor force" (p. 109).

2.2 Financial Independence and Autonomy

The second characteristic of legal personality is the financial independence of the economic enterprise. As an autonomous entity, the economic enterprise is an economic unit with its own assets and liabilities, whereas, in contrast, government organisations rely on the funding from taxpayers through budget allocations to perform their functions. Economic enterprises must also generate enough revenue to be able to continue operating financially.

According to Begg and co-workers (2014), an organisation (i.e., the firm) acts as the agent for a number of other groups (i.e., its stakeholders), and therefore must ensure that its revenues exceed its costs in order to continue operating. In other words, firms are also organisations engaged in the production of goods and/or services for sale to generate profit (p. 68). Therefore, as a result of the firm's existence as a separate entity from the owners, the firm has a distinct financial identity.

There are three manifestations of this financial independence:

- Independent Budgeting – Each enterprise must prepare its own budget based on expected revenues to be earned from the market, as opposed to government grants (i.e., guaranteed funds), and is responsible for its own solvency.
- Retention of Earnings – Each enterprise may keep part of the value that it creates as retained earnings, and it is possible for the enterprise to re-invest retained earnings in order to increase its growth, as this is a characteristic that is unique to autonomous economic entities.
- Assumption of Risk – Financial independence is linked to the risk of failure. If each enterprise incurs a higher level of costs than revenues on a recurring basis, this may result in the enterprise filing for bankruptcy.

As a result of this third characteristic, the separate entity concept in accounting requires economic enterprises to keep accounting records of their transactions separate and distinct from the transactions of the owners of the enterprise.

2.3 The Economic Purpose: Profit and Value Creation

Although the legal and financial framework represents the foundation of the business, the economic objective is the lifeblood of the business. The essential difference between an economic enterprise (business) and a non-profit or charitable organization is the objective of creating value, with value generally measured in terms of profit. Drucker (2008) conveys that although profit is not the only explanation for the behaviour of a business, it is still the final test of the validity of that firm's existence. "The only way to evaluate the performance of an organisation is to evaluate its profit...profit is the reward for taking on risk and the uncertainty associated with that risk" (pg. 62).

The only organisation in a society that is obligated to produce its own resources (through generating a profit) is a business. Thus, if a business produces no surplus (i.e., profit), it is using social resources but not replenishing them.

Ultimately, the creation of profit serves to regulate all aspects of a business. Through the creation of profit, business enterprises are driven to perform more efficiently, innovate and allocate resources more efficiently. Even federally-controlled enterprises whose primary objective is to provide a public benefit view their operations through an increasingly profit-oriented lens in order to avoid being a drain on the taxpayer's pocketbook.

2.4 The Social Reality and Combination of Factors

As such, an enterprise can be described as an entity that exists independent of individuals; rather, it is a society formed through social interaction among individuals within an organization (i.e., how we communicate and work together) under the authority of an established organizational structure. Therefore, it is not simply a legal entity or bank account, but rather a continuously evolving system of human relationships.

"The organization..." is defined by Robbins and Coulter (2018) as "an intentional arrangement of people to achieve a particular objective" (p. 29). The human aspect adds to the level of complexity that an organization must address when managing its stakeholders (including shareholders wishing to receive dividends, employees wanting to receive wages from their employer, and managers wanting additional authority). Ultimately, the effectiveness of an enterprise is determined by its design, which allows it to manage both human and physical (material) and financial (financial) resources.

In summary, the economic enterprise represents a blending of three distinct components: (1) a legal entity (i.e., an artificial person); (2) a financial motivation (i.e., be financially independent and gain profit); and (3) a social unit (i.e., to work together).

3. The Enterprise as an Open System

A comprehensive grasp of the economic enterprise requires going beyond the old static view of seeing it solely as either legal or as being a physical place where production occurs. Current economic and management theory approaches the enterprise as an "open system", using a "General Systems Theory" perspective. Through this lens, the enterprise is part of a broader system, with continual and dynamic interactions with the environment outside the enterprise. The new "open system" paradigm of business emphasizes the importance of understanding how the enterprise interacts with the outside world; in turn, how the enterprise needs to continually adapt in order to survive as a viable business.

3.1 The Theoretical Foundation: Beyond the Closed System

Classical management theories historically viewed organizations as "closed systems" and believed that organizations were capable of resolving all their problems by simply examining their internal machinery and processes, without incorporating any external factors that could impact how efectively their machnery and processes could work. This

view was insufficient in explaining why profitable and efficient organizations would suddenly fail due to market changes, for example; in other words, the closed system perspective failed to explain the dynamics of a changing environment.

Daft (2021) defines an open system as an organization that must interact with the external environmental forces in order to continue functioning. "Open systems...take in raw materials and produce or process them while 'the system takes out'... the finished product into the environment; hence, the system cannot be isolated from its environment" (p. 14). Therefore, according to Daft, the organization is similar to a biological organism in that it must obtain energy in order to exist, and once it stops receiving energy, then the organization will die (the organization will reach a state of entropy, as defined in thermodynamics).

An open systems model assumes that an organization consists of interdependent subsystems (including, but not limited to:marketing, production, finance) which work together to produce synergy. Therefore, the whole of the organization 'is greater than the sum of its parts.' Jones (2013) further elaborates on this idea; "an organization is the resource an individual uses to co-ordinate their actions to obtain things from their designated environment" (p. 2). Jones states that coordination between the subsystems occurs through a cycle consisting of three basic phases: input (raw materials), transformation (throughput), and output (finished products) - representing synergy.

3.2 Inputs: The Importation of Energy

The cycle starts with the environment, as the business does not create anything from scratch; it draws upon resources from its permeable boundaries, which are known as inputs to the system and are generally broken down into Four streams of input: 1) Physical resources, such as raw materials, components and energy. 2) Human resources, such as employees and their intellect and creativity. 3) Funding from shareholders, banks, or customers. 4) Information resources, such as market data, technology, and legal regulations (Robbins & Coulter, 2018). Robbins and Coulter (2018) refer to this phase as resource acquisition because the organization "receives physical, financial, human, and informational resources from the environment (p. 46)". In this case, the significant economic fact to be understood is that the enterprise is in a state of dependence as it relies on the environment for its survival needs. Therefore, the enterprise must strategically manage its relationships with suppliers and labor markets in order to be able to survive within its environment. Should there be a disruption in the supply of inputs to the endeavour (i.e. labor strikes or raw material shortages), there is the possibility of collapse.

3.3 Throughput: The Transformation Process

The 'Throughput' or transformation process is the point at which the input crosses the boundary into the enterprise; it is essentially the ‘black box’ of the enterprise, being the internal engine of the firm in which value is added.

Through this phase, technology, management techniques, and processes are used to change the inputs used by the enterprise. For example, the transformation of a bakery's

input of flour and yeast (material inputs) into bread occurs through the use of ovens (capital and technology) and the use of bakers' skills (human inputs) to produce the final product.

Kast and Rosenzweig (1985), in their classic book on systems, say that the organization will take an input and increase its utility via the organization. The authors state, “The organization takes inputs...and transforms them via the technical and social subsystems of the organization to give rise to outputs” (p. 104).

Fighting entropy occurs in this phase as well. By organizing various resources in an efficient manner, the enterprise creates a structure to counter the disorganization (chaos) of its environment, which is sometimes characterized as negative entropy. In essence, the enterprise imports more energy (inputs) than it has consumed (outputs); and stores the excess (inputs - outputs) as growth and reserves.

3.4 Outputs: Exporting to the Environment

The "outputs" that are produced during the transformation process will eventually be released into the external environment. While the most visible outputs are those that will be sold to the market (i.e., goods/services), an overall view allows for a wider interpretation of the outputs of a system.

Outputs consist of:

- Products/Services: These are the primary economic offerings of a company.
- Employee Satisfaction: The morale of the workforce when they leave the system at the end of each day has an impact on society at large, whether they have a high or low morale.
- Waste/Pollution: The transformation process produces a variety of byproducts.
- Information: This includes marketing materials created during the transformations, financial reports, and the corporation's reputation with the market.

According to Daft (2021), the output produced by an organization must also meet the acceptable standards set forth by the environment in which it operates. "The organization must find a market for its outputs… If the environment does not place value on the outputs, the organization will cease to exist" (p. 15). This statement illustrates the market's validation function: If the outputs produced through the transformation process were not purchased, this would result in a breakdown of the transformation cycle and the loss of a source of new financial resources will cause the transformation system to become ‘starved’.

3.5 Feedback Loops: The Regulatory Mechanism

Feedback loops make up the last and most important part of an open system. Feedback is the return of information concerning the operation and condition of the system back to the input side to control operations of the system. It serves as a "thermostat" for the open system.

There are two types of feedback: Negative feedback indicates the system is not meeting its goals (for example, decreased sales, customer dissatisfaction). This prompts corrective action to get the open system back to an equilibrium (or "homeostasis"). Positive feedback indicates that the current course is correct (for example, increased profits, high levels of employee motivation) and encourages the organization to continue to pursue existing strategies.

According to Jones (2013), "Feedback is essential for organisational learning. Feedback enables the organisation to respond to its environment, facilitating the ability to maintain dynamic equilibrium" (p. 16). Without feedback, a business would be "operating in a vacuum", producing outputs that are no longer required by the environment. This will ultimately lead to the demise of the business.

3.6 Conclusion of the Systemic View

The analysis of economic activity will be affected by considering the enterprise to be an open system. The isolated management of an enterprise is not possible. The manner in which inputs (sourcing), throughput (efficient use of production inputs), and outputs (sales) are determined is wholly dependent upon the condition of the outside world. There is constant adjustment of the internal structure of an enterprise to reflect changes in the external environment by way of a feedback loop; therefore, the enterprise is continually learning.

4. Objectives of the Enterprise

To comprehend the enterprise, one must identify its motivating forces or driving forces. The definition and structure establish the format and the objectives establish the direction of the enterprise. The lack of clear objectives within an enterprise is similar to a vessel in a turbulent marketplace with no guide, and will therefore drift aimlessly about. The assumption in many economic theories is that all enterprises have only one objective (or goal), Profit Maximization, however this is often an oversimplification of the economic reality as the real-world analysis indicates a pyramid of objectives (or goals) and some of these are linked and some may conflict with one another at times. The three general categories of objectives (or goals) are Profitability, Growth and Survival.

4.1 Profitability: The Economic Imperative

The fundamental purpose that differentiates an economic enterprise from charitable organisations or government entities is profit. In a capitalistic society, profit is not just a reward to owners; rather, it provides an important indicator of how efficient the enterprise is and serves as the main source of funds for future investment. The foundational principle behind this assertion is clearly stated by Samuelson and Nordhaus (2010), who say that "firms are assumed to maximise profit... profit is the net revenue, or the difference between total sales and total costs" (p. 109). The profit maximisation hypothesis states that all decisions, from price-setting to hiring, are made with the intention of increasing the difference between revenue and expense.

Profit serves several important functions within the enterprise:

- Measurement of Efficiency: Profit measures how well the firm uses inputs to create outputs. If a firm is losing money, that indicates that society values the resources that were used to create the outputs more than the actual outputs created.
- Risk Premium: Profit compensates investors (or shareholders) for the risk of losing their capital. Without the expectation of making a profit, no reasonable person would invest in an uncertain venture.
- Source of Internal Financing: Retained earnings permit a firm to fund its own growth with very little reliance on debt financing.

However, new management theory adds a layer of complexity to this issue. Drucker (2008) makes an assertion that profit is necessary to the firm but also states that profit is a constraint—not the only purpose. "Profit is not an explanation of business behaviour or decisions, nor is it the cause or rationale of business behaviour or decisions, but it is the test of their validity" (p. 62). By this statement, a business must make a profit in order to exist; however, it does not exist just to make a profit. This distinction leads to the notion of "satisficing" (the term "satisficing" was attributed to Herbert Simon), which means that firms will try to achieve a satisfactory level of profit to satisfy shareholders while at the same time pursuing other objectives, such as increasing market share or providing fair wages to employees.

4.2 Growth: The Drive for Expansion

When a company becomes profitable, it typically begins to pursue expansion (growth). In a rapidly changing economy, an enterprise that achieves limited expansion and stagnates may be at risk for declining profitability. Young firms that do not grow quickly run the risk of losing market share to firms that are more aggressive in their pursuit of an acceptable market. Furthermore, firms that do not grow will eventually lose their relevance in the marketplace.

There are a number of ways to measure growth, including increases in sales volume, increases in market share, increases in tangible assets, as well as increases in headcount. In her classic work The Theory of the Growth of the Firm, Penrose (2009) theorizes that growth is an inherent veil of the firm resulting from underutilized productive resources. "The firm is a group of productive resources and the allocation of those productive resources between various purposes and over the production period is determined by managerial decisions

Another major objective for growth is to provide the company with economies of scale, whereby the unit cost to the firm decreases as production volume increases thereby providing the company with an incremental competitive advantage. Further, as a result of growth, a company's market power will increase enabling it to have a greater influence regarding pricing and control over suppliers. Additionally, one of the targets of growth for managers is to enhance their own personal reputation in the company. Growth is frequently associated with increased prestige and income for managers, and this relationship between corporate size and managerial prestige can be termed the "agency

problem", in which the manager's personal interests (size of their domain) differ from the interest of the shareholders.

However, growth is also associated with a number of negative consequences. Often when a company rapidly expands without appropriate oversight, the firm will encounter what is known as "diseconomies of scale" where it becomes increasingly difficult to manage the firm due to high levels of coordination and the development of a bureaucracy that limits the firm's ability to be responsive to changes in the external environment and its innovation activities. Therefore, the goal for many firms is to achieve sustainable growth - companies that achieve growth at a rate that does not jeopardize the financial stability or operational capabilities of their firm.

4.3 Survival: The Ultimate Existential Goal

Every company's most basic goal is survival, and this basic goal is the foundation of both profit and growth. During periods of economic distress, technological upheaval, or competition, maximising value is all too often postponed to allow for merely keeping the doors open.

Survival is defined as the ability of an enterprise to adapt to changes in the environment and continue to meet its obligations. Daft (2021), using the open systems model, defines this goal of survival as "providing for the survival of the organization," which is accomplished by having a favorable exchange with its environment. "The organization must find a market for its outputs...if the outputs are not of value to the environment, the organization will no longer exist" (p. 15).

The goal of survival leads to several strategies:

- Liquidity Management: The amount of cash required to pay off all immediate obligations, even if it requires sacrificing long-term investments.
- Risk Management: Diversifying products or markets to prevent an entire business from failing from one catastrophic source.
- Adaptability: The willingness to change business models as the industry evolves (e.g., for an organization that manufactures typewriters to transition into a manufacturer of computers).

Survival is the limiting factor that defines all other goals and, as Drucker (2008) famously stated, the most important goal of a company is to survive and the primary focus of any business economics is avoiding loss, not maximising profit.

4.4 The Hierarchy and Conflict of Objectives

Recognizing that there is a tension between the three objectives; Profit, Growth and Survival; is crucial for students of management. The three objectives do not always coincide perfectly with one another.

- Profit vs. Growth: One way to achieve a greater market share (or greater Growth) would be through very aggressive reductions in price. This may for a limited time result in a reduction of profit margins (less Profit).
- Profit vs. Survival: In times of recession, one way to generate cash to pay debts (Survival) would be to sell assets at a loss, thereby sacrificing the Profit objective.
- Short-term vs. Long-term: If current year's Profit is maximized by cutting R&D expenditures, the financial results for the current year will improve, however, the long-term prospects for Survival and Growth would be placed in jeopardy.

Successful management attempts to balance the competing objectives of Profit, Growth and Survival. Typically, modern business enterprises employ a "weighted" objective function in their operations, where different objectives will take priority, depending on what stage of the life cycle the business is currently in. A new venture will tend to emphasize Growth and Survival as primary goals, while an established business will tend to emphasize Profitability and Stability.

In summary, the objectives of the economic enterprise are multiple, not single. The objectives represent an intricate and complex triad, with Profitability providing the means, Growth providing the momentum and Survival providing the necessary condition for all other activities to take place.

5. Roles of the Enterprise

To understand the importance of the business, you need to look at the business' purpose/what it intends to do or achieve. You must also look at the business' role(s)/what it provides society in terms of products or services.

The business is the engine of our economy. A business has several dimensions of contribution: Economic, Social, and Technical. These dimensions of contribution are linked together and the failure of one can lead to the failure of the others.

5.1 The Economic Role: Wealth Creation and Distribution

Enterprises are created for a purpose, namely that of creating wealth by generating both goods and services and providing jobs and income. They accomplish these functions through the efficient organization of resources – that is, efficiently transforming low-value inputs into higher-value outputs (or consumer products) to meet human needs. According to Samuelson and Nordhaus (2010), "The Firm is an organization that coordinates production…The Firm is the basic mechanism for creating wealth in a market economy (p. 110)." Enterprises create wealth in two ways: by producing and selling goods and services, and by distributing income generated from the sale of goods and services. Enterprises increase the aggregate supply of goods and services in an economy by bridging the gap between the availability of raw resources and consumer demand for products (i.e., they increase the aggregate supply of goods and services). For example, when an enterprise manufactures a vehicle, it bridges the gap between the availability of raw materials (i.e.,

metal, plastics) and the demand for that vehicle (i.e., the total number of vehicles produced by that firm in that time period) and thereby increases the total number of vehicles sold within that economy. Second, enterprises are the primary means of distributing income generated from the sale of goods and services. For example, as an enterprise generates income from selling vehicles, it provides wages to employees, pays rent to land owners, and pays taxes to the state; therefore, enterprises are the primary mechanism for distributing income throughout society.

Enterprises also play a critical role in determining prices within the economy by establishing the price at which goods and services will be sold, assisting in establishing equilibrium prices within the market through the number and volumes of goods sold and produced, signalling to the entire economy the relative scarcity of goods and services and assisting society in allocating resources throughout the economy.

5.2 The Social Role: Employment and Community Integration

The economic function is aimed at achieving efficiency while the social function is concerned with achieving humanity. The enterprise is comprised of a group of individuals; for the majority of adults, the workplace is the main and sole source of socialisation outside of their family unit.

According to Drucker (2008), because the enterprise is part of society, it is required to fulfil its social obligations: "The Organization is a human group… it must meet the individual's value system, especially their requirements for status & function" (p. 43).

The social functions of an enterprise include:

- Provision of Employment: The most visible social contribution made by the enterprise is job creation; thus the enterprise provides its employees with a means to earn income (a financial gain); however, it also provides them with dignity, identity and a means to socially integrate into the community. High levels of unemployment are therefore not only a waste of the economy; they also represent a social tragedy.
- Socialisation/Training: The enterprise acts as a school of life by teaching its employees various skills, development in discipline and teamwork. Furthermore, the enterprise brings together many diverse groups of people, and directs them in achieving a common goal, resulting in a greater sense of social cohesion.
- Increasing the Standard of Living: By producing products on a mass basis (in lower quantities), the enterprise makes products available to a larger segment of the community; therefore, it increases the material standard of living for the community, as well.

As with all social functions/purpose, the enterprise is responsible for the quality of life for its employees by meeting their needs in the areas of working environment, safe working conditions, and overall employee satisfaction. A "toxic" work environment can have an adverse effect on the social framework of society, just as a healthy enterprise can stimulate the social structure.

5.3 The Technical and Innovative Role

Enterprise (i.e., a company) plays a major role in technological advancement, providing a supportive environment for the development of breakthrough innovations. Each enterprise is an experimental laboratory where scientific findings are converted into commercially viable applications.

According to Schumpeter (1934), the entrepreneur (and therefore, the enterprise) serves as the foundation for the development of innovation, which Schumpeter defines as the introduction of "new combinations of goods" for consumption by consumers. According to Schumpeter, "The basis for the capitalist (economic) system is new products, new ways to produce them or new ways to transport goods.... The growth of the capitalist (commercial) system depends on the advances made by enterprises in developing new products (consumption), new ways to produce new products and new ways to transport new products".

The technical contributions of enterprises include:

- Innovation (the development of new products (e.g., iPhones) and processes (e.g., automation)), which create growth in productivity, producing the source of sustainable long-term economic growth.
- Technology transfer (the process of bringing new technologies to market by diffusing advanced technology within the economy).
- Research and Development (R&D) by large enterprises, which invest billions of dollars in R&D to advance the frontiers of human knowledge in fields such as drugs and artificial intelligence.

To sum up, businesses are not simply economic machines that generate profit; they are complex organizations that create (Economic), maintain (Social), and drive progress (Technical), and understanding these three facets of a business is necessary for a complete analysis of an economy.

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Axis 2:

Origin and Evolution of the Enterprise

1. From Family Production to Craft Units

A comprehensive understanding of the current day enterprise requires a backward glance through time to the earliest forms of enterprise. The history of enterprise is not simply based on a series of technological discoveries, but rather on the evolutionary history of organizations, which documents the shift from production for subsistence to the development of production for the purpose of exchange. The origins of this transition can be found in the era prior to the industrial revolution, when there was no distinction between the "household" and the "firm." Over time, we began to witness the rise of specialised craft guilds that eventually served as the foundation for eventually developing a professional industrial sector.

1.1 The Family as the Primordial Economic Unit

The family was the primary unit of both consumption and production in agricultural-based and early pre-market societies (Heilbroner, 1999). This era is often referred to as the Domestic Economy. The Domestic Economy is defined by autarky, which is defined as "producing for (one's) own consumption." "In the pre-market world, the family was the factory...Men and women produced the things they needed to survive (and consumed them)" (Heilbroner, 1999, p. 23). In this type of economy, the family would not be able to identify a business, there was no market for transaction. The family worked to survive, not to make a profit. The division of labor was based on biological characteristics: age and sex, not by technical ability.

Once agricultural surplus began to show up, the need for exchange became necessary. Families became more specialized, with some families producing excess grain and others producing excess cloth. This specialization in the production process forced the change from the domestic economy to the transactional economy as well as the development of a business enterprise. The concept of the household began to decouple their consumption from their production activity, which is the foundation of a business enterprise.

1.2 The Emergence of the Craft Unit (The Workshop)

Growth in urbanization during the medieval period in Europe and the Islamic world resulted in the emergence of a new, distinct form of organization for production, the Craft Unit, or Artisan Workshop, representing a major development in the economic evolution of society as a whole.

Craft Workshops were clearly delineated between living and working spaces, but both were normally found in the same building. An artisan was therefore independent and

an owner of his tools (capital) and possessed specialized knowledge and expertise to create products (human capital).

Landes (2003) goes on to say that the Craft Workshop also represents the introduction of professional standards to the production of goods. While domestic producers were typically engaged in their work only part-time, artisans had full-time employment and were fully specialized in their field. He also states that "the artisan shop was a place of order and superiority - the master craftsman was not just a worker; he was also the manager of all his apprentices and journeymen." (pg 45).

The Craft Unit has the following distinctive characteristics:

- A single unit for command and execution: The master craftsman designed the product, acquired the raw materials needed for its production, and executed the production of the goods. There was no separation of "management and labor."
- A reliance on simple technology: The tools used to manufacture products were primarily of a manual and personal nature, meaning the production of goods produced by the craft unit depended solely on the craftsmanship of the artisan and not the speed of mechanical production.
- A direct relationship between the artisan and the consumer of the products produced: Most products were produced through a "bespoke" production process; that is, products were specifically created for a customer and were tailored to their needs by the artisan. Thus, artisans directly dealt with the end customers, unlike domestic producers who commonly produced goods and provided them to an intermediary.

1.3 The Guild System: The First Corporate Structure

The rise and expansion of craft workshops brought about the establishment of Guilds (Corporations in the terminology of the time) in the medieval period. Guilds were groups of artisans that controlled the practice of their respective trades in their town(s). Although Guilds did not operate as "enterprises" in the modern sense, they did develop the first regulatory systems for conducting business.

According to Pirenne (2014), guilds were established to protect the producer rather than the consumer. They were responsible for regulating prices, quality, and entry into their trade. "The purpose of the guild was to ensure that the members could survive economically by preventing competition... it created a monopoly in the local marketplace" (p. 182).

In establishing the guild system, the foundation was created for organized labour hierarchies which are still present in today's world. The following is an outline of the three levels of the guild (the structure):

- Apprentice: Young person who works for food/sh shelter but does not receive wages.
- Journeyman: A skilled individual who is paid a daily wage (journée) and can work for multiple masters.

- Master: Independent businessperson who has created a "masterpiece" and has been permitted to join the guild.

The structure was very rigid. Guild structure emphasized stability and quality rather than encouraging innovation or development. A master was not allowed to advertise or undercut the price of a neighbouring master. This ensured social stability, but, as Mokyr (2002) noted, it also discouraged economic growth. "The guild system was a rent-seeking institution that inhibited technological progress... it replaced efficiency with conformity" (p. 31).

1.4 The Transition Limits

For centuries, craft units were the primary type of industrial organization, but there were upper limits to this type of organization. Any production was dependent upon human labour and skill (i.e., muscle power). For example, a master craftsman could only supervise a limited number of apprentices at one time. Therefore, since global trade was growing rapidly during the 16th and 17th centuries, a new industrial organization was needed to remove the bottleneck of the single artisan. This need resulted in the putting-out system that ultimately contributed to the development of industrial factories, which will be discussed further in the next section.

2. The Domestic System and the Rise of Manufactories

As international commerce grew in the 1600s and 1700s, the strict regulations imposed by craft guilds were no longer able to fulfill the huge amount of consumer products being bought and sold around the world. Because independent artisans could not produce products as quickly due to geographic, or location limitations on their production capabilities and limited financial resources, they created a backlog of production. As these economic forces put pressure on the craft system, a sequence of structural evolution occurred, first with the decentralized Domestic System (or Putting-out System), which evolved to become centralized Manufactory production methods. Collectively, these two development stages are the major historical link between medieval craft production and the modern, industrially manufactured product.

2.1 The Domestic System (Putting-Out System)

Merchant-capitalists relaxed the restrictions that cities established for businesses, and the Domestic System (or Verlagssystem) included a decentralized approach to production. Rather than workers focusing their production efforts in cities, the domestic system allowed families to use their homes in rural areas to produce goods from raw materials supplied by the merchant. They produced goods by spinning and weaving using common tools within the homes, after they would return the finished product to the merchant, and he would pay them on a piece basis.

Landes (2003) attributes the domestic system's emergence to the economic rationale of the merchant's exploitation of the rural workforce due to its “elasticity.” “As the

merchant could increase his production without needing to invest in fixed capital by hiring more cottagers...” (p. 44). By doing this, the entrepreneur was able to reduce his risk of experiment with supply and demand. If the demand for produced goods declined, the merchant would just stop providing raw materials to rural workers, leaving the cost of idleness to rural workers.

Major characteristics of the Domestic System are as follows:

- Separation of Commercial and Technical Functions: The merchant purchased raw goods and sold the completed goods and the rural worker produced the completed product.
- Decentralised: There was no single factory. The merchants “factories” were located in numerous villages.
- Loss of Worker Autonomy: The independent guild artisan had ownership of the completed product as a self-employed person, whereas the domestic worker as a wage earner (proletarian) only had ownership of their labour and tools, but had no ownership of the raw materials or the completed product.

The Domestic System was not without weaknesses. According to Ashton (1997), “the inefficiency of control” by merchants created problems of embezzlement (workers withholding raw materials) and variability of quality. In addition, the workers determined the speed of production, making it difficult for the merchant to establish production schedules.

2.2 The Rise of the Manufactory

In order to overcome the challenges concerning control and quality of the industrialization process, entrepreneurs began to establish factories in which to put their employees under one roof. This is how the Manufactory emerged (from the Latin word Manu Factum which means "made by hand").

While the Manufactory differed from today's factories in that it did not use mechanical power, it represented an advanced organisational model. By ensuring that all employees worked in one area, the entrepreneur could impose discipline and use standardised quality control methods; this would enable successful gathering of raw materials.

Mokyr (2002, p.121) asserts that the manufactory was an advance in organisation prior to it emerging as a technical advance. The factory system became the model based on the fact that supervision over worker activity was possible; and that this change reduced the cost of transactions associated with the supervision of worker activity.

2.3 Division of Labor in the Manufactory

One of the most important innovation in manufacturing emerged from the evolution of the detailed Division of Labor found within the Manufactory of the 1700s. Prior to this change, a craft guild consisted of a single craftsman creating an entire item (for example, a shoe). The Manufactory divided production into many simple repetitive steps.

Adam Smith illustrates this increase of productivity with an example he observed at a pin manufactory. An individual worker was able to produce less than 1 pin per workday while 10 workers, with each worker performing one specific function (drawing the wire, cutting it, and pointing it) could produce an aggregated minimum of 48,000 pins per workday.

According to Heilbroner (1999), "The division of labor is not an interesting historical fact from the 18th century, but the principle upon which mankind left behind the limitation of subsistence" (p. 52). As a result of this specialization in manufacturing, workers have developed improved dexterity, reduced time lost while switching tasks, and manufactured simple tools to perform very specific tasks.

2.4 The Transition to Hierarchy

The Manufactory also formalized the hierarchical structure of the modern corporation, providing a purposeful contrast between the owner, who provided the facility and equipment; the manager, who oversaw the production floor; and the worker, who performed the task.

This period represents the removal of worker authority over production. The cottage environment allowed the worker (example: weaver) to work at their own pace, which sometimes included taking breaks to cultivate their gardens. The factory setting dictated that time was money; therefore, the sound of a bell started and stopped workdays while imposing the regimented discipline typically associated with the modern workplace.

To summarise, the Domestic System and the Manufactory were not only transitions; they were the laboratories where the conventions associated with modern day capitalism - wage labour, authority over the process of production, centralised leadership and division of labour - were first tested and codified to provide a framework for the mechanical revolution.

3. The Industrial Revolution and the Mechanized Enterprise

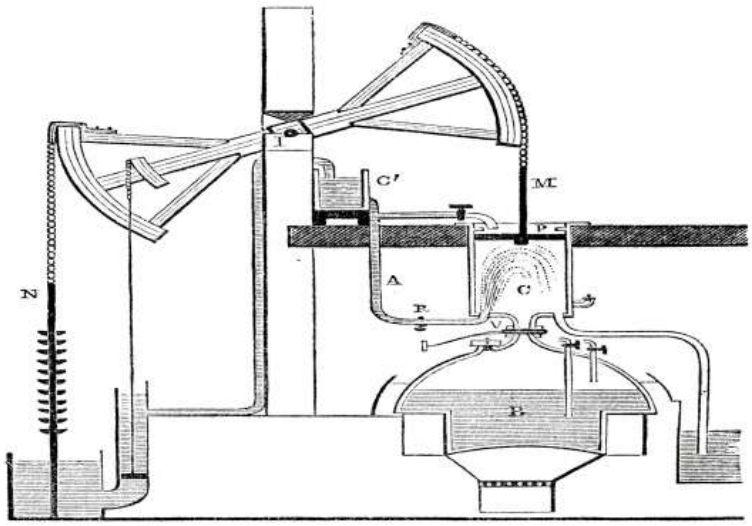
In the late 18th century was the Industrial Revolution reached its turning point; this point was not just an improvement in the production process; however, this time represents a major transformation of the structure of economic enterprises. The Industrial Revolution mechanized labour at the time of the centralization of the labour force in the manufacture. At the same time, the introduction of steam power and sophisticated machinery moved the enterprise from a labour intensive entity to a capital intensive entity and created the contemporary industrial manufacturing plant as a result of this transformation that originated in England and spread to other parts of the world and it is on this solid foundation that we have developed our contemporary corporate economy.

3.1 The Technological Shift: From Muscle to Machine

Innovation in technology is what defined the shift to new forms of production. Prior to this time, production was limited primarily by the amount of energy humans could exert using organic energy (examples: wind, water, animal muscles). Once the steam engine was invented by James Watt and used to power textile machines such as the Spinning Jenny, physical limitations no longer bounded this industry.

According to Landes (2003), this was the moment at which the "unbinding of Prometheus" occurred, meaning that technological advancement became self-sustaining. "The industrial revolution was not merely a series of inventions...but rather the displacement of human ability with machines and the deployment of machines to substitute for powered motion from animals and/or people" (p. 41).

As a result of technological innovation, enterprises experienced dramatic changes organizationally. Production machines were heavy, costly in price, and required a centralized power source (i.e., steam engine). Thus, machines could not be utilized in homes as spinning wheels were, but instead were contained in one location, or factory; therefore, workers would go to the factory rather than machines coming to them.



3.2 The Birth of the Modern Factory System

The characteristics of the Factory System included rigid and structured discipline, along with continuous flow of production. Under the Domestic System of production however, work was at various intervals throughout the day. Production in the factory was non-stop as the engine produced power without any fatigue.

According to Ashton (1997), "The Factory System introduced an entirely new form of discipline that had been alien to the rural worker. The Factory demanded punctuality and obedience; The rhythm of work was no longer dictated by the seasons or the will of the worker, but by the relentless pace of the machine" (p.58).

Mechanized Enterprises had many distinguishing characteristics including:

- Capital Intensity: The cost to enter into business became astronomical due to the high level of financial capital required for the construction of factories and the installation of machinery. As a result, joint-stock companies emerged to allow individuals to pool their resources and create sufficient capital to enter into business.
- Standardization: Machines provided for the mass production of goods. Therefore, not only was the uniqueness of the artisanal product eliminated; The introduction of machines enabled the mass production of goods.
- De-skilling of Labor: The introduction of machines required that many previous artisanal skilled labour jobs be converted to simple machine cycles accessible to unskilled labour or children working at the machine.

3.3 The Managerial Revolution

The size of factories increased and could have therefore hired many more workers. The original concept of the owner-manager no longer existed as one person could not possible look after purchasing, production, sales and discipline at the same time. This need for managerial expertise created a new level of employment and gave rise to the manager (Chandler 1977, 1). Chandler describes the "Visible Hand" of the corporation as the "visible hand" of business. He states that the "invisible hand" of the market has been replaced by the administrative coordination of managers. "Administration, through the development of a hierarchy of salaried executives, replaced market mechanisms in the coordination of business activities of private firms... and the allocation of resources and wealth through the economy" (Chandler 1977, 1).

In this time period the following happened:

- Development of organizational charts which provided formalized hierarchies of who reported to whom.
- Development of accounting systems to track the depreciation value of capital and unit costs.
- Development of systems of production to provide a steady supply of coal and raw material inputs to operate the very large capital assets in the factories.

3.4 Economic and Social Impact

The development of mechanized production has completely transformed the economy and subsequently altered the shape and progression of urban growth by encouraging rural to urban migration. Factory towns such as Manchester and Detroit have emerged as a result of this migration. The development of mechanization has also led to the establishment of a rigid class structure that separates those who own the means of production (bourgeoisie) from those who sell their labour (proletariat).

The factory system also commodified labour, meaning that labour became visible and separable from both the worker and the good this worker was producing. "The worker no

longer sold the product of his/her labour, but the 'energy' used to produce the goods he/she produced." (Heilbroner). The new commodification of labour has resulted in significant social disruption, which spurred the creation of labour unions and new political ideologies such as Socialism, to help regulate the power of industrial production.

The industrial production system created an unprecedented increase in efficiency which also resulted in a dramatic increase in productivity; thus enabling the costs of goods to fall dramatically and the mass of goods to be made affordable to the masses, such as with clothing and tools. The mechanized enterprise also demonstrated that scarcity can be overcome through the systematic application of scientific management and the use of capital.

In short, the Industrial Revolution transformed the way in which products are produced by moving from the workshop model to a complex and well-organized mechanized model, which created three key components of modern enterprise (centralized mechanization, management hierarchy, mass production).

4. The Era of Conglomerates and Multinational Corporations (MNCs)

The last step, which is the highest level of sophistication, of the evolution of enterprises is the transformation from a single-site to a multi-site and a global company. By the middle of the 20th century, the industrial world was no longer characterised by local factories, but instead had been overtaken by huge companies that were spread across multiple industries and across international borders. This time period also marked the development of two interrelated concepts: the Conglomerate (a company that has multiple business units) and the Multinational Corporation (an organisation that has operations in multiple countries), both of which are based on financial diversification and global market integration respectively. Both types of business organisations are the end result of the evolution of enterprises and, as such, require very complex management structures to manage them than organizations did during the period of direct oversight typical of the first large manufacturing enterprises.

4.1 The Structural Revolution: From U-Form to M-Form

The establishment of multi-functional structure in the early 1900s severely restricted enterprises' ability to grow; as such, corporations began to adopt Multi-divisional structure as a solution to their inability to effectively manage the increasingly complicated functions of production, sales and logistics within their organisations.

The Multi-divisional structure provided a framework to release the general executive team from the day-to-day management of the operational units so that they could focus on the long term strategy of the entire enterprise, after working with their respective divisional units to establish an allocative capital return on their investments (Chandler, 1962, p. 382).

Ultimately, the Multi-divisional structure created the conditions for the development of large modern corporations; for example, it permitted General Motors to operate Chevrolet, Buick, and Cadillac as distinct, profit centres while still working towards the corporate strategic objectives and common operational controls through the corporate office; thus permitting the enterprise to sustain growth to an almost infinite scale without collapsing under its own mass.

4.2 The Rise of the Conglomerate

Following the development of the M-Form structure, corporations realised that they were not restricted to a single industry. If the central management was essentially acting as a 'capital market', allocating funds to individual divisions, then why not invest in entirely different industries? This line of reasoning led to the birth of the conglomerate, which is defined as a corporation made up of unrelated businesses.

Conglomerates thrived during the so-called golden age of conglomerates (1960s-1970s) based upon the theory of financial synergy. Managers believed that by diversifying, they could minimise the fluctuations in their businesses. If the steel division was performing poorly, the insurance division may be performing well. Drucker (2008) referred to this era as a time when management was regarded as a generic discipline. "The conglomerate's assumption was that 'management' is a unique and separate skill... and, therefore, a competent manager could manage anything from a foundry to a flower shop" (p. 367).

The conglomerate model frequently encountered challenges in the financial markets; the "conglomerate discount". Investors found it difficult to place a value on such complex entities. While many conglomerates were dissolved in the late 1980s, they still exist in companies such as Berkshire Hathaway and General Electric, and have successfully created value for shareholders through the execution of extraordinary leadership.

4.3 The Multinational Corporation (MNC)

In addition to diversifying, firms began to seek out geographic expansions. A Multinational Corporation (MNC), according to Dunning and Lundan (2008), is defined as an enterprise that controls and owns value-adding activities in at least two separate countries (p. 96). The MNC's establishment involves Foreign Direct Investment (FDI), creating factories; offices; and R&D centers located in countries outside of the MNC's home country rather than exporting from its home country. They further argue that MNCs are formed to take advantage of a firm-specific, ownership advantage, whereby firms possess ownership-specific advantages (technological and/or brand-name) that can be leveraged by producing in foreign locations rather than by exporting to those locations (p. 98).

The MNC has fundamentally changed the global economy by enabling Global Value Chains (GVCs) to develop. A single product, for example, an iPhone, is no longer produced by a single country (i.e., made in one country). Instead, an iPhone is designed in the United States, sourced from Japan and South Korea, assembled in China, and sold in

Europe. This fragmentation of the production process allows the MNC to take advantage of the arbitrage that exists due to differences between countries with respect to wages, taxes, and skill levels in labor.

4.4 Challenges of the Global Enterprise

Complexity is introduced exponentially by managing MNCs. MNCs must deal with many different legal systems, cultural norms and currency fluctuations. Companies will need to balance the demands for Global Integration (standardizing products to reduce costs) against the demand for Local Responsiveness (customizing products to meet the tastes of local consumers).

Bartlett and Ghoshal say that the "Transnational Solution" is one way that a modern enterprise can combine efficiency and flexibility at the same time. A transnational company "proposes to develop a decision-making process that respects different perspectives and utilizes the full range of an organisation's capabilities" (p. 14).

Additionally, the rise of MNCs has prompted many discussions about their influence on politics. MNCs generate more revenue than many countries' Gross Domestic Product, meaning they have considerable political power, leading to questions about sovereignty and the global social accountability of MNCs.

4.5 Conclusion of the Evolutionary Arc

The progression of enterprise has been a journey of increased capacity for organizing human effort from the small artisan shop to large multinational corporations.

- While the craft unit was built on the optimization of individual craft skills, the factory focused on optimal use of mechanical power.
- At present time, corporations have expanded their operations through optimal allocation of financial and intellectual capital worldwide.
- The present day enterprise is "networked" and many times it is neither tangible in terms of location nor involved physically, yet still relies on the structural framework created by 20th century industrialists.

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Axis 3:

The Enterprise and the Internal Environment

1. Concept and Diagnosis of the Internal Environment

In order for any organization to successfully traverse through unknown waters and challenging external marketplace conditions, it must first ascertain the seaworthiness of its own ship. Strategic management does not begin with consideration of competitors, but instead starts with introspection (i.e., the diagnosis of the Internal Environment). Introspection entails an examination of the internal workings of the organization (i.e., resources, capabilities, and culture) so that the organization can understand what it can do as opposed to what it may be wanting to do.

1.1 Defining the Internal Environment

The internal environment covers everything that exists in the organization; that is within the organization's boundary and affects how the organization works, but that the organization has direct control over. In contrast to the external environment, which exists outside of the organization (e.g., inflation or political systems) and can only be reacted to by the organization, the internal environment is mutable; it is clay in the hands of the manager.

David (2011) describes the process of conducting an internal audit as collecting and combining elements of the firm's organizational management, marketing, finance, operational, and R&D functions into a complete picture. He also highlights how the internal audit process gives all of the participants a clearer understanding of how their job, department, and division fit together into the total organization (p. 93).

Inside the internal environment are three main levels:

- Resources - The firm's "input" owned by the firm (i.e., cash, machinery, trademarked brand).
- Capabilities - The firm's ability to utilize its resource capabilities (i.e., streamlined manufacturing processes).
- Core competencies - The firm's distinguishable strengths (e.g., Apple's design reputation).

1.2 The Logic of Internal Diagnosis

What makes internal diagnosis so vital? The Resource Based View (RBV) of the firm emphasizes that competitive edge derives predominantly from internal differences (i.e. differences within the firm) rather than from external placement (i.e. differences between firms). Two organizations may be subject to very similar market conditions; however, one

of those organizations is thriving while the other is failing because of the way these operations function internally.

Barney (1991) argues that an organization is a “bundle of resources”; therefore, “a firm has a competitive advantage whenever it is utilizing a value creating strategy that is not concurrently being implemented by any other present or future competitor” (p. 102). To find the firm's competitive advantage, the manager must take on the role of the diagnostician, looking for the good and the bad.

There are two main purposes of doing an internal diagnosis:

- Assessing the Firm's Strengths: Assets and/or capabilities available in an organization that can be used to take advantage of an opportunity that exists in the marketplace. For example, having a significant cash cushion is a strength that will allow for quick purchases of other companies.
- Assessing the Firm's Weaknesses: Internal deficits or liabilities that place the company at a disadvantage in competing within the marketplace. Examples of weaknesses may include excessive employee turnover rates or out-of-date equipment.

1.3 Tools for Internal Diagnosis

Managers employ an array of diagnostic tools to measure the health of their business instead of relying on just one thermometer.

- Functional Analysis: This is a traditional method that assesses the firm by separating out functional areas (Marketing, Human Resources, Finance, etc.) to individually evaluate performance. For example: Are leads being generated by the Marketing function? Is waste being minimized by Production?
- Value Chain Analysis: Developed by Porter (1998), this provides an overall breakdown of a firm into both primary and supporting activities. "Value chain analysis is a method of enabling the firm to identify where they add value..." (Porter, 1998, p. 33) and ultimately provides an evaluation of how the firm utilizes resources (i.e., is value added through logistics, customer service, etc.).
- Financial Ratio Analysis: This is a quantitative representation of the firm's performance, which enables the firm to obtain an objective assessment of the financial condition relative to industry benchmarks by reviewing liquidity ratios, profitability ratios, and leverage ratios.

1.4 The Challenge of Objectivity

A significant challenge of diagnosing an organization’s internal environment is "organizational myopia." A manager may misperceive his/her organization’s strengths or weaknesses by either being too attached to emotional connections or to previously achieved levels of success. The organization may perceive that its product is superior (a strength), however, if the consumer provides feedback that indicates the product is antiquated (a weakness), then the organization has a false perspective on its capabilities.

According to Hitt et al., in order to accurately diagnose an organizational concern, one must possess a "global mind-set" and be able to view the organization in an unbiased manner. "Managers must realize their organization's resources and capabilities are dynamic and change over time" (p. 78). Therefore, internal diagnosis must take place as an ongoing, moving target, and is not a one-time occasion.

The idea of the internal environment is that the organization is a distinctly composed set of resources and/or capabilities. Diagnosing is the means by which management tracks these resources/capabilities as a means of verifying that they are consistent with the organization's strategic objectives.

2. Tangible and Intangible Resources

A company's initial step in diagnosing its internal environment entails conducting an inventory of all the assets possessed by the company. In the Resource-Based View of a company, a company can be seen as not just a collection of different products but rather as a distinct collection of different resources, which are all the things that are used by the company in creating value in the marketplace. Different resources differ in their potential to create value; thus, to appreciate and maximize the potential of a company's resources, one must be able to identify and differentiate between the company's tangible resources (which can be considered the organization's "hardware") and intangible resources (which can be viewed as the organization's "software"). The interaction between the two types of resources determines how well a company is able to compete in the marketplace.

2.1 Tangible Resources: The Visible Assets

Tangible resources are the actual physical and financial resources that belong to an organisation. They are observable, measurable or able to be measured, and easy to account for in an organisation's balance sheet. (Hitt et al., 2017) Because they had been historically the major source of wealth for all companies, a company with the most cash and the largest factories would generally emerge as the largest or the dominant company in its industry.

Hitt et al. (2017) also breaks down tangible resources into four subcategories of assets: Financial, Organisational, Physical and Technological. Hitt et al. (2017) go on to say that tangible resources are assets that are able to be observed or quantified... [that] range from manufacturing machinery and production plants to distribution centres and formal reporting organisations. (p. 83)

2.1.1 Financial Resources

The firm is sustained by finances. Financial resources represent the enterprise's ability to grow, invest, and withstand economic challenges. Financial resources encompass the company's credit rating (borrowing ability); its ability to generate internal cash flows (capital) and cash reserves (cash on the balance sheet). Companies with large financial

resources (deep pockets) can spend on advertising more than competitors and endure a price war longer, thus providing a temporary advantage over competitors.

According to David (2011), a firm's financial condition provides one of the best indicators of a company's competitive position and attractiveness to investors. "Financial conditions often affect existing strategies and affect their implementation ... [financial conditions] are the most important resource when executing a strategy" (p. 102).

2.1.2 Physical Resources

The above mentioned comprise the material assets that are utilized in production and operations. The material assets may include: a) "level of sophistication" of manufacturing plant; b) where retail stores will be located; c) access to raw materials; and d) inventory of equipment. In sectors like mining or heavy manufacturing, the quality and location of physical resources represent the predominant factors of success. For instance, an enterprise that is located in a major metropolitan area with high traffic will, generally speaking, possess a superior physical asset relative to a competitor in a rural community.

2.1.3 Technological and Organizational Resources

A number of technology assets (patents, copyrights, trade secrets) are often referred to as intangible assets; yet, because they have been legally defined and protected, they are "tangible" assets, with the potential of licensing or selling them. Likewise, organizational resources are the formal planning, command, and control systems in the organization's structure - i.e., the organizational chart itself is a tangible resource that determines how information flows.

Tangible resources have a strategic limitation because they can be easily replicated by another organization; therefore, when competitors have funds available to them, they may acquire the same type of machinery or build a very similar manufacturing facility. While tangible resources are essential for the operation of an organization, they do not represent a source of sustainable competitive advantage in themselves, with few exceptions.

2.2 Intangible Resources: The Invisible Drivers

As economies worldwide become less industrialized and more knowledge-based, intangible assets (resources) are taking on increasing importance in strategic management. Intangible assets are considered to be built over time from the unique history of the firm (Grant 2016). The unique characteristics of intangible resources include that they cannot be seen and/or touched. Because of this fact, competitors also have a difficult time analyzing and/or copying these types of resources as compared with tangible resources such as buildings or equipment.

Furthermore, Grant argues that, due to the less apparent nature of intangible resources, they are also more likely to lead to a sustainable competitive advantage. "Intangible resources … are more valuable than tangible resources. They are invisible, which makes them much more difficult for competitors to understand or copy" (p. 125).

Intangible resources can be divided into three broad categories: 1) human resources, 2) innovation resources and 3) reputation resources.

2.2.1 Human Resources

Human Capital Is A Firm's Human Capital. The Skill, Knowledge, And Reasoning Ability Of Employees Is The Firm's Human Capital. This Includes Technical Skill And The "Organizational Trust" Employees Have And The Capacity Of Employees To Work Together As A Team. An Excellent Engineer Is A Resource; The Culture Of An Organization That Creates An Environment In Which That Engineer Collaborates With A Marketer Is A Capability.

Barney (2007) emphasized Human Capital Is Unique Because Human Capital Is Not Separately Able From An Individual. Firms Cannot Have Ownership Of Human Capital As They Do Of Other Forms Of Capital (For Example, Physical Capital); However, The Relationship Between Employees And The Firm (i.e., Human Capital) Can Be A Source Of Continued Competitive Advantage (p. 143). When An Organization Has An Employee Population That Is Highly Skilled, Highly Motivated, And Aligned To The Organization's Mission, Then They Have An Important Resource That Cannot Simply Be Purchased.

2.2.2 Innovation Resources

Innovation resources represent a firm's ability to create new ideas. Innovation resources include both scientific capabilities, as well as the organizational culture surrounding research and development (R&D) and intellectual property stored in non-codified forms. Together these components provide the organization's overall "knowledge stock." Knowledge assets do not depreciate in value when they are used, as do physical assets; instead, knowledge assets tend to increase in value the more they are used, as they are shared and utilized by others. A company that has a strong innovation resource will provide not only a new product to the market but also a process to support on-going new product development.

2.2.3 Reputational Resources

In business, an organization's reputation can be considered its most important unseen resource. This includes the corporate brand name, customer loyalty, and relationships with suppliers and governments. A brand represents trust in the quality and reliability of products.

According to Daft (2021), an accumulation of goodwill associated with a firm creates an asset that is useful for reducing the overall costs of conducting business. "A positive reputation enables the company to sell at premium prices and signals to the market that there is no risk associated with buying products from the company" (p. 192). For example, the brand value of Coca-Cola or Mercedes-Benz far exceeds the value of the factories used to manufacture their products. If these companies had all their factories destroyed, they would be able to rebuild them; however, if they lost their reputations, it is likely that they would go out of business.

2.3 The Strategic Superiority of Intangibles

Interestingly enough, though it may seem like an academic distinction and thus irrelevant in some sense, the importance of this distinction for the profitability of an organization cannot be stressed enough. During the last several decades, intangible resources have increasingly been the primary source of an organization's value creation. This can be noted by examining the growing gap between the 'book value' (the value assigned to tangible assets; e.g., buildings, machines, etc.) and 'market value' (i.e., the stock price on the public markets) of many large companies.

Kaplan and Norton (2004) creators of the Balanced Scorecard, state that the value creating process has fundamentally changed. "In the industrial era, companies created value by turning raw materials into finished products... In North America today, over seventy-five percent of the value of the average company is derived from intangible assets" (p. 4).

The following are a few examples of some of the economic characteristics surrounding intangible resources that demonstrate the superiority of intangible resources:

- Non-Rivalry: Unlike machines that can only be used in one location at one time, brands and other types of intellectual property can be used simultaneously across multiple, if not an unlimited number of locations, without depleting the resource.
- Causal Ambiguity: It is very difficult for a competitor to identify the specific intangible resource that causes the competitor's successful outcomes. For example, is the competitor successful due to culture, leadership, or specific skillsets? The uncertainty related to these resources prevents others from replicating success.
- Path Dependency: Intangible resources are built/grown over an extended period of time. It is not possible for a competitor to 'crash' a program and develop a 100-year reputation for quality within a 12-month time frame.

2.4 The Symbiosis of Resources

Intangible resources are the stars of strategy but can't exist in a vacuum as an enterprise is required to have tangible resources in order to deploy her intangible assets. A brilliant piece of software code (intangible) needs a computer server (tangible) to run; a world-class brand (intangible) needs a logistics network (tangible) to deliver its products. For this reason, the analysis of the internal environment should assess the balance & fit between these two types of resources. A company that has great ideas without cash (tangible) will go bankrupt; a company that has cash but no ideas (intangible) will stagnate. Rothaermel (2017) concludes that tangible & intangible resources, reinforce one another: "The strategic value of resources lies within the unique combination of resources" (p. 112), not simply their accumulation. A successful enterprise is one that utilizes her tangible resources to amplify & protect her intangible core.

3. Core Competencies and Competitive Advantage

We defined an enterprise as being composed of resources (both tangible and intangible) in an earlier section. However, simply having resources does not guarantee success. A library full of books does not make someone a scholar; it is the reading, synthesizing, and application of that information that is more important than merely owning the resources. The same idea applies in business economics, where businesses will create value when their resources are integrated and deployed properly. The ability to coordinate many different types of production skills together, along with integrating a number of different technologies, is what we call a Core Competence. Core Competences are the means through which an organization can connect raw materials to reach its ultimate goal of Competitive Advantage in Strategic Management.

3.1 The Concept of Core Competencies

This article discusses core competence as popularised by Hamel and Prahalad (1994) in the book 'Competing for the Future'. They showed that managers tend to overemphasise the end products of what they produce (the leaves and fruit on trees) and fail to appreciate the underlying strengths (roots) that ultimately sustain the greater organism.

Core competencies are defined as "the collective learning of an organisation, especially how to integrate disparate skills in the production of goods and services, and the ability to use and combine varying streams of technology" (Hamel & Prahalad 1994 p. 202). While the physical assets of a business continuously decline in value through use, core competencies increase in value as they are used and shared.

To further elaborate on the distinction between a true core competence and a capability, use the analogy of a tree:

- Trunk and Major Limbs - core products.
- Smaller Limbs - business units.
- Leaves and Fruit - end products sold to customers.
- Roots - core competencies.

As an example, Honda's core competence of "engines/powertrains" provides a foundation for producing various end products: automobiles, motorcycles, lawnmowers, and marine engines. Assessing Honda only in terms of producing automobiles drastically undervalues their strategic potential.

Hitt et al. (2017) use the example of core competencies as a source of competitive differentiation and reflect the nature of the corporation. It is stated that "core competencies create competitive advantage for a company over its competitors...they are the crown jewels of an organisation" (p 86). Typically, a firm will possess only three or four actual core competencies; if a firm asserts that it possesses twenty core competencies, it truly has none.

3.2 The VRIO Framework: Identifying Core Competencies

A manager's evaluation of whether a particular resource or capability (such as superior customer service) is a real core competence can be accomplished through the evaluation of that resource or specific capability against four criteria in the VRIO Framework developed by Barney (2007). More specifically, in order for a resource or capability to provide a sustainable competitive advantage, it must meet four criteria: 1) it must be Valuable; 2) it must be Rare; 3) it must be Difficult to Imitate; and 4) the company must have the appropriate level of Organization to make effective use of it.

3.2.1 Value (V)

Is the resource able to give a firm an external opportunity or to negate an external threat? The only time a capability will be valuable is when the firm is able to improve its efficiency and/or effectiveness with the capability. For example, a highly skillful, manually typing department may be a rarity, but in our computer world that is no longer a valuable resource. According to Rothaermel (2017), "A firm has valuable resources if they allow it to improve Consumer Value of the product/service" (p. 115).

3.2.2 Rarity (R)

Can only some of the current or potential competitors use this resource? If several competitors have the same valuable resource (e.g., common accounting software), they will all achieve "competitive parity," not an advantage over one another. Resources must be rare for them to provide competitive advantages. According to Barney (2007), "If a firm has resources that are valuable, but not rare, it should expect to earn only normal (average) returns on those resources" (p. 153).

3.2.3 Imitability (I)

Do other organizations incur high expenses completing the resource they would be able to imitate the company's resources? This question is at the core of sustainability. If competitors have access to another means for acquiring or replicating a resource (e.g., the ability to purchase the same equipment), then any potential competitive benefit associated with that resource will be transitory. The difficulty in copying certain resources can be attributed to one or more of the following factors:

- Historical Conditions - the company developed its ability to provide an advantageous resource at a unique time in history (e.g., Caterpillar's extensive global dealer network developed during World War II);
- Causal Ambiguity - the competitor is unable to determine what specific conditions led to the success of the company's resource provision (e.g., the successful implementation of an organizational culture or the establishment of a system of incentive-based compensation) ;
- Social Complexity - the company possesses an advantage based on the degree of complexity associated with the interrelationships among different people or groups (e.g., the establishment of mutual trust between management and suppliers).

3.2.4 Organization (O)

Is the organization of the business arranged to maximize the full competitive opportunity of a business' assets? This relates to the way in which a business is structured, the reporting lines between departments and the ways in which the business controls their overall operations. For example, a business may have a valuable, rare and unique technological asset however, if there is not a well-organized management structure in place to use that technology then the business would not be utilizing that asset correctly. David (2011) states that "Without the organization...the other three [resources] are all wasted", p 129.

3.3 From Competence to Competitive Advantage

The attainment of competitive advantage through the application of the VRIO framework in identifying and exploiting a firm's core competencies is the ultimate goal of business economics.

Porter (1998), a pioneer in contemporary competitive strategy, describes competitive advantage as a firm's capacity to consistently realise ROI in excess of what would be anticipated based on the performance of the industry as a whole. He identifies two principal categories of competitive advantage: (1) Cost Leadership and (2) Differentiation.

3.3.1 Cost Leadership

Cost leadership is achieved through core competencies producing as the lowest cost producer in its industry. Being a low-cost producer doesn't mean you're selling the lowest priced product; rather, it means you're producing the product at the lowest cost.

There are multiple competencies that contribute to being the low-cost producer of a finished product. These are: process engineering, efficient logistics, having access to inexpensive raw materials, and economies of scale.

The economic reasoning behind having cost leadership is shown in this example. Let's say the market price of a product is DZD 100 and the average cost is DZD 80. The average cost producing firm has a profit of DZD 20 per unit sold (DZD100 – DZD 80 = DZD 20). The cost leader produces the same product at a cost of DZD 60 and therefore has a profit margin of DZD 40 (DZD 100 – DZD 60 = DZD 40). A huge advantage over average competitors.

3.3.2 Differentiation

A business can differentiate itself from its competitors if it can provide a unique and valuable offering for the customer and not just offer the lowest price.

- Competencies involved with the delivery of differentiated products to customers include product design, marketing, research and development (R&D) and customer service.

- Economic Logic: Differentiation allows the business to charge a premium price. A typical price might be DZD100, while the price of a differentiated product could be DZD120. Even if differentiation adds some cost to the differentiation process, the margin for the extra premium provides the firm with significant profit.

In summary, Grant (2016) states "Competitive Advantage Results from the Value Created for Buyers that Exceeds the Cost to Create that Value" (p. 176). In order to have a competitive advantage, the firm must be able to deliver either a lower cost product or an additional product that adds value to the customer.

3.4 Sustainability and Dynamic Capabilities

Obtaining a competitive edge is the culmination of success in a stable market. The business climate is, in fact, dynamic; fast-paced competitors imitate, technology develops, and customer preferences change. Therefore, A company's core ability may evolve into a "core rigidity" if they fail to meet the existing demands of their environment.

As such, the definition of Dynamic Capabilities arises. It demonstrates how an organization (the enterprise) can utilize their internal and external abilities/competencies to adapt and build a competitive edge in rapidly evolving environments.

In an article published by Teece (2009), a scholar noted as one of the leading researchers/expert in the field of dynamic capabilities, defined long-term competitive advantage as having the resources necessary to compete, and possessing the Correct Environment-related processes to renew those same resources ("have" vs. "do"). He wrote: "Dynamic capabilities are the firm's ability to recognize new opportunities and seize them and to transform to fit with existing/integrated knowledge... they are the most significant source of long-term survival" (Teece 2009 pg 45).

As an example of dynamic capability, a firm may have a core competence in manufacturing traditional film cameras... and that competence will no longer exist as the overall digital photo market continues to advance. To address the loss of their original capability, a dynamic capability-possessing firm would continue their advantage in digital photo technology by retraining their optical engineers to manufacture digital sensors. Thus retaining their competitive advantage, and evolving into a new form of advantage.

3.5 Conclusion

It has been established through an in-depth evaluation of inquiries conducted within a business, there exists a causal relationship between how companies create business success with intent through supporting their core competencies via appropriate establishment and continual development of these core competencies through the VRIO framework; when the core competencies of a company's enterprise are determined to be valuable, rare, inimitable, and effectively organized combined with the proper use of these core competencies, the company will ultimately be able to provide its customers and potential customers with a competitive edge, enabling them to service customers and become more successful than their competition. Finally, as we progress into the 21st century, companies

should create methods and processes to enhance the agility of their existing dynamic capabilities, to avoid having the advantages gained from utilizing their core competencies, become a liability in the future.

4. SWOT Analysis (Internal Strengths and Weaknesses)

The last step in assessing an organization's internal atmosphere after identifying its core competencies and assessing its resources is to combine both aspects together into a coherent and consistent structure. One of the longest lasting and most widely used assessment frameworks for this step is the SWOT Analysis framework. The SWOT Analysis framework also uses external factors (i.e., Opportunities and Threats) as part of its integrated structure; however, the fundamental value of the SWOT Analysis framework on this axis is the comprehensiveness of its evaluation of an organization's Strengths and Weaknesses. A SWOT Analysis provides a mechanism for converting resource data into usable strategic intelligence.

4.1 The Concept and Origin of SWOT

SWOT is a term made up of the following 4 letters; S= Strength, W= Weaknesses, O= Opportunities, T= Threats. This was introduced in 1965 by the Stanford Research Institute (SRI) while they were researching corporate planning failures. The fundamental premise behind SWOT is "to find a way to create a better fit between what an organization can do (its internal environment) and what it has to do (its external environment)."

As described by David (2011), SWOT is not just a list of things but rather a matching tool. "The SWOT Matrix is an important matching tool used by managers to develop four types of strategies SO (Strength - Opportunities) Strategies, WO (Weakness - Opportunities) Strategies, ST (Strength - Threats) Strategies, WT (Weakness - Threats) Strategies" (David, 2011, pg.177).

When discussing the internal environment, we will focus only on S and W as those are the only two variable a company has direct control over. For example, during a recession or a new legislation there are many external forces impacting a firm, on the other hand, strengths and weaknesses only exist internally within the firm. The internal environment variables can be manipulated by a company while an external force (such as incompatible government regulations) cannot.

4.2 Diagnosing Internal Strengths (S)

A "strength" can be described as internal resources/capabilities that assist the enterprise in reaching its objectives and performing competitively in the marketplace. Further, a strength is considered to be an advantage; thus, when compared to competition, it is an asset that creates a competitive advantage. An example of this would be a firm has high cash reserves and its competition operates on a relatively low amount of cash reserves. In this case, high cash reserves are considered a strength; whereas, if all firms operate on the same level of cash, this may not be considered a strength, but a common operating condition.

According to Hitt et al. (2017), strengths are considered resources/capabilities that allow the firm to perform tasks efficiently. Specifically, "strengths… are the core competencies that provide a company with a competitive advantage" (p. 120).

Strengths can be categorized by functional area:

- Managerial Strengths: such as experienced leadership, a flat organizational structure enhancing speed or an established organizational culture
- Marketing Strengths: for example, dominant market share, strong brand equity (i.e., such as Apple or Coca-Cola) or an exclusive distribution network
- Financial Strengths: include high levels of liquidity, low debt to equity ratios or superior credit ratings whereby access to, and the cost of, capital is reduced.
- Technical Strengths: an example would be unique technologies developed by the firm; for instance, a firm may hold patents or have an exceptionally strong research and development team that supports product improvement.

As an example, if a firm owns a patent for a highly efficient solar panel, that patent is a physical strength for that firm; if its engineers are successfully working together to develop new features for that solar panel, that teamwork would be considered an intangible strength of that firm.

4.3 Diagnosing Internal Weaknesses (W)

A Weakness is defined as an internal barrier or limitation that inhibits the entity from accomplishing its goals. Internal limits would include a lack of resources, a gap in skills, or a structural weakness that would place the company at a disadvantage in comparison to its competitors. In their book, Robbins and Coulter (2018), provide that weak areas of the organization are those areas that do not do well and/or those resources needed by the company, but are not available. "Managers have to evaluate the culture and reputation... if

weak culture or negative reputation exists, those issues will create great liabilities" (p. 288).

Identifying weaknesses requires brutal honesty and frequently overcoming "managerial myopia" explained in previous sections. Operational Weaknesses (i.e., obsolete machinery/high cost of production/long distance from major markets), Financial Weaknesses (i.e., poor cash flow/excessive debt/declining profit margins), Human Resource Weaknesses (i.e., high turnover/lack of skilled employees/toxic work environment), and finally Strategic Weaknesses (i.e., no clear vision/unclear brand message/over dependency on one product).

An important aspect of evaluation during the evaluation process is recognition that a strength can change to a weakness as environmental conditions change. For example, if a company's manufacturing activity is to manufacture heavy diesel engines, it is considered a "strength." If and when, however, the market changes to use electric cars, all of the investment in diesel technology will become a "weakness" (or a core rigidity), and the ability to adapt to the changing market will be virtually nonexistent.

4.4 The Strategic Implications: The Interaction Matrix

The advantages of determining S & W can't be underestimated. However, the most useful aspect of the analysis is that the analysis of these internal factors will help shape your strategy, which is typically displayed in TOWS Matrix (a variation of SWOT). The TOWS Matrix is designed to challenge the manager to ask different questions about their internal environment.

- (Maximizing Opportunities). How can we leverage our strengths to take advantage of the opportunities in the marketplace? For example, a strong R&D department (strength) could create a new product line that dominates a specific market segment.
- (Minimizing Threats). How can we minimize or eliminate weaknesses so they do not hinder progress? An example of this would be a firm that has a great product but has a poor advertising/marketing department (weakness), could outsource their advertising to an agency, or they could hire a new chief marketing officer.
- (Converting Weaknesses to Strengths). Is there a way to convert a weakness into a strength? For example, a firm that has very small size (resource-based weakness) could turn this into a strength by being able to move quickly with their products or services, and provide personalized service, versus providing products or services through the bureaucracy of larger competitors.

The TOWS matrix was popularized by Weihrich (1982) and he concludes from his studies on the TOWS matrix that identifying S & W leads to strategic decisions, "The TOWS matrix illustrates that strategy formulation is more than just a list of the factors involved in a decision ... the formulation of strategy also has to do with how the internal and external environment interact" (David, 2011, p. 178).

4.5 Limitations and Pitfalls of SWOT

Even though it has gained traction in the business world, there are several major drawbacks to the SWOT method that students of enterprise economics should be aware of and account for when attempting to use it appropriately.

- One person's weakness is another's strength; therefore, what may be viewed as a positive to the chief financial officer (e.g., a conservative financial policy) may be viewed as negative/risk averse by the chief marketing officer.
- The static nature of a SWOT analysis only captures the current status and performance of the organization, and is typically applicable for no longer than a few months in today's fast moving marketplace.
- The SWOT method oversimplifies and forces complex realities into four boxes (MINTZBERG, 1998). According to Mintzberg, et al. the SWOT method can potentially lead to "list making" rather than strategic thinking, with the danger of producing a list of many items without giving priorities to any of them.

4.6 Conclusion of the Internal Analysis

The Internal Audit's Capstone: Applying a SWOT Analysis as the final step in the internal audit is to conduct a SWOT analysis by applying filters to tangible and intangible resources (Refer to Section 2) and core competencies (Refer to Section 3) based on Strengths and Weaknesses to provide the enterprise with a realistic self-image of the internal environment. Before taking the next step in our study, we must agree upon what is in the backpack. If a company does not have a strong and substantial internal environment, it is ineffective to scan for external environmental information (the horizon). Therefore, if the internal environment is weak, the company will pursue a retrenchment/repair strategy. If robust and resource rich, they can pursue aggressive growth. Thus, the conclusion to Internal Environment Axis is that your Strategy is dependent upon the unique configuration of your Company's own resources.

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Axis 4:

The Enterprise and the External Environment

1. Concept of Environment: General and Specific

Companies do not operate alone in their own world. The outside world represents the landscape on which they operate and provides the context for all business actions. External factors will often have more impact on a business than the actions taken by that business. An understanding of these external factors is critical to the success of companies and economy, as individual companies' success is often dependent on events and forces outside of their control, including consumer preferences and government regulations. To understand the environment is not a luxury; it is essential to the survival of businesses.

1.1 Defining the External Environment

The External Environment consists of all the items that are outside the organisation's boundaries which can impact the organisation in whole or part. It covers all items that present one of two opportunities or threats to an organisation.

According to Robbins and Coulter (2018), "The External Environment consists of those factors and forces which exist outside the organisation and have an effect on the organisation's ability to perform, also referred to as the organisational performance." (P. 46) This definition demonstrates the relationship of dependence between the organisation and its external environment. An organisation is dependent upon its external environment for the input of materials to be used in the manufacturing of goods and/or for the production of services and the consumption of goods and/or services produced. Therefore, should an organisation experience a hostile disruption of business (for example, a pandemic, financial crisis, etc.), a well-organised entity, regardless of organisational efficiency, could be eliminated from the marketplace.

Due to the complexity of the external environment, many researchers characterise the external environment into two distinct levels of the external environment: the General (Macro) and the Specific (Micro or Task).

1.2 The General Environment (Macro-Environment)

The general environment consists of the societal-level forces that impact all organisations in a given society, independent of industries. These forces are often referred to in the business world as "weather" or "climate". For example, if interest rates rise, it would affect a bakery, car manufacturer, and software company; however they would be impacted differently.

According to Daft (2021), the general environment consists of social, economic, legal-political, international, natural, and technological factors that have an equal impact on all organisations in society (daft, p. 142).

Characteristics of the General Environment:

- Uncontrollable: An individual organisation has almost no control over the forces within the general environment. For example, if a company wanted to reduce the inflation rate, there would be no way for them to "vote" to do so; therefore, they would need to change their pricing structure to accommodate inflation.
- Indirect Impact: The impact of the forces within the general environment are often not immediate - for example, if the demographic composition of the world is changing (i.e., the population is aging), it would take decades for this change to be reflected in the structure of the marketplace; therefore, organisations must plan for their responses to the general environment over the long term.
- Pervasive: All sectors of the economy are impacted and no one sector is exempt from the changes brought about by the technological force of digital transformation. For example, digital transformation has changed the way in which taxis and cities are set up and operate; also, digital transformation has changed the banking industry.

To analyse the forces in the general environment, organisations will generally utilise the PESTEL Framework and will learn about PESTEL in greater detail later in this chapter.

1.3 The Specific Environment (Micro-Environment)

The Specific Environment, also referred to as the Competitive Environment, is located close to the business operations of the company. In the immediate vicinity, the Specific Environment consists of the actors and forces with which the company is dealing. The Specific Environment has direct and immediate relevance to the company's ability to accomplish its goals. In comparison to the general environment, which is akin to the weather, the Specific Environment can be more appropriately compared to other football players on the field—actions by other players will require other players to react quickly and respond.

Hitt et al. (2017) indicated that the Specific Environment is referenced by their proximity to business operations in the following way: "Industry environment is comprised of factors that directly affect a firm and its competitive actions and reactions (Hitt et al., 2017, p. 56). The specific Environment consists of five (5) components:

- Customers: Those individuals or organisations purchasing the company's products; any change in their preferences creates an immediate crisis for the company.
- Competitors: Other companies that are competing for the same consumer dollars as the company.

- Suppliers: Those companies providing the raw materials used to produce the company's products. If a key supplier has a work stoppage, the company's ability to produce will be halted.
- Regulators: Local, state, and federal government agencies that manage and monitor the production of goods and services based on company compliance with industry standards (e.g., FDA regulates the pharmaceutical industry).

The relationship between the company and its competitors, suppliers, and regulators is heavily influenced by this interaction. The company cannot affect a general factor such as inflation, but it may affect a competitor or supplier through negotiations, advertisements or through collaboration on mutual strategies.

1.4 Environmental Uncertainty

The primary difficulty related to the environment faced by a manager is Uncertainty. An Uncertain situation occurs when the Manager has insufficient Information concerning Environmental Variables to build an Understanding of the State of and predict needs or changes within the Environment.

Duncan (1972) in his landmark research looking at Environmental Characteristics identified two Measurement Variables or Dimensions that define the level of uncertainty.

- Complex - The amount of External Influences that must be dealt with by the Organization. A local flower shop has a simple environment a Multi-National Airline will have a more complex environment that will include Factors such as fuel cost, International laws, and weather patterns.
- Dynamic - The speed at which changes to those Factors occur. A manufacturer of Canned Vegetables has a Stable Environment where there will be little to no change and therefore not a dynamic environment; whereas, a manufacturer of Smartphones is dynamic as technology is changing at least every 6 months.

Due to the high uncertainty of the Enterprise, the need for an Enterprise to be Flexible becomes greater. Flexibility leads to an Organizational Structure that goes from Rigid / Bureaucratic Structures that work in Stable Environments to Organic / Adaptive Structures that work in Dynamic Environments.

1.5 The Enterprise-Environment Interface

The border around an enterprise and the external environment contains no solid walls but exists as a semi-permeable membrane. The boundary of an enterprise may be defined as a porosity barrier where the enterprise employs the Boundary Spanning roles to identify/monitor and process information on the external environment. Marketing typically identifies customer trends; legal generally identifies changes in regulation; and procurement often monitors risks in the supply chain.

In summary, the environment is the recognition of a context. The General Environment creates a wide range of environmental conditions and opportunities in any

given time period; the Specific Environment represents the real-time, daily context for competition. Therefore, a sound strategy is essentially a proposition regarding the expected outcomes of the environmental forces on an enterprise and how an enterprise should position itself for long-term success in light of those outcomes.

2. Macro-Environment Analysis (PESTEL Dimensions)

As businesses encounter daily pressures from customers and competitors, their long-term fates are mostly determined from more significant changes (tectonic shifts) in the overall society around them. In other words, the overall company (Macro-Environment) is influenced by larger societal changes. The size and complexity of these forces require a structured tool for managers to analyze them in a methodology-based way. The most effective methodology-based tool to be used is the PESTEL Analysis. PESTEL breaks down the Macro-Environment into six different dimensions: Political, Economic, Social, Technological, Environmental, and Legal.

The authors Johnson et al. (2017) state the purpose of the PESTEL analysis is not to simply list facts, rather to identify "key drivers of change" — or significantly high-impact changing factors affecting the industry structure or business strategy. Through a scanning of the six dimensions, a business can develop anticipation of future scenarios/tendencies instead of relying on simple reaction to them.

2.1 Political Factors (P)

The role of the government in the economy can be understood as the political dimension. The government plays a role in setting rules for everyone involved in the economy and making sure there is a proper level of competition amongst businesses operating within its jurisdiction. Frequent changes in government will create major challenges for long-term investments as there will be the potential of frequent policy changes, creating uncertainty. The degree of collectivism versus individualism, and the degree of democracy versus totalitarianism can be used to measure the political systems of countries.

Political variables that are relevant to international business include:

- Political Stability: The level of political stability within a country directly affects the ability of an international business to implement its strategy over an extended period of time.
- Taxation Policy: The level of taxation directly affects the amount of after-tax profit that an international business can expect to generate. Historically, the government of a country that has allowed foreign direct investment by offering the ability of companies to not pay corporate income tax for a number of years has attracted foreign investment, while a country that continually increases its corporate income tax will likely drive many businesses to relocate or no longer operate in that country.

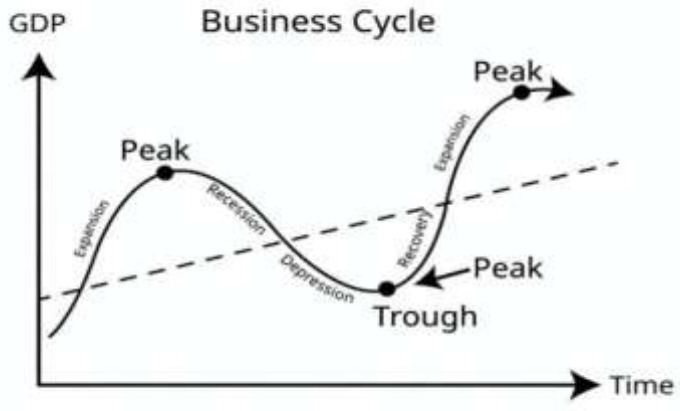
- Trade Barriers/Trade Quotas: Tariffs, quotas, and other trade restrictions will determine whether or not a company can produce a product or service in a country and sell it to other countries. A sudden tariff (or trade restriction) placed on steel imports into the U.S. would require a U.S. automobile manufacturer to increase its costs to manufacture automobiles.

2.2 Economic Factors (E)

The economic dimension includes the macroeconomic variables that will impact consumer purchasing power, and firm capital costs. These variables will determine the "health" of the operational market.

Samuelson & Nordhaus (2010) identify the major macroeconomic variables that all firms should monitor: "output (GDP); employment; and price stability (inflation)" (p. 367).

- Economic Growth (GDP): Economic growth leads to higher consumer income levels which will generate increased demand for goods. However, during a recession consumer demand will decrease causing firms to reduce costs, or discounts to survive.
- Headline Inflation Rate: Headline inflation reduces consumer purchasing power, increases raw material costs, and creates uncertainty in business planning as firms have difficulty predicting available raw material costs.
- Central Bank Interest Rates: The central bank will determine their prime lending rate which is the cost of borrowing money. Therefore, if central bank interest rates are high, it will make financing capital expansion through debt for firms extremely expensive which will generally cause an investment slowdown.
- Foreign Currency Exchange Rates: For those firms that primarily produce goods for export, a weak domestic currency is beneficial (because it makes its exports cheaper in the foreign market), while, for those firms that primarily import goods and/or services, it is a disadvantage (because it raises the costs of inputs).



2.3 Social and Socio-Cultural Factors (S)

The social dimension looks at the demographic features of the population, their norms, customs, and values. Changes in the way people live and what they value greatly affect demand because companies are there to serve people.

According to Robbins and Coulter (2018), "Managers must adapt their practices to accommodate continually changing expectations of society." (p. 54)

- Demographics: The age structure of the population is extremely vital. An older population (e.g., Japan or parts of Europe) will result in a greater demand for healthcare and retirement services, while at the same time, the demand for labour will decrease. Conversely, a youth bulge (e.g., many countries in Africa) creates a need for schools and high-tech products for consumers.
- Lifestyle Changes: The increase in families with two incomes has increased the need for convenient food and childcare services.
- Cultural Values: Soft drink manufacturers respond by diversifying into bottled water and juices due to the increased number of consumers interested in health and wellness. Work-life balance is changing where more companies offer telecommuting as a result of changes in the way that people think about work.

2.4 Technological Factors (T)

The technological sector is the most rapidly evolving sector in the modern world. Technological advances are changing how businesses operate and how goods and services are produced, delivered, and consumed. In addition to increasing efficiency and productivity, new technologies are creating what is termed as "Creative Destruction," where the advent of new technologies and industries makes some existing industries obsolete.

Schumpeter (1934) describes this process as follows: "The fundamental impulse that drives and sustains the capitalist system is the emergence of new types of consumer goods (and the methods of producing them), created as a result of the capitalist enterprise" (Page 83-84).

The following factors will continue to influence technological change:

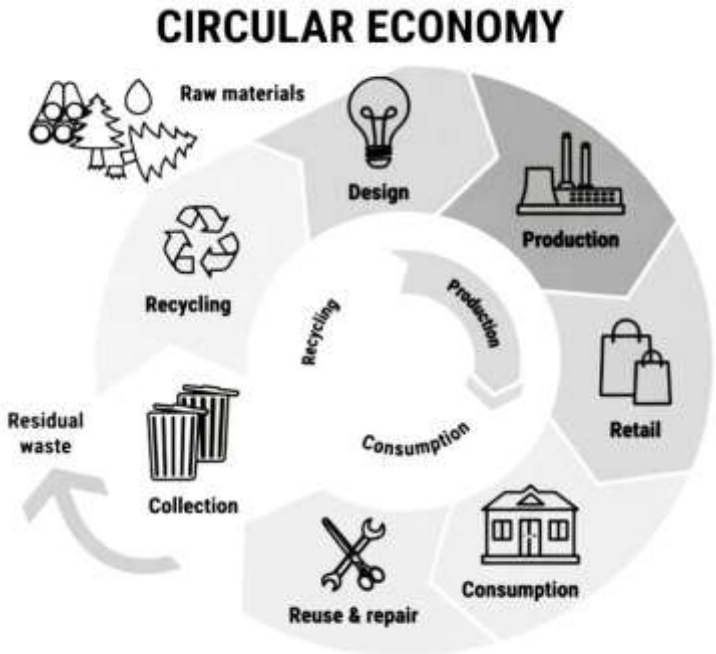
- The pace of change is accelerating, as evidenced by the decreasing length of product life cycles (for example, Kodak failed to adopt digital photography quickly enough to survive).
- R&D spending will continue to vary from country to country, affecting the availability of technical talent and infrastructure.
- New technology will continue to change the way that logistics, marketing and finance operate, as illustrated by the impact of e-commerce on retail, which has diminished the need for physical retailers.

2.5 Environmental (Ecological) Factors (E)

Since the beginning of time, mankind has treated the natural environment solely as an infinite source of free resources. Today, The Environment is now considered in terms of the physical limits of the planet as well as the growing need for businesses to operate sustainably. This is often referred to as the "Green Economy."

Daft (2021) states that "the pressure on organizations from governments and the public to reduce their carbon footprint and conduct environmentally sustainable operations is becoming more influential than ever" (p. 150).

- Climate Change: Extreme weather events (e.g., flooding) can disrupt entire supply chains by closing factories down, while droughts can cause farmers to have little or no crops.
- Resource Scarcity: The depletion of fresh water and rare earth minerals has caused firms to experience greater input costs, while also forcing them to innovate recycling and circular economy models.
- Consumer Activism: Modern consumers are increasingly attracted to brands that demonstrate environmental responsibility. Conversely, "greenwashing", or feigning sustainability, can lead to substantial reputational damage.



2.6 Legal Factors (L)

The legal dimension has a relationship with the political dimension, but they are separated from one another. Politics is about the intent of the governing body; however,

the law is about the rules that have been codified, which must be followed. A lack of knowledge regarding the law does not excuse you from its application and not following the law could subject you to heavy fines or imprisonment.

According to Cheeseman (2019), "the law is a dynamic force that shapes the behavior of business... the law supplies the framework within which commerce must operate" (p. 4).

- Employment Law: Subject to minimum wage, safety standards (OSHA), and anti-discrimination laws; protecting workers and increasing labor costs;
- Consumer Protection: Laws regarding safety of products, accuracy in advertising, and warranty obligations; shaping product design and marketing;
- Intellectual Property (IP) Rights: For technology and pharmaceutical companies, the legal protection afforded to them through their patent and copyright system is the foundation of their business model; Weak IP laws discourage innovation;
- Antitrust Law: Regulate monopolies to ensure that businesses can compete fairly; most significant mergers (e.g. two telecommunications companies merging) have regulatory approval prior to completing the merger.

2.7 The Interconnectedness of PESTEL

These six dimensions should not be considered as separate entities; they are highly dependent upon each other and a change in one area will typically be accompanied by changes in all other areas.

For example, a political decision to provide financial support for renewable energy sources will lead to investments in technologies such as solar power; thus lowering the economic costs associated with energy and having an environmental impact (by reducing emissions), thus modifying the social attitudes of consumers because they will now have an increased awareness of ecology and, ultimately, formulating new legal standards for energy-efficient buildings.

The PESTEL analysis needs to be a comprehensive whole. The organization can't engage an economist for analysis of the "E" and a lawyer for the "L". Strategic management requires integrating these conflicting signals into a unified image of the future.

2.8 Strategic Implications

PESTEL analysis provides a method for determining opportunities and threats (i.e., O and T in SWOT) through resulting data. Scenario planning allows managers to create simulations of two possible future conditions (i.e., best case, worst case) to evaluate how well their current strategic plan would withstand change. To proactively identify changes to the macroenvironment, continuous scanning of the markets will enable firms to identify weak signals of potential crises ahead of time.

PESTEL also provides information that allows firms to determine their position in the environment (i.e., turbulent ocean) as they navigate. By having visibility into the storms

(threat) and trade winds (opportunity) early enough, firms can adjust their sails accordingly.

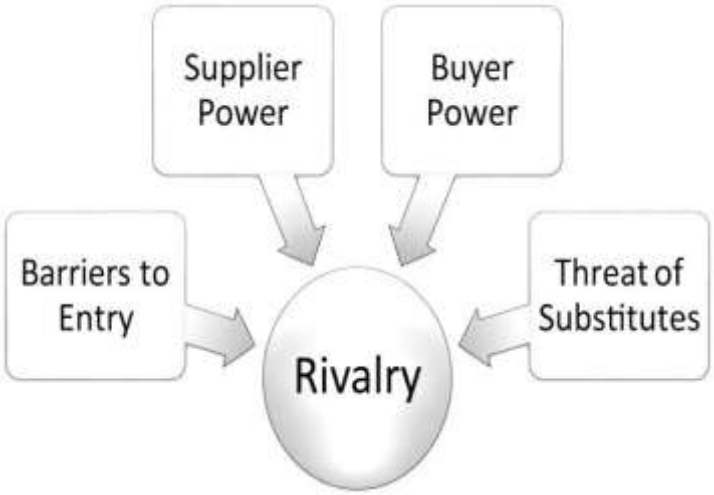
3. Competitive Environment Analysis (Porter's Five Forces)

The PESTEL Analysis is an appropriate tool for gaining an overview of the macro-environment in which an enterprise operates. However, a Further, more concentrated, and precise instrument is still necessary to analyze the industry—the enterprise's immediate battlefield. An enterprise's profitability will be constrained by the structural features of the industry in which it competes, not solely by the efficiency of its internal operations. Michael E. Porter introduced the Five Forces Model of Industry Structure in 1979. It was his seminal contribution to the field of strategic management, as it synthesized the central ideas of strategic management from its inception into a single model of analysis. This model represented a transition from a static and mechanical representation of enterprises to one based on the dynamic nature of the economy and the changing nature of the structure of the industry.

3.1 The Theoretical Foundation: Industry Structure and Profitability

Porter's (1998) framework develops the idea that competition is broader than established competitors in the market, and that there are five basic competitive forces that create the existence and intensity of competitive forces within an industry and are collectively known as 'competitive forces'. The ultimate profit potential of an industry can be measured by the combined strengths of these five competitive forces. In establishing a competitive strategy, Porter (1998) states that a primary goal is to position the firm within the industry so that the firm can better defend itself against each of the competitive forces—either directly or indirectly (increasing the firm's opportunity to exploit the competitive forces).

Economists refer to the relationship between the competitive forces within an industry and the industry's performance via the Structure-Conduct-Performance (SCP) Paradigm. Structure refers to the nature of the industry (i.e., number of firms, barriers to entry, etc.), while conduct refers to the firms' responses to the competitive forces (e.g., pricing, advertising, etc.). Performance refers to how well firms within the industry have been able to generate profits (e.g., return on invested capital). Therefore, when competing against other firms in an industry with highly competitive forces (e.g., airline industry), a firm is unlikely to generate a profitable return on its investment, whereas, when competing against other firms within an industry with low competitiveness (e.g., soft drink industry), a firm is more likely to generate high profits.



3.2 Force 1: The Threat of New Entrants

The first of the competitive forces is intended to reflect the ease with which new competition can enter an industry. When new companies enter an industry, they create new capacity, are seeking to increase their market share, and will often have additional resources. The result at the macroeconomic level for all players will be price decreases for existing players and higher costs for new players, squeezing profits.

The presence of barriers to entry is a direct indicator of the ability of new entrants to change the competitive balance within an industry. Barriers to entry are the obstacles to an emerging competitor attempting to enter the market. Grant (2016) cites barriers to entry defined as "disadvantages which new entrants are at relative to the established firms," (p.68). The lower the barriers to entry, the higher the threat to the incumbents and the lower the price that incumbents can charge.

Barriers to entry in an industry include but are not limited to the following:

- Economies of Scale: Existing competitors are producing a much higher quantity of products than potential new entrants; thus, their cost per unit is much less than that of new entrants. This puts new entrants at a disadvantage as they decide to enter any given market at a much lesser quantity (therefore risking retaliation) or at a much greater quantity (therefore at a cost disadvantage).
- Capital Requirements: The need for large amounts of capital investment in order to be competitive creates a barrier to entry; this is especially true when there are substantial unrecoverable expenditures (e.g. initial advertising/research and development).
- Switching Costs: Switching Costs are the one-time costs to the buyer of changing from one supplier's product to another's. The greater the switching costs, the more difficult it will be for new entrants to convince buyers to switch from their existing supplier's product to the new entrant's product.
- Access to Distribution Channels: The new entrant must find a way of distributing its new product. Established suppliers have often filled logical distribution

channels, therefore new entrants will typically need to provide price-break incentives or provide a co-op advertising allowance to entice retailers to carry their products.

Lastly, Hill and Hult (2019) state that government policy is another major barrier to entry into an industry by noting that "Governments can impose restrictions or outright refusals of entrance into industries through such controls as licensing, requirements and limitations on access to the raw materials necessary to conduct business within an industry." (p.122).

3.3 Force 2: The Bargaining Power of Suppliers

Bargaining power exerted by suppliers can create a situation where they are able to apply pressure on participants in an industry by threatening to increase their rates, along with or to decrease the quality of products/ services purchased. A supplier who is powerful enough to create pressure on all members within the industry, who does not have a mechanism through which to recover the increased cost, can "squeeze" the profitability from the industry. A supplier group can be classified as powerful by consideration of the following characteristics.

- Concentration- A supplier group functions effectively when a sole supplier company dominates this group, or the composition of the supplier group is more concentrated than the industry to which they are selling. The aerospace industry is supplied by GE & Rolls Royce for engines, and as such, the aerospace industry must compete with one another for business from one of these two suppliers.
- Differentiation- A supplier can possess a unique product or product with high switching cost, providing them an opportunity to create leverage over their customer. A Pharmaceutical Company relies solely on one chemical, which has been patented, from a specific supplier. As such, that supplier holds significant power over the pharmaceutical company.
- Forward Integration- A supplier can threaten to perform a forward integration into the supply chain of their customer. A clothing manufacturer could threaten to open their own retail store, thus reducing retailers leverage in the sale of their product.

According to Rothaermel (2017) “The relative bargaining power of a supplier acts as a tax to the industry. A powerful supplier captures a portion of the economic value created... thereby reducing the potential profit of the industry" (p.112).

3.4 Force 3: The Bargaining Power of Buyers

Buyers are an important element in the competitive dynamics of industries. They exert their influence over the industry by driving down prices, demanding improved quality or increased service, and utilizing competition among suppliers to negotiate the best deal for themselves, thereby exerting pressure on those suppliers' ability to profit.

There are some characteristics of buyers which make them particularly powerful, which include:

- Volume: Buyers purchase large volumes of products compared to what sellers sell. Walmart and Amazon, for example, are able to purchase products at very low unit prices because they represent such a large percentage of the suppliers' total sales.
- Standardization: When buyers purchase products from an industry, those products are generally standardized or undifferentiated. If a buyer believes they can find another supplier that will sell them the same product at a similar price, they will use that as leverage to negotiate with other suppliers.
- Price Sensitivity: Buyers typically have low profit margins, therefore they are under pressure to reduce their costs.

According to Porter (1998), "the power of important buyer groups in any industry is dependent upon several characteristics of the industry's market environment and their relative importance as a buyer group to overall business operations" (p. 24).

3.5 Force 4: The Threat of Substitute Products

Misunderstanding competitors for substitutes— competitors being businesses operating in the same sector (e.g. Coca-Cola and Pepsi) and substitutes being foolishly made products by another enterpriser that serves the same purpose as Coca-Cola (e.g. Cola and Better Water) is one of the most commonly made mistakes. Substitute-producing enterprises restrict the amount of money that an enterprise could make in the event that the price at which they could sell their product was limited because of the existence of a substitute for the original product. If an enterprise cannot distance itself from its substitutes through either performance or marketing, it will ultimately not be able to grow or produce sufficient revenues. Johnson et al. (2017) state that the danger of substitution is often an indirect or downstream danger. Substitutes can be represented in a variety of different ways, including abstaining from purchasing the product entirely, different products or from a new technology that makes the presently available product unusable (p62).

The level of danger from substitutes is high when:

- Price vs Performance: The price vs performance of a substitute is significantly better than that of the competition. An example would include that video teleconferencing can be considered an exceptionally and unmatched substitute for corporate aircraft travel, due to the fact that video conferencing will always be at least $100 to $300 per business trip cheaper than using a corporate aircraft, and will have the “sufficiently competent” means of business communication in comparison to a corporate aircraft.
- Low Cost of Switching: The costs which the customer must incur in order to transition from their original source of supply to the substitute source shall be considerably lower than they would have incurred instead had the original source of supply continued to sell to them.

3.6 Force 5: Rivalry Among Existing Competitors

Rivalry between rivals is the focal point of the model. Rivalry takes the form of jockeying for position. Examples include: price, advertising, introduction of new products (e.g., Product A, Product B), and increase customer service/warranties.

Rivalry is caused when competitors either feel pressured or see the opportunity to improve their position. Several factors that increase the intensity of rivalry are identified by Hitt et al. (2017):

- Many competitors and relatively equal size – when firms are virtually the same size, there is no dominant leader to establish discipline among competitors — they tend to have many highly disorganized and chaotic skirmishes with one another.
- Industry growth is slow — when an industry grows slowly, competition becomes a 'zero-sum' game, with opponent firms stealing market share (i.e., customers) from each other.
- High fixed costs — when companies have high fixed costs, it puts them under pressure to fill their capacity with products or services; hence, they tend to cut their prices once sales decline.
- Barriers to exit — when there are economic, strategic, or psychological barriers to exiting an industry, competitors will continue competing in an industry even when their return on investment may not be high or may be negative. For example, specialized assets (equipment, production facilities) or labor agreements with unions may make it less expensive to stay in business than to close out an operation.

Destructive rivalry, such as a price war, will transfer profits from the industry directly to the customers of the industry. Non-price competition, such as brand names, will add value to the industry.

3.7 The Sixth Force: Complements

The original five-force model of Porter has evolved into a six-force model in modern economic theory - the so-called ‘complementary’ force to the five. Complementary goods are those goods or services that increase the value of the firm’s own good or service. For example, software is a complement to hardware; apps are complements to smartphones.

In Grant’s (2016) view, “the presence of substitutes diminishes the value of a product (or service) while complements increase its value” (p. 82). In high tech industries, the presence of complements is often the critical factor that determines competitive advantage. Therefore, any firm must not only analyze its rivals (substitutes and rivals) but also monitor its suppliers of complementary products.

3.8 Conclusion: From Analysis to Strategy

A Five Forces analysis is not merely a snapshot of the current situation. It is a tool for taking action. After determining what the five forces of competition are regarding their respective strengths, the company will be able to construct a competitive strategy for its business across three areas:

- Place the company in an area of the market where the five forces of competition are weakest.
- Develop an entry strategy for any time or location when any of the five forces of competition become weaker over time.
- Make investments in research & development (or similar) to reshape the model of the five forces of competition in order to increase barriers to entry into the market.

The Competitive Environment Analysis indicates that an enterprise's profitability will ultimately be determined by how all five forces of competition (i.e., the bargaining power of suppliers, buyers, and potential entrants, along with substitute goods and rival businesses) interact together with one another. Understanding how these economic forces function is essential to constructing an ongoing defensive posture against the impact of the market forces on your business.

4. Market Opportunities and Threats

The ultimate goal of analyzing an organization's external environment—from the general PESTEL dimensions to the specific Five Forces of competition—is to identify actionable intelligence in the form of opportunities and threats; the external component of the SWOT matrix (with the internal component being strength and weakness, which is discussed in Axis 3). Market opportunity is defined as a possible way for the organization to increase revenue and profits; whereas threat is defined as anything that could jeopardize an organization’s continued existence or health. Thus, the central function of strategic management is to configure the organization’s resources so that the organization can successfully exploit opportunity and eliminate its threats.

4.1 Defining Market Opportunities

An opportunity presents the potential to enhance a company's competitiveness, or its performance if it are exploited properly. It should be clear that there is a difference between an "idea" and an "opportunity" when discussing opportunities for your business. An idea is an imaginative thought while an opportunity is an idea that has been supported by evidence of both market demand, as well as supporting economic feasibility.

According to David (2011), there are several types of external opportunities that could provide significant benefits in the future to organizations: "events (the PESTEL

factors), trends, external facts" (p. 16). These opportunities come from failures in the market or from changes in the PESTEL factors.

Opportunities typically represent three types of environments:

- New markets - A company could expand into a new country or into a new demographic (for example, a luxury brand creating a low-cost, affordable line to target younger customers);
- New needs - Identifying an unmet need of a potential customer. For example, the proliferation of remote work created an opportunity for video conferencing software, for example, Zoom; and
- New technologies - Using a technological advance to produce a higher quality product or decrease production costs.

4.2 Analyzing Market Threats

An external environment presents a categorized phenomenon that negatively impacts the organization, therefore, represents a threat to the organization.

The foundation of a threat is the headwind or the wind/water that is against your forward motion. If the wind becomes stronger, such as during periods of heavy weather conditions, it can actually cause your boat/sailing vessel to sink.

An example of this is found in Hitt et al. (2017), where they provide a description that describes how a threat hinders the firm's ability to gain strategic competitiveness. Therefore, it is important to identify threats in order to develop a defensive strategy.

Examples of potential sources of threats are as follows:

- Competitive Aggression: Competitors engage in a price war or provide the customer with a superior product
- Regulatory Changes: A new law imposed by the government will prohibit using a core material in the manufacture of the product or impose numerous tariffs on the import of their product.
- The Decline in the Economy: An economic downturn can reduce consumers' ability to purchase items.
- The Technological Gap: The introduction of a new technology (substitute) can diminish the relevance of an organization's core offering (e.g., streaming services are becoming a substitute for DVD manufacturing).

4.3 The Window of Opportunity

Opportunity analysis has many critical concepts. One of the most important is the Window of Opportunity. This is the time that exists for an enterprise in which there is an optimal fit between what is needed in a marketplace and what can be provided by a firm.

The marketplace is constantly changing. The Window of Opportunity may be open today, but if competitors are going into the same market or if the preferences of consumers

change, then that Window may close tomorrow (Wickham, 2006). Timing, according to Wickham, is as critical as the opportunity itself, as illustrated in the following statement "The window of opportunity opens when a new market need develops; once that new market need is satisfied by one or more competitors or becomes saturated, the window of opportunity closes" (p. 235).

Strategic agility refers to the firm's ability to identify the opening of a Window of Opportunity and move resources into the market as quickly as possible before the Window closes.

4.4 Strategic Responses to Opportunities and Threats

Once an organisation has identified its external Opportunity and Threats and compared these to its internal Strengths and Weaknesses the next step is to develop an appropriate response, usually using the TOWS matrix to match external (Opportunity and Threat) influences against the internal (Strength and Weakness) capability of a firm.

- Aggressive Strategy (SO) – Combining internal Strengths to take advantage of external Opportunities. This is the Ideally desired position. Example: Cash-rich company (Strength) acquires a struggling competitor during a recession (Opportunity).
- Diversification Strategy (ST) – Combining internal Strengths to avoid external Threats. Example: A Tobacco company suffering from litigation and legal problems (Threat) uses its strong cash-flow (Strength) to diversify into food products.
- Turnaround Strategy (WO) – Combining Opportunities with internal Weaknesses. Example: A company with poor marketing expertise (Weakness) engages a new advertising agency (Opportunity) to take advantage of this growing market.
- Defensive Strategy (WT) – Minimising internal Weaknesses while avoiding and limiting external Threats. This usually occurs through the process of retrenchments of operations, liquidating assets, or merging with another organisation to survive.

4.5 The Blue Ocean Strategy

There are theories on how to deal with competition, one of which suggests that withdrawing from a competitive environment is the best response. The theory called Blue Ocean Strategy (Kim & Mauborgne, 2005) suggests that businesses can find new opportunities through innovation and by creating value (i.e., using differentiation and low cost simultaneously) in new market spaces. Instead of going after a declining pool of profits in the established markets (i.e., Red Oceans), businesses can use innovation and create new value (e.g., using both cost and differentiated strategies).

Blue Oceans represent all of the currently non-existent industries, where businesses create demand instead of fighting over existing demand (i.e., Red Oceans). Businesses have many opportunities for rapid and profitable growth in Blue Oceans.

4.6 Conclusion

The environmental scan has been finished by identifying both the opportunity and threat dimensions of the analysis. The result is now a concrete strategic map for the enterprise derived from the PESTEL and Five Forces as abstract data. An enterprise's success does not come from eliminating all possible threats (which is impossible). Rather, its success comes through developing a strong portfolio of opportunities that can adequately mitigate the risk of market forces.

5. The Mutual Relationship between Enterprise and Environment

We have analyzed the external environment in terms of PESTEL dimensions and Porter's Five Forces that exert tremendous pressure on the established enterprise. The relationship between the enterprise and the external environment is dialectical. That is, the external environment shapes the established enterprise, and vice versa. This section will examine this dynamic reciprocity, viewing the established enterprise not only as a passive victim of circumstance but also as an active agent of change to the external environment.

5.1 Adaptation: The Enterprise Reacts

This relationship is defined primarily by the Adaptation principle. The organization must adapt (structurally and strategically) to the external environment in order to continue to exist. This concept is the basis for what is known as contingency theory; according to contingency theory, there really is not a “one best way” to organize, rather the best method is dependent upon the situation or environment.

Daft (2021) describes that the impetus for this adaptation to occur is due to uncertainty. "Organizations become increasingly organic in terms of their structure as there is a greater degree of environmental uncertainty… when an organization becomes more organic, it generally represents an indication that authority has been decentralized and employees have been empowered" (p 154).

Buffering: The organization protects its technical core from environmental shocks. This could mean the organization has created inventory buffers against supply chain disruptions or has created a public relations department to act as a buffer against social backlash.

Boundary Spanning: The organization creates roles specifically designed to connect the internal and external environment of the organization (e.g., market researchers and lobbyists).

5.2 Influence: The Enterprise Acts

Powerful organizations are not simply reactive—they try to wrestle control over their environment by "enacting" it. By strategically deploying resources, organizations can modify the competitive landscape in their own favor. According to Pfeffer & Salancik (1978)—who developed the Resource Dependence Theory—organizations are not

powerless: "Organizations use political and other strategies to effect change on the external economic environment… (thus) to minimize dependence on others and to create dependence for others." (p. 108)

Organizations can seek to influence the external environment via

- Political Action: lobbying government officials to pass laws that provide benefits to their organization (e.g., tax breaks, tariffs that disadvantage competitors), and in some cases, to deregulate an industry completely.
- Marketing & Advertising: creating and/or influencing social attitudes and consumer preferences. Companies do not always just develop products/services that meet a need; they also frequently create needs through effective marketing strategies—such as developing a demand for bottled water.
- Strategic Alliances: working together with competitors and/or suppliers to decrease uncertainty and achieve control over prices in the marketplace.

5.3 Co-evolution and Social Responsibility

At the end of this relationship is a coevolutionary relationship where the organism and the environment are evolving together. A technological breakthrough made by a firm (in the inside) affects the entire industry (outside the company); therefore, the other firms must also adapt (internally).

The relationship between the two organisms (enterprise and the environment) is based on Corporate Social Responsibility (CSR). The enterprise takes resources from the environment (natural resources and social capital) and, at the same time, has a moral responsibility to give something back to the environment — not just waste.

According to Porter and Kramer (2006), the idea of "Shared Value" presents the idea that the enterprise and community's well-being are dependent on each other. As they state: "To be successful, corporations require healthy communities (society)... Similarly, to have a healthy community, successful businesses must generate wealth" (p. 83).

In summary, there is a flexible boundary that separates the two organisms (enterprise and environment). Therefore, an astute manager knows that he is in a game and can change some of the rules of that game.

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Axis 5:

Enterprise Classifications

1. Legal Classification

The most fundamental categorization of firms in business is based on their legal form. It is not simply a bureaucratic label; the legal form is essentially the "DNA" of the firm and defines how risks are distributed; how profits are allocated; the tax mechanisms applicable to the firm; and the extent of the liability that the owners of the firm bear.

While the economic system of countries is different throughout the world, the legal system governing firms is consistent with three main categories - Sole Proprietorship, Partnership, and Corporation. In Algeria, these types of firms are governed by the Algerian Commercial Code (Code de Commerce), providing the legal structure for how economic agents will interact with each other in the market.

1.1 The Sole Proprietorship (Physical Person)

The sole proprietorship is the simplest type of business organization and is thus, the most widely utilized form of type of business (i.e., sole proprietorships). Legally, the sole proprietorship does not have any separate legal identity; thus, the owner and the business are considered to be one and the same. The sole proprietorship can be described as the extension of an individual's legal personality.

An example of a sole proprietorship according to Pride et al. (2019) is "a business owned (and usually operated) by one person, making it the easiest business to start" (p. 116).

In Algeria, this business organization is sometimes referred to as a "Natural Person" (or a "Personne Physique") or an individual enterprise. For example, artisans, shopkeepers, and freelance consultants would typically have a sole proprietorship. The main benefit of this business form is that the owner has total control over the business and makes all decisions without the need for board meetings or partner agreement. Additionally, there is a reduced regulatory burden compared to corporations and, in general, the taxation of the income of the individual as opposed to the income of the business.

However, one of the main disadvantages to the sole proprietorship is that it provides the owner with Unlimited Liability. Since the sole proprietorship does not have a separate legal identity from its owner, the owner personally assumes the liability for all debts and obligations that are incurred by the business.

Accordingly, Cheeseman (2019) cautioned that "the sole proprietor bears the risk of losing the entire value of the business; if the sole proprietor's business goes bankrupt, the sole proprietor will lose the entire amount of his or her capital contribution to the

business" (p. 665). In Algeria, if a merchant declares bankruptcy, they could lose their personal assets (i.e., their house, automobile, savings, etc.) to pay for their business debts. High-levels of risk in operating a sole proprietorship generally limit the type of economic activities that a sole proprietor can engage in because the capital requirement to operate the business requires low levels of capital.

1.2 Partnerships (Sociétés de Personnes)

When an individual entrepreneur is unable to provide enough capital or manage a large enough business, partnerships are created. In civil law countries like Algeria, partnerships are referred to as Sociétés de Personnes (People's Companies). Personal trust is the foundation of a person's partnership with each other, which is known as Intuitu Personae.

According to Mallor et al. (2018), a partnership "is an association of two or more persons to carry on...as co-owners of a business for profit...each partner acts as an agent of the other(s) and of the partnership" (p. 936).

There are primarily two forms of partnerships in Algeria:

- General Partnership (SNC - Société en Nom Collectif): All the partners have equal authority to manage the firm, as the partners are all jointly and severally liable for any debts incurred by the firm. Therefore, a creditor can seek repayment from any partner for the full amount of the debt from their property if the partnership fails to repay the creditor. General partnerships are generally used for Algerian family firms because the partners have full faith in each other.
- Limited Partnership (SCS - Société en Commandite Simple): A limited partnership can be defined as a hybrid structure that distinguishes between two types of partners: general partners (commandités) who manage the partnership and are personally liable for the debts of the partnership, and limited partners (commanditaires) who provide a capital contribution but do not manage the partnership and are only liable for the amount they have contributed as capital.

Partnerships combine resources and/or skills and create wealth through the partnership's ability to share and pool the resources of all partners. However, the fragile nature of partnerships, as a result of the intuitu personae relationship, creates serious risk that the death of a single partner or the withdrawal of one partner from the partnership will cause the dissolution of the partnership.

1.3 Corporations (Sociétés de Capitaux)

The establishment of modern day economies was also facilitated through the creation of corporations (Sociétés de Capitaux). Corporations differ from other company structures as they form a separate legal entity apart from their owners. Corporations have their own legal personality, enabling them to own property, enter into contracts and take action against those that contravene their rights.

According to Hill & Hult (2019), "A corporation is an artificial legal person; the distinctiveness of a corporation arises from the separation between ownership and the management of that corporation." Pg. 448

Corporations in Algeria, as well as in most other civil law jurisdictions, are further classified based on size and number of owners.

1.3.1 The Limited Liability Company (SARL)

The SARL (Société à Responsabilité Limitée) constitutes the principal form of enterprise for Small and Medium Enterprises (SMEs) in Algeria as well as embodying both the features of a partnership and those of a corporation. Regardless of which type of partnership or corporation is established, the liability of each partner is restricted to the amount they have contributed – therefore there is no way that a partner could be liable for another partner's debts. The transferability of shares in a SARL is therefore not open to the public as shares can only be transferred with the consent of the other partners and thus maintains the closed nature of the Partnership.

One example of a SARL is an EURL or Entreprise Unipersonnelle à Responsabilité Limitée). An EURL is essentially a SARL formed by one individual. This type of entity allows one individual to limit their personal liability without having to partner with other individuals – thus addressing the most significant disadvantage of being a sole proprietor.

1.3.2 The Joint-Stock Company (SPA)

SPA (Société par Actions) is the only acceptable form of business for larger companies or companies wishing to obtain a listing on the Algiers Stock Exchange. The primary purpose of this structure is to raise large amounts of capital by issuing shares (actions), which are completely transferable.

Brealey et al. (2020) state that "Liquidity is critical to growth. Public corporation structure enables separation of ownership and control, thus permitting the firm to raise equity capital through a wide array of investors without requiring their involvement in management" (p. 5).

SPA; requires a higher minimum amount of investment and has a more complex governance structure than the other business structures in Algeria. The Board of Directors (Conseil d’Administration) and statutory auditors (Commissaires aux Comptes) are examples of the more complex governance structure for SPA. Due to the significant regulations associated with the SPA, it provides for transparency which is important when attracting potential external investors.

1.4 Comparative Strategic Implications

In summary, choosing a legal classification affects consumers; businesses; and all other parties involved in the company. When the entrepreneur selects a sole proprietorship as their business structure they gain certain advantages such as quickness and

independence of decision-making. However, they expose themselves to unlimited risk resulting from liabilities associated with the business.

For a family business setting up an SARL or SNC provides a good balance between control and protection, while also having the advantage of adhering to the Algerian culture's preference for privacy or confidentiality when conducting business. On the other hand, a company that is an industrial giant must use an SPA as a vehicle to access the amount of capital it will need to develop heavy industries or to expand the operation internationally.

Ultimately, a company's legal structure establishes the framework for doing business; determining its ability to generate capital over time beyond its founding member or members.

2. Economic Activity Classification

Beyond the legal structure of the enterprise, it can be stated that the primary definition of an enterprise will always rely on what activities comprise an enterprise's economic activity and the process by which an enterprise creates a value. The nature of an enterprise's economic activity affects three dimensions of an enterprise - the operational logic of the enterprise, the resources required by the enterprise, and the market strategy employed by the enterprise. For many years, economic and statistical researchers have attempted to measure the interconnectedness of the national economies in which productive activities are located by classifying productive activities into many different industrial sectors. The most commonly used framework classifies the economy into three sectors - the industrial sector, the commercial sector, and the service sector. The classification of the economy into three sectors, which has been associated with the Fisher-Clark hypothesis, establishes a framework not only to evaluate individual enterprises but also to understand the overall stage of development of the economy as a whole, including the context of Algeria.

2.1 The Industrial Enterprise (Secondary Sector)

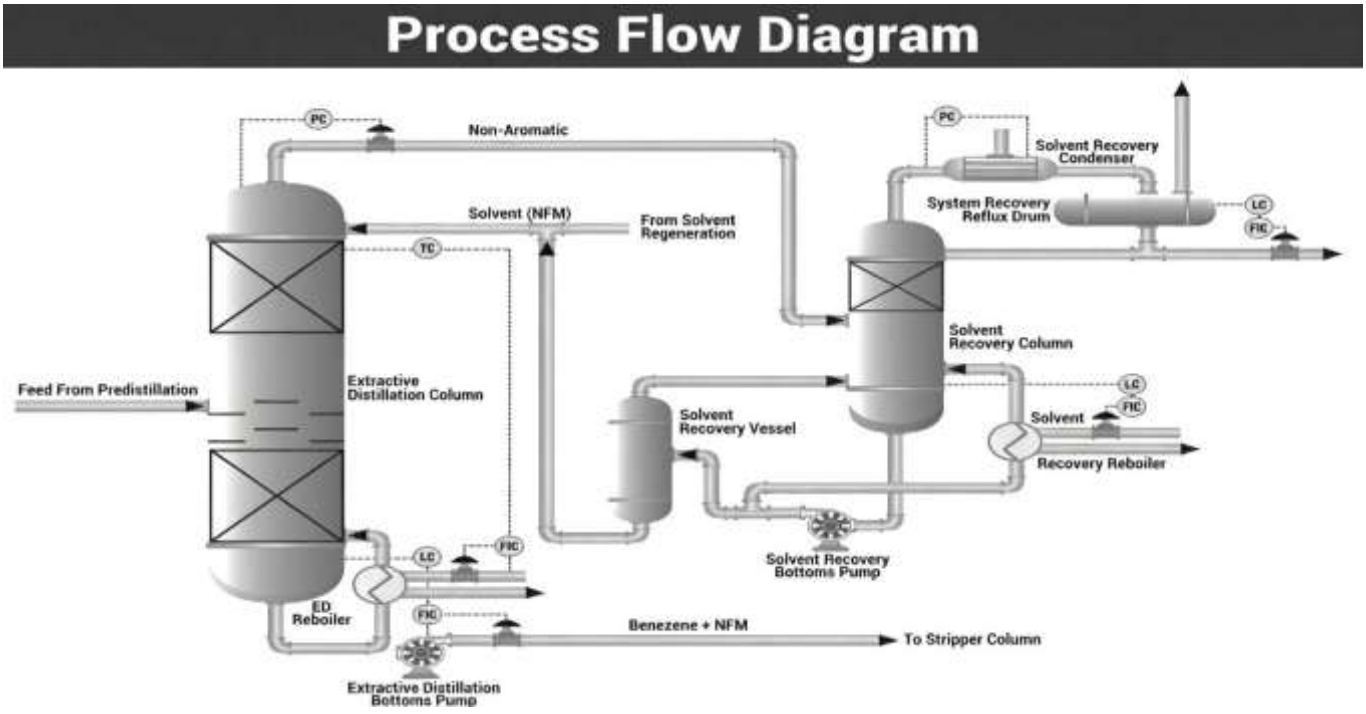
Industrial manufacturing is responsible for generating tangible goods out of raw materials. Industrial production is characterized by the use of both labour and machines to convert raw materials to finished and/or semi-finish goods. Industrial production is typically classified as part of macroeconomic theory's "Secondary Sector".

Krajewski et al (2019) described the essence of manufacturing processes as follows: "Manufacturing processes change not only physical properties, but also shape, fixed dimensions...., and the joining of parts. The result of all of these changes is a tangible good that can be put into inventory" (pp 6).

Industrial enterprises can be classified as:

- Extractive Industries: These firms extract raw materials from the earth. In Algeria, there is only one industry dominating the economy and that is Sonatrach. The extraction of oil/gas will be the primary resource of the Algerian government's budget.
- Manufacturing Industries: These firms create usable goods by processing raw materials. The range of manufacturing can be considered "light" (Cevital's sugar/oil) or "heavy" (Sider El Hadjar's steel).
- Construction and Public Works (BTP): BTP enterprises create immobile assets (i.e., roads, dams, and housing). These enterprises are vital to urbanization and infrastructure development for developing countries like Algeria.

The economics behind the industrial enterprise is based on economies of scale. Because of the high fixed costs of manufacturing (building, machinery), there is a tendency for the industrial firm to operate at increasing production levels so the average cost of production is decreased. Some of the challenges facing industrial enterprises are: inventory management, quality control, and technological obsolescence.



2.2 The Commercial Enterprise (Distribution Sector)

Commercial enterprises are the intermediaries between producer and consumer. These firms do not change the product itself but add time and place utility to it by taking the product from where it is in abundance and moving it to where it is in short supply. The commercial firm adds value by storing the product until it is needed and moving it when it is needed.

According to Kotler and Armstrong (2018), "Marketing channel members buy large quantities from many producers, and they break these bulk quantities down into smaller quantities and a wider variety of products that consumers wish to purchase" (p. 362).

Within the commercial enterprise category, there are two major categories:

- Wholesalers: The wholesale sector of the Algerian market is used to provide logistics support between producers and retailers. The wholesale sector is located in hubs such as El Eulma and Semmar and functions as the de facto banking system for smaller retailers by providing trade credit.
- Retailers: Retailers sell products directly to the final consumer. The retail landscape is changing rapidly in Algeria. The traditional hanout (corner shop) is culturally important in Algeria but is being rapidly replaced by modern hypermarkets such as Uno and Ardis and changing consumer behavior.

The underlying logic of the commercial enterprise is the turnover of products. While industrially focused companies place importance on being efficient in producing goods, merchants place importance on the "stock rotation" of their products. The profit from a commercial enterprise is calculated based on the difference between the price the merchant pays for a product and the selling price multiplied by the speed of sale.

2.3 The Service Enterprise (Tertiary Sector)

The services industry creates value through non-tangible means like skills, knowledge, and experiences; as opposed to producing physical goods. Services are the largest contributor to GDP and employment and continue to grow in stature as economies "tertiarize", become service-oriented, and shrink in manufacturing and/or agriculture activity.

"Lovelock and Wirtz (2016) define services as ‘economic activities offered by one party to another’.... services involve time-based performances that create results desired by customers" (p. 15). Examples of service characteristics include:

- "Intangibility - a bank account or medical diagnosis cannot be touched."
- "Production and consumption are inseparable (e.g., haircut)."
- "Perishability - if an airplane flight from Algiers to Paris has an empty seat, that empty seat cannot be stored and sold the next day, thus forever losing the revenue from that flight."

The service sector in Algeria includes all types of service businesses such as:

- Financial services (i.e. banks (BNA, CNEP) & insurance companies)
- Telecommunications - Mobilis, Djezzy, Ooredoo represent some of the largest and most profitable in Algeria.
- Tourism & Hospitality have potential economic growth compared to neighboring countries.

- Intellectual services (i.e., consulting, IT companies, & private educational institutions).

The service firm's economic logic is based on human capital. Because quality is not easily quantifiable it is determined by the interaction between the employee and customer. As a result, training and culture become the main determinants of service firm competitive advantage.

2.4 The Blurring of Boundaries (Servitization)

It should be noted that in today's world, the boundaries are becoming porous, as many manufacturers have created new service options for their products, a phenomenon called Servitization, which means that manufacturers are now adding new service options to their products. For instance, Otis, which sells elevators, does not only sell the elevator but also maintains the elevator, and therefore, is making significant profits from the maintenance contracts than that of selling elevators.

According to Baines et al (2009), "Manufacturers are establishing themselves in the value chain further down by engaging with customers by providing integrated product and service systems to maintain customer relationships and enhance their financial stability" (p. 555).

Digital companies (e.g. Yassir in Algeria) have further blurred the lines, and if Yassir is defined as a transportation company which provides a service or a company that develops technologies which would be classified as a technology platform, then this new hybridisation is challenging traditional statistical classifications while reflecting the reality of our modern, networked global economy.

Ultimately, classifying businesses based on their economic activity is essential in understanding the different operational challenges each presents. For industrial businesses, profit and efficiency are relatively equal, whereas for merchant businesses and service providers, customer satisfaction and profit will dominate. However, together they form the organic unity of the national economy.

3. Ownership Classification

Legal status indicates the structure of an enterprise, while economic activity indicates its purpose; ownership classifies how the enterprise is ultimately controlled. The control over capital (state, private individual, or a combination thereof) will dictate the firm's strategic objectives, management style, and social accountability. The distinction between public and private sector investment in political economy is fundamental; it defines the event of the pursuit of social welfare by the public sector and profit by the private sector. Understanding the distinctions between Public, Private, and Mixed enterprises will lead one to understand the national economy of Algeria, which has moved from a state-controlled socialist economy to a market-oriented one.

3.1 Public Enterprises (The State as Entrepreneur)

A public enterprise is a company in Algeria where the larger part of the capital is owned by the state or local government, but unlike regular government administrations (i.e. ministries), they conduct commerce and sell products or services to the market; however, their final goal is often not just profit.

According to Stiglitz (2000), the basic argument for the existence of public ownership is to correct market failures. As such, the government uses public enterprises as a means of providing public goods, controlling natural monopolies, or providing equity in the distribution of basic goods.

In Algeria, the public sector is still the dominant force in the economy, by having a major presence in strategic industries such as energy (Sonatrach), electricity (Sonelgaz), and rail transportation (SNTF). These types of companies tend to share some or many of the following characteristics:

- Their objective is primarily to promote social welfare by providing low price (in the case of example, electricity) to help to maintain social stability rather than making maximum shareholder returns;
- While public enterprises are generally considered to be autonomous from an economic point of view, a specific ministry of the government often retains control over the company's major economic and financial decisions. The lack of clear separation of political and business decisions may create barriers to both efficient use of resources and productivity;
- Since the government cannot go bankrupt, public enterprises typically have greater ease of access to credit and are guaranteed bailouts from the government unlike their private sector counterparts.

3.2 Private Enterprises (The Engine of Efficiency)

Private businesses may be run by individuals or by groups that are not part of the government and are known as private entities. Profit is the principal motivator for this kind of business. Because business owners take all of the financial risk if their business fails, they will always want to be as productive and innovative as possible and react to what their customers want quickly.

Friedman (2002) has said that the only social responsibility of a company is to produce profits. According to Friedman, the private business contributes to society by maximising the efficient use of resources to create wealth and jobs instead of using resources for political purposes.

As a result of the economic reforms that began in the 1990s and the establishment of the Code des Investissements, Algeria's private sector has increased dramatically in size.

Family-owned shops have developed into multi-national corporations such as the Cevital Group or Condor. True of the private sector:

- Management has the freedom to make decisions based on what will work for them. The owners and board members make decisions with no government interference, so they are free to be agile.
- Different from state-owned enterprises, private enterprises operate under "hard budget constraints." If their businesses are inefficient, they will go out of business and be forced to liquidate. This creates a natural discipline for management.
- The private sector has become the dominant force in food processing, construction, services, and digital technology industries.

3.3 Mixed Enterprises (The Hybrid Model)

In a mixed enterprise, also referred to as a semi-public enterprise, capital investments from both public and private sources are combined to create a hybrid approach. This allows for a combination of the financial resources and backing of the government (sovereign state) with the efficiency and effectiveness of the private sector (commercial business operation), thereby creating the best elements from both sectors of the economy. According to Vickers and Yarrow (1988), mixed ownership will often be a transitional phase or used as an approach to have growth capital for developing countries or enable a developing country's government to keep some control over key industries, while attracting FDI (Foreign Direct Investment) and/or technology transfer from developed nations.

The most frequently identified example of mixed enterprises in Algeria has occurred through the establishment of joint ventures. Historically, the "51/49 rule" required that an Algerian entity (usually publicly owned) must hold at least 51% of any foreign investment. Although the 51/49 rule has been relaxed for non-strategically important industries (i.e., rapidly growing sectors), it has also created numerous instances of mixed enterprises established in the oil, automotive, and pharmaceutical industries in Algeria.

- Strategic control over the enterprise - most of the time, the government gets a "Golden Share" (or veto power) for key strategic issues (i.e., divestiture of the enterprise) to ensure that Algerian national interests are protected.
- Operational management of the enterprise - on most occasions, the private sector partner manages the operation of the enterprise on a day-to-day basis in order to achieve technical efficiencies and competitiveness.

3.4 The Trend Toward Privatization

There is a continuum of these classes of assets. Over the past thirty years, the global economy has seen a clear trend toward privatization. The privatization trend is also taking root in Algeria, although to a much lesser degree than in other countries around the world.

Megginson (2005) summarizes a great deal of research about the impact of privatization on company operating and financial performance. Analysts have concluded that privatizing a company typically leads to significant improvements in both areas. Essentially, the reason for this is that an ownership change creates different incentives for management and makes them concentrate on enhancing value as opposed to simply attempting to appease politicians.

In Algeria, the state has a substantial presence in the economy by way of its control over "strategic" sectors. This creates the view that public enterprises are not only economic entities, but that public enterprises are also tools of national sovereignty and social cohesion.

In summary, the classification of ownership serves to illustrate the political economy of a nation. Public enterprises contribute to stability and equality; private enterprises contribute to creating growth and innovation; and the mixed enterprise attempts to strike an optimal balance between them.

4. Size and Economic Dimension Classification

Legal and economic activity determine the "form" and "function" of an enterprise but they are not a good indicator of scale. The difference between a multinational corporation and a local bakery is not just a question of degree, but rather it is a question of type; they exist in two very different economies with different regulations and require completely different management systems to operate in each.

Classification of enterprises based on size and economic measurement is an important consideration for policy makers, economists and investors; however, defining “size” can be challenging because it is a multidimensional measurement (i.e., it has many dimensions). Classifying enterprises into size categories is based upon three dimensions of “size,” including the total number of employees, annual revenue (total sales), and total assets owned by the business.

In both Algeria and the European Union, firms are classified as micro, small, medium, and large companies (i.e., SMEs and LEs) based on the three dimensions of size mentioned above.

4.1 The Criteria for Measurement

There are numerous states and agencies that have a different standard for the division between small and large businesses due to the variability in the organization of their respective economies. An easy way to determine business size is by using an employee count, thus making employee count the generally accepted method for measuring an entity's size based on both ease of use and ease of measurement.

Storey & Greene (2010) state, "...employment is the most obvious way to measure size . . . however, the employee count is misleading in sectors using a lot of capital like crude refinement, where a very large crude refinery would employ very few individuals" (p. 15)

A composite classification of businesses utilizes the following components:

- Employees (Workforce) - this represents the human component of a business, as it relates to measuring the number of people employed by a business;
- Annual Turnover - this represents the revenue generated by a business; and
- Total Assets - this represents the aggregate value of both physical and financial assets owned by an entity.

4.2 Micro-Enterprises (TPE)

The bottom of the pyramid (or economic pyramid) is where the micro-enterprise is located, in Algeria typically called the Très Petite Entreprise (TPE). Micro-enterprises are considered the "seeds" of the economy; they are frequently established by family members or through self-employment, and they represent a significant share of small and medium-sized enterprises (SMEs).

A micro-enterprise, according to Algeria's Law No. 17-02 on the promotion and development of SMEs, is an enterprise that employs between 1 and 9 people and generates an annual revenue of less than 40 million DZD (Algerian Dinars) (Republic of Algeria, 2017).

To provide a brief overview, the characteristics of TPEs are as follows:

- Their adaptability to local market conditions and ability to respond promptly to changes in the local economy.
- Their vulnerability to external events, such as pandemics, due to the absence of financial reserves.
- A large proportion of TPEs operate outside of the formal sector, resulting in their non-compliance with taxation or employee regulation.

Scarborough & Cornwall (2016) explain that while TPEs are individually relatively small; together, they represent a large enterprise. "Micro-enterprises are the largest provider of income to millions of people...they serve as an important social safety net in developing countries" (p. 4).

4.3 Small and Medium Enterprises (SMEs/PME)

There are many different terminology used to categorize the small and medium business sector or the PME – "Petite et Moyenne Entreprise." In general, they are complex enough that they can be perceived as a formal and productive enterprise while still having the resources necessary to be nimble and innovative.

The definitions of small and medium enterprises vary significantly in the Algerian environment:

- Small Companies (PE) – those that employ between 10 and 49 people and have an annual revenue between 40 million and 400 million DZD.
- Medium Companies (ME) – those that employ between 50 and 250 people and have an annual revenue between 400 million and 4 billion DZD.

The economic contribution of small and medium enterprises cannot be underestimated; they are the biggest drivers of job growth. According to Audretsch (2006), small businesses are the major drivers of innovation in the "entrepreneurial economy" that has emerged in response to the "managed economy." SMEs, according to him, are "agents of change... they take on new technologies in ways that larger companies are less willing to do" (p. 36).

Despite their importance and their role as innovators, SMEs in Algeria lack the critical mass of medium-sized, dynamic exporters necessary to contribute to the Algerian economy. This is often referred to as the "Missing Middle" syndrome. In Algeria, there are many micro-enterprises and a few large state-owned monopolists, but few to no medium-sized exporter businesses exist.

4.4 Large Enterprises (GE)

The Large Enterprise or (GE - Grande Entreprise) is the largest entity at the top of this hierarchy. A company qualifies as a "large enterprise" in Algeria by having either a number of employees greater than 250 or a total annual sales greater than 4 billion DZD.

Although there are not many large enterprises in Algeria, these companies account for a majority of the total generated wealth in Algeria, as well as, a substantial amount of cash generated by exports. Within this class of large enterprises, some are owned by the state, such as Sonatrach (“a state-owned oil and gas company in Algeria”), while others are privately owned, such as the Cevital Group (“the largest privately owned investment and consumer goods conglomerate in Algeria”).

According to Chandler (1990), the reason that large companies enjoy a dominant position in the marketplace is due to "the existence of economies of scale and economies of scope." By producing large quantities of goods, they significantly reduce the per unit cost of goods, thereby creating a barrier for smaller, competitive firms to enter the market.

- Financial Power: Large enterprises have the ability to access the global capital markets and finance large-scale research and development projects.
- Managerial Complexity: Because they have thousands of employees, large enterprises require formal organizational structures with discrete departments and professional management systems to successfully coordinate the efforts of their numerous employees.

4.5 The Economic Ecosystem

It is a mistake to consider these categories as independent of one another. A healthy economy requires a network that is symbiotic and comprises:

- Large firms that act as an "anchor" and help maintain a steady demand and provide basic infrastructure,
- Small/medium businesses that act as a "supplier," providing component parts and other services to the large firms,
- Micro-businesses that act as "innovators," testing new ideas that could ultimately grow into small/medium businesses.

Porter (1990) points out that the idea of "clusters" (i.e., geographical areas in which there exists a high concentration of different-sized related businesses) allows businesses of all sizes to collaborate with one another and to grow through interdependence. He explains, "Competitive advantage is generated…where local industries are able to provide mutual support and drive each other's growth" (p. 78). The Algerian government's plan for the establishment of "industrial zones" is a concept that tries to re-create the same process, by creating a critical mass of small/medium businesses around large-scale industrial development projects.

Thus, while the classification system of firm size is a statistical classification, it is also a diagnostic classification; it indicates how developed the economy is. An economy that is made up entirely of micro-enterprises indicates a primitive level of development; an economy that is made up entirely of state-owned large enterprises is stagnant. A dynamic and prosperous system of production will typically have an equal distribution of different-sized enterprises and will permit firms to naturally migrate from micro- to large scale, without disruption.

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Axis 6:

Enterprise Structures and Organization

1. Principles of Organization and Span of Control

The identification of the entity as an enterprise, its origin and its environment have been covered in prior sections. Next, I will explore the anatomy of the enterprise: namely, how can we evaluate how the structure of the enterprise is created? Like every organism in biology has a skeleton to bear the weight of the organism and a nervous system to communicate and control the functioning of the organism, so too does an enterprise in the economy have an organizational structure. An organizational structure is not just a Venn diagram made up of boxes and lines; rather, it defines how work will be divided, how resources will be allocated, and how there will be cooperation between different departments so that they can achieve the same set of goals. Without an organizational structure, an enterprise is like a crowd of individuals, whereas once it has an organizational structure, it functions like a disciplined army.

1.1 The Concept of Organizing

One of the essential functions of management is to organise (and lead, control and plan). Organising is the systematic arrangement of activities so that organisational goals can be reached.

According to Robbins and Coulter (2018), 'the formal arrangement of jobs in an organisation' is called the organisational structure (p. 352). The organisational structure serves to meet two conflicting requirements, the need to divide work among individuals (specialisation) and the need to bring this specialised work together as a whole (integration).

If everybody did everything there would be chaos. Thus, when an organisational activity involves complex tasks, the manager must break this activity down into simple, discrete parts in what is referred to as 'work specialisation'. However, in order for the finished product to be coherent, the tasks must then be brought back together after being divided. The 'glue' which keeps these divided parts together will be the organisational principles that are described below.

1.2 Fundamental Principles of Organization

An extensive body of management theorists (i.e., from Henri Fayol to contemporary contingency theorist) has produced a corpus of universal principles that can be employed to create effective organizational structures.

1.2.1 The Scalar Chain (Chain of Command)

A chain of authority exists between the various hierarchical levels of an organization and will span from the highest level of management to the lowest level. The scalar chain defines who (employee) reports to whom (superior) within an organization; while ideally unbroken, the authority linking employees with superiors is considered to be the formal means of reporting relationships and therefore establishes an employee's supervisor and avoids any ambiguity with respect to their supervisor.

According to Fayol (1949), the father of the modern administrative theory, "the Scalar Chain is the chain of superiors, extending from the ultimate authority of the organization to the lowest levels of the organization" (p. 34). Thus, the following principles exist with respect to the Scalar Chain:

- An employee will know exactly who their supervisor is, and thus there will not be any confusion as to who is the employee's supervisor.
- An employee will communicate through their supervisor and will give their orders through their supervisor.
- An employee will receive orders from their supervisor and will have to wait until he or she receives permission to complete an order.

1.2.2 Unity of Command

The principle of Unity of Command is similar to the chain of command and holds that each employee will receive instructions from no more than one immediate supervisor. Daft (2021) states that violating this principle creates disorder. He observes that having two supervisors generates conflicting demands on employees which can create anxiety, confusion and ultimately result in a lack of disciplinary control in the workplace (p. 212). For example, if the marketing manager instructs the salesperson to give the customer a discount while at the same time, the finance manager prohibits it, this causes the salesperson much anxiety because he or she is unsure how to respond. Establishing the Unity of Command will assist in providing clarity regarding who has the ultimate authority within a given organisation.

1.2.3 Unity of Direction

Unity of Command emphasizes the role of individual employees, while Unity of Direction emphasizes the department as a whole, stating that all activities with an objective should be under the responsibility of one manager, and one plan created by that manager.

This is an important difference. "One head and one plan directing a set of activities that have a similar goal" will help to assure that the marketing department is not initiating an advertising campaign that will conflict with the production departments schedule. All oars must be going in the same direction for the boat to move forward.

1.2.4 Division of Labor (Specialization)

Advocated by Adam Smith in The Wealth of Nations, the division of labour increases worker productivity as a result of their ability to become proficient in a narrow field of task performance. For example, one pin maker may have constructed only one pin in an entire day, whereas ten pin makers working together can create thousands of pins by each performing one of ten operations in a single day.

However, the limit to the application of this concept is now recognised in more recent theories. For example, Jones & George (2020) state that "too much specialisation can cause boredom, fatigue and stress... thus lowering productivity" (p.235). Therefore, an industrious organisation today needs to balance productivity gains with the creation of fulfilling work.

1.3 The Span of Control

A significant feature in establishing the structure of an organization is the amount of subordinates a particular manager has in their "Span of Control." The defining characteristic of an organization's Span of Control will determine if that organization ultimately has a "flat" or a "tall" structure.

Koontz & Weihrich (2015) outlined the mathematically derived aspects of the significance of Span of Control stating, "Span of Control determines the number of levels and managers within an organization" (p. 110).

- Narrow Span of Control – consists of a small number of employees (typically 4-5) and a manager has to supervise/supervise them with numerous levels in the organization. This type of structure will allow the manager to closely manage the employees, but slow down the speed of decision-making as the information will need to be communicated through a number of levels.
- Wide Span of Control – consists of a larger number of employees (typically 15-20) and a manager has to supervise/supervise them with fewer levels in the organization. This will speed up the communication process of the decision without the addition of an excessive management structure, and therefore, cost ineffective. However, this form of organization may create an excessive amount of work for the manager.

1.3.1 Factors Determining the Span

An ideal span of control cannot be predetermined because it is based on various contingency factors.

- The nature of the work performed by subordinates (i.e., standardized or complex). For example, an assembly line would typically have very few variations in work tasks; thus, there would need to be fewer direct workers under a leader's supervision (i.e., wide span). Conversely, if there were more variations in work tasks, such as with research and development teams performing complex tasks requiring

continuous problem-solving, it would be necessary to limit the number of direct workers under a leader's supervision (i.e., narrow span).
- The relative level of competence possessed by subordinates performing the tasks. High-performing subordinates require less direction and guidance and thus can allow leaders to have larger spans than low performers.
- The media used by managers to evaluate the performance of subordinates (i.e., technology). The development of modern information technology allows managers to better evaluate the performance of subordinates using technology rather than relying solely on their physical presence; thus, allowing managers to manage larger groups of individuals than previously possible.

1.4 Authority, Responsibility, and Delegation

Three elements form the triad that determines the flow of power and therefore the distribution of authority within any organizational structure. These three elements include the concepts of authority, responsibility, and accountability as defined below.

- Authority - The right granted by virtue of one's position as a manager to make decisions, give directions, pass on orders, and allocate resources to produce the desired outcomes for the organization.
- Responsibility - To perform the duties associated with assigned tasks.
- Accountability - The obligation to provide a rationale to others for the results of the actions taken.

Griffin (2016) states that the Parity Principle represents that authority and responsibility must be commensurate. If a manager does not have authority to execute a task, then he/she cannot be held accountable for completion. Conversely, by giving authority for the task but not holding the person responsible, this becomes an abuse of the authority granted.

According to Griffin (2016), delegation is the mechanism through which organizational structures are brought to life. "Delegation is the mechanism through which managers assign some portion of their overall work responsibility to other employees" (pg. 315). Without delegation, the manager becomes a bottleneck and the organizational structure is no longer functional. Delegation provides employees with the empowerment needed to make timely decisions, enables the organization to be more efficient, and supports the growth of the organization.

1.5 Conclusion

The enterprise's basic organization will be determined by three principles – the scalar chain will create the base of the pyramid for an enterprise; the unity of command will give direction and clarity to the organization; and the span of control will create the shape of the pyramid. Modern organizations are experimenting with more fluid types of organization (such as Network Organizations) but classical organization principles are the fundamental grammar of management. An organization that does not adhere to these

principles is at risk of establishing an organization that will collapse from weight or will not effectively manage its activities in a competitive environment.

2. Classical Organizational Structures (Functional, Line)

We will now investigate how we may construct coherent organizing frameworks by using basic organizing principles such as the scalar chain and the span of control. Modern organizational structures arose during the Industrial Revolution and have their roots in the mass production environment it created, in which chaos prevailed before the implementation of these structures. Throughout the Industrial Revolution, the idea that organizations will function more efficiently in an environment of stability, hierarchy, and a distinct division of labor has been evident. The principal archetypes of organizing that developed at this time are synonymous with today's organizational structures and include two basic types, line and functional.

2.1 The Line Structure: The Military Model

The Line Structure, also called Simple Structure, represents the oldest and simplest form of organizational structure. Its roots are not found in business but in the military and the church because they both needed absolute discipline and a clear chain of command long before modern business began to exist.

In a Line organization, there is a clear linear downward flow of authority from the top of the organization to the lowest point. Each employee has only one designated direct supervisor and there is no advisory specialist or cross-functional team to complicate the chain of command.

Koontz and Weihrich (2015) explain the basic concept of this structure, stating: "Line authority is the relationship where a superior has direct supervision over a subordinate... it is the principle of the scalar relationship in operation." (p. 165).

2.1.1 Characteristics and Mechanics

One of the primary characteristics of the Line structure is its Unity of Command. A Production Worker reports to a Foreman; a Foreman reports to the Plant Manager; and a Plant Manager reports to the CEO. There is no confusion on who makes the decision at each level of the organisation. The decisions are made at the top by the CEO and executed by the bottom of the organisation.

This structure subdivides the business into the Primary Departments (based on principal components of the business, such as production, sales, and finance) and the unique attribute of the structure being that each one of these Department Managers (Sales Manager, Production Manager, etc.) has Complete Control (full authority) over all facets of their Department. Therefore, a Sales Manager in a pure Line organisation has Complete Control over the hiring, training and strategy of his/her Sales Team without intervention by Human Resources.

2.1.2 Advantages: Speed and Clarity

The Line structure has economic rationale in its ability to operate with low transaction costs as it relates to communication. Due to the linear nature of reporting relationships, decisions can be made very quickly.

- Simplicity – The structure allows everyone to understand the hierarchy of authority. There is no question as to who has authority.
- Discipline – The direct relationship between superior and subordinate provides a basis for strong discipline and accountability.
- Speed – During a time of crisis, the leader can quickly issue an order that will cascade down the line without debate.

2.1.3 Disadvantages: The Overload Problem

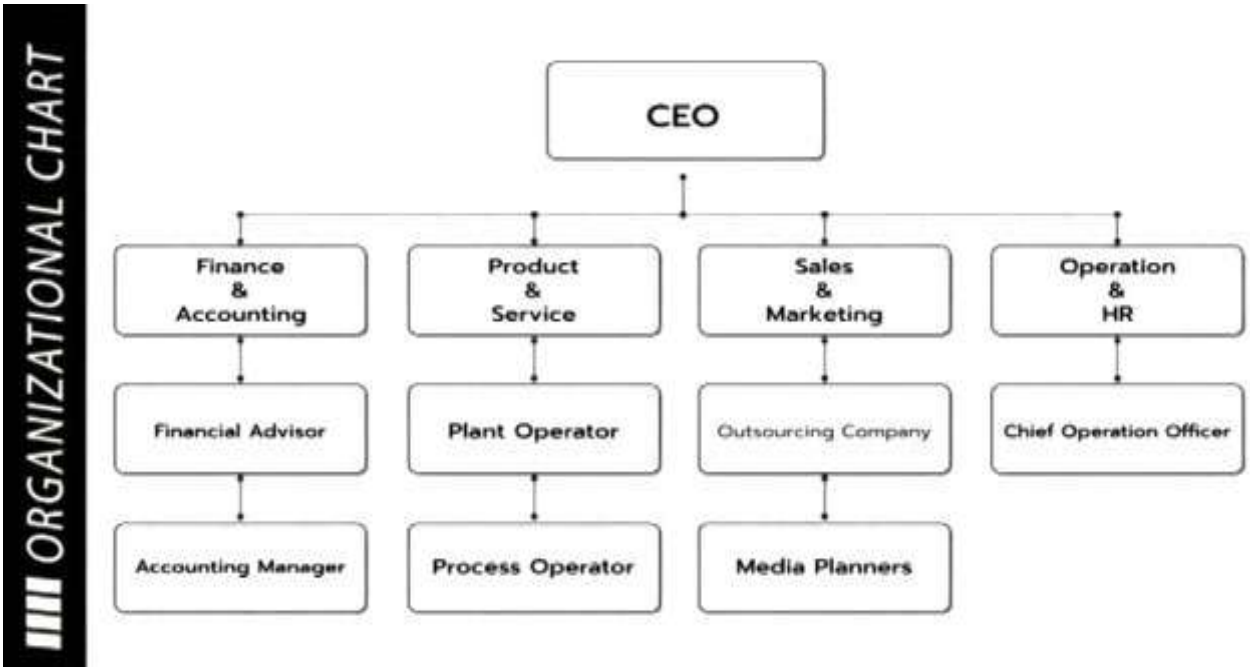
Line structures have a major drawback when an organization expands: Managerial Overload. The line structure assumes the manager is a jack-of-all-trades. According to Robbins and Coulter (2018), "In complex environments as the organization expands, the line manager becomes overwhelmed with administrative tasks and does not have the specialized experience to remedy technical issues of a complicated nature" (Robbins & Coulter, 360). A production manager cannot be an expert in engineering, labor laws, quality control, and logistics at the same time. Therefore, pure Line structures exist mostly in very small companies (Sole Proprietorships) or very young start-up.

2.2 The Functional Structure: The Logic of Specialization

As businesses grew during the early 1900s, single Line structures began to fail. The answer lay in the functional structure, which organizes people (or resources) into groups based on specific skill areas. Specialization within departments became an outgrowth of Frederick Taylor's scientific management; since the time of Taylor's influence over production processes through scientific methods and his belief that specialization worked best for efficiency.

In the functional structure, the organization has multiple departments that are organized along functional lines (i.e., marketing, HR, R&D, finance) — each department has a defined scope of work and serves the entire organization in its function only.

According to Daft (2021), this functional grouping of activities forms the basis for improving efficiency: "Functional structure is a way of grouping activities by like function from the bottom of the organization up... it consolidates human knowledge/skills" (p. 218).



2.2.1 The Economic Logic: Economies of Scale

Economies of Scale are the primary reason for having a Functional structure. The Functional structure groups all Engineering resources within one department, which creates a shared pool of expensive Engineering equipment and Engineering expertise. Thus, the Functional structure reduces duplicate Engineering efforts.

Instead of establishing a small, inefficient accounting department for each product line, one centralized Finance (Accounting) department can efficiently manage the books for all five product lines using a common Accounting system.

According to Jones and George (2020), "Functional structures promote interaction among workers, enabling them to learn from one another, become more specialized and productive, and develop a high level of technical competence" (p. 245).

2.2.2 The Line-and-Staff Variation

To alleviate the inflexibility inherent in the Line Structure and the intricacy connoted by the Functional Structure, many organizations implement a hybrid approach called the Line-and-Staff Structure. The Line-and-Staff structure retains the vertical chain of command (Line) in relation to the primary value-creating activities (i.e. production and sales), while adding specialized advisory departments (Staff) to provide support.

- Line Authority – The right to issue orders and make decisions (i.e. The Production Director).
- Staff Authority – The right to advise, recommend, and counsel (i.e. The Legal and HR Departments). The Legal Advisor may not order the factory to cease production; however, the Legal Advisor may advise the CEO that a safety violation exists. This

compromise allows the Line Managers to concentrate on "execution" while leveraging, on a reliance basis, the technical expertise of the staff.

2.3 The "Silo Effect" and the Crisis of Coordination

The Functional structure does an excellent job of providing organisations with maximum effeciency, but it has severe limitations also due to a major flaw called the Silo Effect or the Functional Chimneys. This is caused by employees who work solely within their own classified departments to be very short-sighted due to the cliquishness of functional departments. For example, the Marketing department focuses on increasing company sales. This could result in the Marketing department making promises about manufacturers' producing the features they (the Marketing team) want, yet those features will not be able to be produced at the price desired by customers. Likewise, the finance department may limit research and development's budget which is constraining their ability to invent new products.

Mintzberg (1979) describes the Functional Structure as the "Machine Bureaucracy" and points out the "...functional structure serves as a barrier to co-ordination among departments...and thus leads to displacement of the departmental objectives into the objectives of the organization (p175).

The lack of horizontal co-ordination within the functional structure makes the functional structure very slow to response to external changes. In a business (Axis 4) that experiences rapid change, it often takes a long time for information to go up through the finance silo, over to the CEO, and then down to the production silo.

2.4 Comparative Analysis and Suitability

The selection of these traditional organizations is not based on personal taste but instead based on how well they fit with the organization's goals.

- Line Structure is appropriate for small businesses, simple environments, or crisis scenarios where speed is critical; it is aligned with the Entrepreneurial stage of the life cycle.
- Functional Structure is appropriate for Medium to Large Businesses in stable environments with a narrow product line (it serves as the "engine" for mass production).

According to Griffin (2016), "the functional design promotes high-quality technical problem solving...But it can lead to communication problems and an inability to consider the overall product or service that is to be delivered" (p.330).

2.5 Conclusion

The Line and Functional organizational structures form the "bones" of the industrial economy. They were essential in providing the stability and specialization necessary to change the traditional family shop into the modern corporation. The Line offered the clarity of command required for discipline, while the Functional allowed the productivity

benefits of the division of labor to be realized. However, with the economy experiencing increasing volatility and greater demand for innovation than for standardization, these rigid hierarchy structures will experience limitations. They provide a necessary infrastructure upon which to build the modern enterprise, but as will be demonstrated in the next section, enterprises today will often need to develop more flexible, organic structures in order to survive into the 21st century.

3. Modern Organizational Structures (Matrix, Divisional)

The functional and line structures were effective during the industrial era, which required stability to produce large quantities of everything. As we enter 20th century organizations, however, everything has changed significantly since we moved into a Global Market with fragmented customer preferences and rapid technological advancement where new ways to do business are evolving at an increasing rate. The rigidness or inflexibility of functional silo structures have become a hindrance for managers as they require new types of organizational structure that can accommodate complexity, respond quickly, and manage several product lines at the same time. As a result, managers today are finding that Modern Organizational Structures, particularly the Divisional Structure and the Matrix Structure, provide an opportunity to focus on flexibility and producing results rather than just functioning efficiently.

3.1 The Divisional Structure: Decentralized Accountability

Large, diversified companies needed an organizational structure that would accommodate their increased complexity and size. When companies grew too large (e.g., General Motors, DuPont), control of the entire organization became impossible for a central management team. The way companies have reorganized is by creating semi-autonomous or "divisional" structures.

In a divisional structure, organizations are set up as separate entities based on (1) product/service lines; (2) markets served; or (3) geographical regions. Each division typically has its own functional specialists in terms of marketing, production, and accounting, so it operates as a separate entity from the corporate office.

Hitt et al. (2017) stated, "Multidivisional structures consist of a corporate office and operating divisions that are separate businesses and profit centers, and the top officer of the corporate office delegates responsibility for day-to-day operations as well as business-unit strategy to the managers in each division" (Hitt et al., 2017, p. 345).

3.1.1 Types of Divisional Structures

Enterprises use different organizational structures to group their various types of business divisions together based upon the enterprise’s strategic focus. There are three main types of organizational structures:

- Product Structure: Product lines have separate operating divisions. For example, Samsung has its Mobile Division, Consumer Electronics Division, and Semiconductor Division; therefore, each division focuses on creating products to satisfy customer needs in its particular product line resulting in increased innovation rates and quicker response times to market trends.
- Geographic Structure: Firms are organized into geographic regions (North America, EMEA, Asia-Pacific, etc.- multinational corporations (MNC) must modify products to meet the needs of local cultures as well as local laws. McDonald's Inc.'s establishment in India serves no beef whereas a McDonald's Inc. establishment in France serves beef.
- Market (Customer) Structure: The market structure is used by a company to design its services based on the type of customers serviced; such as Government Contracts Division, Enterprise Clients Division, Consumer Retail Division, etc.

3.1.2 Advantages: Accountability and Focus

Profit accountability is the most important benefit of the Divisional structure. Each division operates autonomously and its results can be assessed directly. If the Mobile Division suffers a loss, it is obvious that the division manager is responsible for that loss because of the clear nature of the situation. In a functional structure, it is easy for blame to be misdirected ("Marketing didn't do their job" vs. "The Production Department made the product too costly"). According to Robbins and Coulter (2018), the Divisional structure "is oriented around results... and all division managers are responsible for either a product or service" (p. 362). Moreover, the Divisional structure allows for the corporate headquarters staff to concentrate on long-term strategic planning, rather than putting out daily fires.

3.1.3 Disadvantages: Duplication and Competition

The cost of this independence is costly for the organization because of the duplication of resources. A well structured organization should have one central HR department; therefore, with five divisions, the organization has five separate HR departments. The additional departments increase the organization's overhead costs, while lowering its economies of scale. Second, there is considerable competition for corporately available resources due to divisions having competitive initiatives/ incentives. This results in competitiveness among divisions, as they will not share information with each other to gain an advantage.

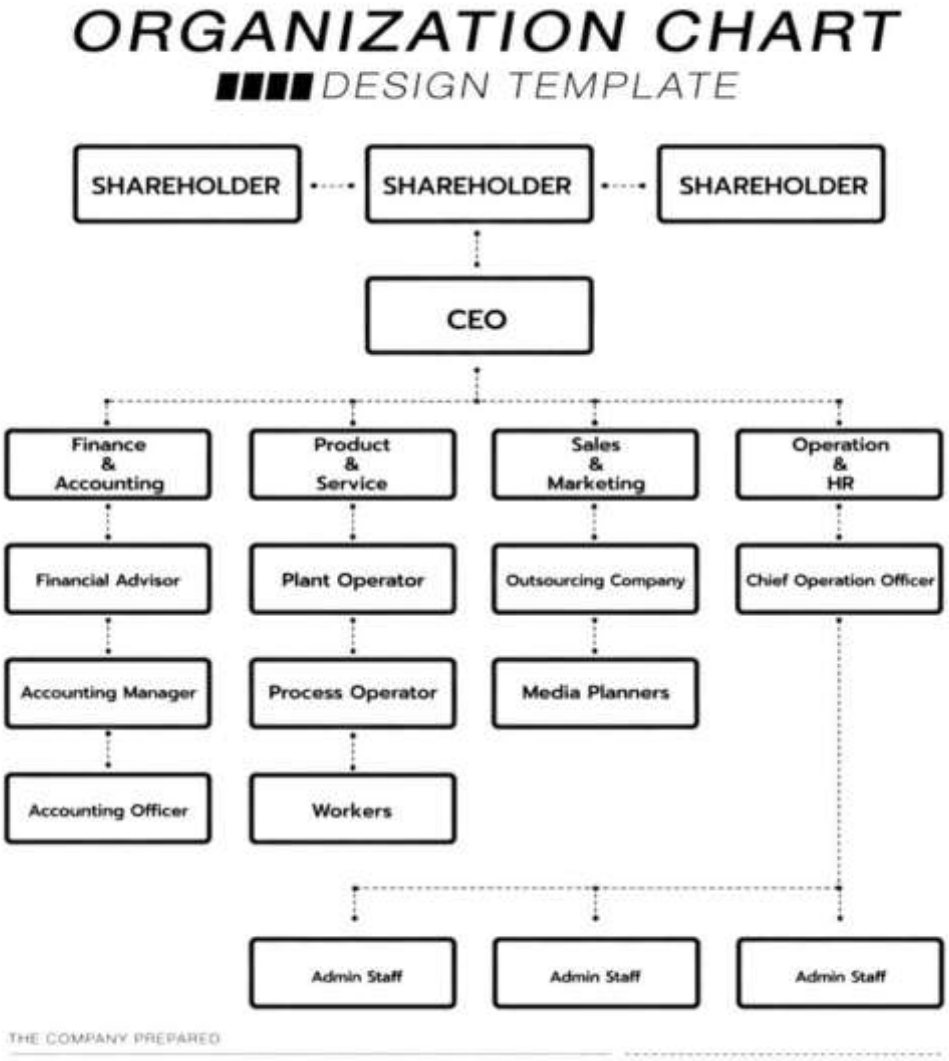
3.2 The Matrix Structure: The Dual-Command System

The Functional structure's emphasis on efficiency and the Divisional structure's emphasis on responsiveness are combined in the Matrix structure to create an organizational design that is both efficient and responsive at the same time. The Matrix is the most intricate form of organizational design.

The Mathematical Structure breaks the major principle of traditional management: Unity of Command; hence in the Matrix, an employee is subject to receiving directions from two different employers — the Functional Manager and the Project (or Product)

Manager. An engineer would therefore report to his Functional Boss (the "Head of Engineering") for technical standard requirements and report to his Project Boss (the "Product Manager") for daily task requirements and timelines.

According to Daft (2021), this represents a strong form of horizontal linkage. Moreover, Daft goes on to explain that the Matrix structure consists of both Functional and project divisional structures simultaneously being used at both horizontal and vertical levels (p. 228).



3.2.1 The Economic Logic: Flexibility and Resource Sharing

The Matrix provides organizations with the flexibility to create a network of specialized resources across all of their various products, allowing an employee who has expertise in artificial intelligence (AI) to work on both "Project A" in the morning and "Project B" in the afternoon instead of being posted permanently to any one of the company's divisions.

Organizations that work in industries where the majority of projects are temporary, such as consulting, high technology, and aerospace (e.g., Boeing), benefit from this type of

matrix structure because they often need to assemble multidisciplinary teams to complete projects (Jones & George, 2020). Additionally, the Matrix allows for the rapid flow of information both vertically (technical quality) and horizontally (project coordination).

According to Jones and George (2020), the Matrix "provides the greatest degree of flexibility to an organization by allowing it to fully utilize its available resources as well as respond to the fast pace of new product needs (p. 250)."

3.2.2 The Challenge: Power Struggles and Confusion

Although the matrix format appears to be aesthetically pleasing, its functionally operational complexity renders it unmanageable. When two executives are involved, this leads to conflicting roles. As an example, both a functional manager and a project manager have claiming rights over what an engineer can do when each has a request from the engineer. The functional manager may want to have the engineer attend a training seminar while the project manager may want to have the engineer finish his/her coding by Friday. The question is, which of these managers will prevail?

This matrix format requires a large amount of interpersonal skills and negotiation, as there needs to be a "clear rules of engagement". Otherwise, the matrix may lead to an "anarchy." Mintzberg (1979) has also stated that the Matrix has created a high degree of stress due to a need for ambiguity tolerance by managers who operate in the matrix. He states the following: "The matrix format is definitely not for the weak in spirit... it institutionalizes conflict" (p. 170).

3.3 Emerging Structures: Network and Team-Based

The digital revolution is changing the way companies are structured. In addition to the division and matrix structure there are even more nimble structures now available:

- Team Based Structure - The company consists of teams only. There is no rigid hierarchy. Companies like Gore-Tex or early-stage Google use this structure.
- Network Structure (Virtual organisation) - The company acts as a hub and outsources most of its important business functions (manufacturing, distributing, marketing) to outside partners. Nike, for example, is really just a design and marketing hub; the factories are independent contractors. This gives the company maximum flexibility and minimum fixed costs.

3.4 Comparative Analysis

Deciding between Modern and Classical structures involves a consideration of Efficiency versus Flexibility.

- Functional (Classical) - High Efficiency Level & Low Flexibility +Best suited to stable environments.
- Divisional (Modern) - Medium Efficiency Level & High Responsive Level +Best suited to multi-product Companies.

- Matrix (Modern) - High Flexibility Level +Complicated Management Structure +Best suited to Project-Driven Industries.

The modern organization does not support the premise that there is a single best method for an organization to be successful (the premise put forward by the classical organizational theorists). The divisional organizational structure has created a solution to the problem of high scale of companies by decentralizing authority and decision making power, while the matrix organization structure has created a solution to the problem of high complexity by institutionalizing the facilitation of collaboration. The modern organization should not be viewed as a machine that requires to be maintained / lubricated to function. Rather, the modern organization should be viewed as a living organism, and therefore, be structurally designed in such a way that it can adapt, change and continue to exist within an ever-changing and turbulent environment.

4. Designing the Organizational Chart and Authority Distribution

The previous sections included a review of the three types of theoretical frameworks — functional, divisional and matrix — used by managers for organizing businesses. A theoretical model can only be successful if it is put into action. The practical representation of this organizational structure will become the organization's organizational chart (also called the "Organigram"), and its method of operation will be through distribution of authority. Creating an effective organizational chart is much more than simply creating an image; it requires strategic planning and will affect the organization's power relationships, communication systems, and the volume of decisions made in the organization.

4.1 The Organizational Chart: Visualizing the Enterprise

The organizational chart serves as a visual tool to display the framework of the organization and relate all positions or jobs within the organization to each other. The organizational chart can therefore be quantified as a map of the business that enables all interested parties the opportunity to navigate the hierarchy of the organization.

According to Daft (2021) there are two major aspects outlined in an organization chart; "the vertical hierarchy of authority" (who reports to whom) and "the horizontal division of labor" (who does what) (p. 210). The boxes that typically make up an organizational chart identify individual jobs or departments and are connected by lines that illustrate the degree of direct supervision.

- Vertical Lines - represent the chain of command. A solid line showing a direct reporting relationship from the CEO to the VP Marketing describes a direct supervisor - supervisor relationship.
- Horizontal Lines - represent peer to peer relationships and coordination across different departmental functions at an equal level in the organizational hierarchy.

While they are absolutely essential, Organizational Charts have disadvantages; they illustrate the formal structure of the organization, but do not convey the informal structure or the "network" of relationships that exist (i.e. the "water cooler conversations" among employees) that ultimately gets the work done. As noted by Mintzberg (1979), "The organigram describes how work is divided in the organization, but not how work is coordinated" (p. 36).

4.2 Departmentalization: Grouping Activities

The first phase of creating a chart is a process called departmentalization which means to group jobs together into logical categories. The way a manager groups the activities of his employees delineates the basis by which resources will be allocated and how employees will cooperate with one another.

- Functional Departmentalization: This refers to groups of employees being designated based on their functional skills (e.g. engineering, finance). This is very efficient but also creates functional silos.
- Product Departmentalization: In this case, the basis of sorting department employees is the output of the product made by the department (e.g. trucks, cars). This allows the company to focus on managing product but often causes many duplicate resources.
- Customer Departmentalization: This method is sorting department employees based on type of customer they serve (e.g. government or retail). This provides high customer satisfaction.
- Geographic Departmentalization: This refers to sorting employees by geographic territory (e.g. north, south). This provides for a high degree of logistical efficiency.

Modern day corporations often use a hybrid approach to departmentalizing according to Robbins and Coulter 2018, "As a result, many large organizations today use a hybrid approach, and typically utilize most or all of these different forms of departmentalization. This allows for proper balancing of responsive and efficient" (p. 355). For example, a multinational corporation may use geographic departmentalization at the executive level, and may use functional departmentalization at the local level.

4.3 Distributing Authority: The Power Structure

The authority within each authority box will determine how the manager establishes authority boxes, thus distributing power of authority; therefore, authority is an appropriate power in determining how to distribute resources and make decisions.

Another distinction to consider when preparing the org.chart is line versus staff authority in that the line authority refers to the direct line of authority/power relative to accomplishing the org. goals and is the position of direct responsibility of an org. goal, i.e., the Production Manager or Sales Director has line authority in that position to issue direct orders; whereas Staff Authority refers to the position of supporting the line manager, e.g., Legal Counsel/HR Manager who cannot issue direct orders to line employees but must rely on using persuasion and expertise when providing support to line managers.

Many times there are conflicts between staff members and line managers; for example, if a safety officer (staff) is observing a production line and concludes the line is not complying with safety standards, can the officer stop the line from running? This is best illustrated in the org.chart by a dotted line illustrating a staff to line relationship as opposed to a solid line of chain of command (i.e., authority).

According to Koontz & Weihrich (2015), "a major source of conflict in organizations, is due to the lack of clearly defined relationships between line and staff positions; [staff] positions sometimes dilute the authority of line positions" (p. 202).

4.4 Factors Influencing the Design

There is no such thing as a 'perfect' organization chart. The best design will depend on a variety of conditions, including: Strategic Direction; Size of the Organization; Available Technology; and the Environment.

- Strategy: There is a direct correlation between an organization's strategy and its chart structure. If the strategy is 'Cost Leadership', an organization will require an efficient structure to reduce overhead; this is best represented by a simple, functional chart. If the strategy is 'Innovation', an organization will be encouraged to use an organic structure to promote creativity; this would be best illustrated by a flatter chart.
- Size: A growing organization will become increasingly complex. This is supported by Chandler's (1962) research, which demonstrated that an organization evolves its structure as it gets larger; a small organization would utilize a very loose structure chart, while a multi-national corporation would utilize a formalized divisional structure chart to maintain order.
- Technology: The type of technology employed by an organization will impact the structure of the organization chart. An organization using manufacturing technology (i.e., assembly line) will typically have a very formal, hierarchical organization chart, whereas an organization using electronic technology will generally have an informal, flat organization chart.

4.5 The Mechanistic vs. Organic Continuum

The decision of how to design the organization is found along a continuum between the two extremes of mechanistic and organic organizational design.

- Mechanistic Organizational Design: This organizational design is defined as a highly specialized, rigidly departmentalized, with a defined chain of command and narrow spans of control. It is referred to as "bureaucratic" in nature and designed for efficiency under stable conditions. The organizational chart would resemble a rigid pyramid shape.
- Organic Organizational Design: This organizational design is defined as using cross-functional teams, open flow of information, wide spans of control, and decentralized authority. It is referred to as "adaptive network" design and is

designed for innovation during dynamic / turbulent conditions. The organizational chart would typically be depicted graphically as either a circle or a horizontal shape.

According to Burns & Stalker (1961), "mechanistic systems are suited for use under stable conditions; organic systems are suited for use under fluctuating conditions" (p.119).

In summary, the manner in which an organizational chart is designed constitutes a balancing act for the organization's manager. A manager must weigh not only the need for control versus the need for flexibility, but also the need for specialization versus the need to build integrations. The ideal organizational chart is one that is largely invisible to the employees performing the work, since it helps employees do the work with minimal interference. Conversely, the poorly constructed organizational chart acts as a barrier, thereby causing bottlenecks, confusion, and political conflict to the point of rendering a financially wealthy organization ineffective.

5. Centralization vs. Decentralization in Management

The last, and also the most politically charged, dimension is the vertical locus of decision-making authority (for example) after the organization chart (pictures of the key roles and departments) is established, the key question is: where in the hierarchy is authority to make decisions located? Who decision authority do you want to retain as: the CEO/top management potential or all significant decision makers: managers and employees at the front? The issue is Centralized- Decentralised Authority and is not a "yes or no" question - it is a continuum of authority (i.e. a range of distribution of authority) and has a major impact on organization agility, control, and employee morale.

5.1 The Concept of Centralization

A centralized management structure is one in which most, if not all, of the ultimate authority/responsibility to make decisions rests with senior management. The central office (or "strategic apex") of a highly centralized organization acts as the brain, while the lower levels act solely on behalf of the strategic apex by performing their duties.

This model is based on the traditional administrative management model, which emphasises uniformity and tight control of the organisation.

According to Robbins and Coulter (2018) "Centralization is a term that refers to the extent to which the [decision making authority] of the organisation is concentrated at a single location" (p. 358).

The economic rationale for centralisation is founded on two factors: Coordination and Consistency.

- Uniformity of Action - this ensures that the same policies are used equally throughout the enterprise. For example, a single, centralized purchasing department

would be able to negotiate greater bulk purchasing prices, as compared to fifty separate purchasing departments making their purchases independently.

- Crisis Management - a centralized command structure can facilitate quick and decisive actions during emergencies (such as a financial collapse or a PR predicament) without requiring a time-consuming consultation process.
- Financial Control - prevents low-level managers from creating unapproved financial expenditures that may cause the organisation to become illiquid.

The cost associated with excessive centralization within the organisation results in an occurrence known as "managerial overload." As an enterprise grows in size, senior/upper levels of management become bottlenecks to decision making. As a result, the information must travel up the scalar chain of command for processing, and the orders must travel back down the chain of command. The resulting problem of decision latency (i.e., the delay between when a decision is made and when it is actually made) may be catastrophic for an enterprise competing in a fast paced marketplace.

5.2 The Concept of Decentralization

Decentralization is the process of delegating authority and accountability for decisions to lower levels in the organizational hierarchy. It gives power to those of the closest proximity to the action itself, such as at the shop floor, customer interface with a store, or in a regional office. As such, decentralization is a tangible form of empowerment.

According to Koontz and Weihrich (2015), decentralization is "the tendency for an organizational structure to decentralize (disperse) authority for making decisions; it is an organizational and management philosophy" (p. 180).

Reasons for decentralization include: Responsiveness and Motivation

- Speed and Agility: If a customer has a complaint, a decentralized frontline employee can solve that complaint on-the-spot without having to go to a supervisor for permission. This results in increased customer service.
- Better Information: Lower-level managers will have in-depth knowledge of the local area that top management may not know. For example: the regional manager of Oran will have better understanding of the marketplace than that of the CEO in Algiers.
- Employee Development: The most effective way to prepare future leaders is through the decision making process. Decentralization creates a sense of ownership and autonomy that are significant contributors to job satisfaction.

5.3 Factors Influencing the Choice

Organizations cannot be classified as either centralized or decentralized; they can fall somewhere in between those two polarities and (if you like) are continually re-evaluating their "sweet spot" with reference to the factors that might affect how centralized or decentralized an organization should be.

The environmental context of an organization will play a major role in determining how decentralized or centralized an organization should be according to Child (2015). "Decentralization is necessary when there is more information to process than the central office can handle and where local responsiveness will be critical to business survival" (p. 245).

Factors affecting the degree of decentralization for an organization include:

- Size of the organization - When a business grows larger and larger it will absolutely be impossible to centralize all areas of the company due to the massive number of decisions that a multinational corporation will make.
- Stability of the surroundings - An organization will generally find that it will operate better, from an efficiency standpoint, with a centralized structure if it is in a stable environment; however, in a constantly changing and unstable environment (Axis 4), the company will perform better if it has a decentralized structure (due to being able to react more rapidly to change).
- Cost of making regulatory decisions - Many decisions that have an associated risk/return (how much money you are willing to take a chance on) will be made at a centralized level (an example may be building a new factory), whereas routine operating decisions (an example may be scheduling shifts) would most likely be made at some level of decentralization.
- Corporate Culture - An organization may have a corporate culture that supports democratic involvement (which encourages decentralization) or it may have a culture that supports a dictatorial approach to management (which would encourage centralization).

5.4 The Modern Trend: "Coordinated Decentralization"

The knowledge economy of the 21st century has experienced a trend towards greater decentralization than ever before. The traditional command and control management structure that was dominant during industrialization is now too slow for the fast-paced digital world. However, total decentralization does run the risk of creating fragmented organizational structures that operate in different ways with little or no knowledge of how each element functions, i.e., the left hand does not know what the right hand is doing.

As a result, many organizations are trying to maintain coordinated decentralization. In this structure, the what elements of an organization (strategy, values, and information technology standards) are kept centralized, while the how elements (execution and operations) are decentralized.

According to Daft (2021), the use of technology has enabled organizations to use this hybrid model of combining the benefits of decentralization (empowerment) with the benefits of centralization (control) because the internet and other enhanced technologies allow managers to have real-time access to the operations of all the different branches and divisions within an organization.

To summarize, centralization versus decentralization is not a question of moral right versus wrong; it is simply a question of which approach will work best for a particular organization. While one side is advantageous in providing more control and coordination for an organization, the other side can provide the speed needed to compete successfully in today's marketplace. Therefore, astute organizational architects must create organizational designs where the authority for decision-making exists where it will be most effective; this means centralized enough to maintain organizational unity but decentralized enough to maximize the use of human resources through creativity.

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Axis 7:

Enterprise Functions and Resources

1. Human Resources Function (Evolution and Tasks)

The prior axis described the structure or anatomy of an enterprise, which serves as a framework for action; however, without the fuel supplied by people, structures are lifeless. Accordingly, the enterprise is a fundamentally human organization. Machines cannot develop new ideas(innovate); algorithms cannot do business with one another; and investors cannot generate their own motivation. It is people who convert resources into value. As a result, the Human Resource (HR) Function is not just a functions as an administrative function; rather it serves as a level of strategic partnership and is tasked with overseeing and managing the most dynamic and valuable asset of the organization - its employees. This section will discuss the evolution of this function from the original employee discipline or "Personnel" type of function to its present day strategic "Human Capital" type function, and will outline the primary operational activities that define today's HR Function.

1.1 The Evolution of the HR Function

Managing humans has changed in tandem with the evolution of enterprises; therefore, it is possible to identify several phases of evolution in the management of human resources. Each phase reveals how managerial philosophy has evolved in relation to changes in social and economic reality.

1.1.1 The Era of Personnel Administration (Late 19th Century – 1950s)

Labor was viewed as a commodity, just like with coal and steel, and there was very little management of human resources by the manager to align with the overall business objectives would take place at this stage in developing the industrial society. Similarly, the role of the “Personnel Department” was primarily administrative (to hire and fire), and to ensure the employee would comply with basic rules established by the employer. Desslandes (2001) points out that this time period was dominated by Taylorism in terms of how “the worker was thought of as a cog in the machine … and the role of personnel was to keep order and track employee working hours.” (p.23). Thus, the psychological needs of the employee were not even an aspect to consider; the relationship between the company and employee was purely transaction-based, where money is paid for labour.

1.1.2 The Era of Human Relations (1960s – 1980s)

The Human Relations Movement emerged from both the Hawthorne Studies and the theories of Maslow and Herzberg, which created a significant change in the way the workplace operates. Prior to this point in history, managers thought of productivity as something determined purely by how many units of product were produced. However,

once they discovered that happy employees were also more productive employees, they were able to shift their thinking towards "Employee Relations" as the function that manages how employees work together to meet the company's needs.

Dessler (2020) states, "This evolution of the HR function represented a shift... Managers came to understand that, in addition to needing to be successful at producing products, employees also have social and psychological needs..." (p. 14). As such, the HR department became the "conscience" of an organization, balancing the needs of the organization for production with the needs of the employees for a healthy working environment in which they can be productive.

1.1.3 The Era of Strategic Human Resource Management (1990s – Present)

The elevation of the HR function into the boardroom reflects the rising importance of the executive management team on organizational performance, especially concerning human capital, in today's knowledge-driven economy. HR is now viewed as a key component of "strategic human resource management" (SHRM) — that is, HR's current role has expanded beyond record keeping and compliance with federal and state labour laws, to aligning an organization's employees with its organizational strategy and objectives.

Armstrong and Taylor (2020) define SHRM as "an approach to management decision-making on the intention and plans of the organization with regard to the employment relationship including, staffing; recruiting; training; developing employees; performance management; rewarding and compensating staff and employee relations strategies" (p. 6). Therefore, it is necessary to understand that the modern day CHRO (Chief Human Resources Officer) is asking not, "How do we fill this vacancy?", but rather "What skills do we require five years from now in order to be the market leader?"

1.2 Core Tasks of the HR Function

While human resources (HR) have moved through different philosophies/remains fundamentally unchanged across various technology-based HR operational functions, most core areas of HR Technology (HRTT) still play an integral role throughout each stage (or phase) of the employee lifecycle within every employer's workforce.

1.2.1 Workforce Planning and Recruitment

The first stage of an Employee Lifecycle is to identify whether employees occupy the correct roles at the correct times; this is accomplished through Workforce Planning, by reviewing current workforce competencies against projected workforce requirements necessary to support future business growth. After identifying the need for additional employees, employers begin recruiting new employees. Recruiting is generating a pool of highly-qualified candidates to fill vacant positions. According to Noe et al. (2019), "Recruitment isn't merely an organisational practice" but "organisations conduct recruitment to help them find and secure high-quality employees." (p. 206) In today's digital recruiting environment, there are many different ways to engage in recruitment including; employer branding ('positive brand image of an organisation'), social media ('an

interactive form of content dissemination that allows for the identification of potential new hires') and automated candidate screening systems ('AI-based technological advancements in candidate assessment and qualification').

1.2.2 Selection and Onboarding

Selection is a filtering process involving tools, such as interviews, psychometric testing, and assessment centres to determine the candidate most likely to perform well in the organisation ("cultural fit"). A poor selection can be expensive to the organisation not only in salary but also in altered team dynamics.

Following selection, the new employee must go through Onboarding (or Induction). This is not just about the completion of forms but rather the process of integrating the new employee into the organisation's culture. Proper Onboarding will reduce employee turnover and improve the time taken to become fully productive in their new role.

1.2.3 Training and Development (L&D)

Globalisation has resulted in rapid change and the loss of skills in the workplace due to their short lifespan. Therefore, employers have to adopt the role of being educators. Where training is focused on improving current job performance through the acquisition of skills for present-day use (e.g., learning a new computer program), Development prepares employees for future jobs with organisations (e.g., leadership development).

According to Cascio (2018), "The investment in people is an inescapable reality for all organisations." Training is aimed at improving employee performance by equipping them with the required skills, while Development develops employees for potential future roles with the organisation (Cascio, 2018, p. 302). Talent management is part of this function by identifying and developing high-potential employees in order to ensure a steady stream of qualified personnel for succession.

1.2.4 Performance Management

Every company has to make sure that the work each person does adds up to the final work of the whole company, which is usually called "Performance Management." Performance Management has continued to change from being thought of as just 'annual appraisals' to also including continuous coaching and real-time feedback loops as part of an employer's efforts to help employees achieve their maximum potential.

There are two dimensions of performance management that support an overall performance management strategy. One is for administrative purposes (e.g. determining promotion or pay decisions) and the other dimension is for developmental purposes (e.g. help to identify an employee's strengths and weaknesses). An effective performance management system also aligns individual employee KPIs (Key Performance Indicators) with the business goals/objectives of the organization (e.g. increase sales by 10%).

1.2.5 Compensation and Benefits (C&B)

The transactional nature of compensating employees is based on the exchange of one's effort for earnings. However, today's C&B systems have become very sophisticated when designing a Total Rewards package to attract and retain desirable employees while keeping costs reasonable.

There are two types of compensation:

- Direct Compensation which includes the base salary plus cash bonuses or commissions paid to employees; and
- Indirect Compensation which includes employee benefits such as health insurance, retirement plans, fitness club memberships, and stock options.

According to Martocchio (2019), "Pay has a strategic role within an organization... Compensation systems are designed to motivate employees to exert effort at work... Equity theory states that if employees believe pay is not equitable to the pay of their peers or associates, it may de-motivate them (Martocchio 2019, p. 4)."

1.2.6 Labor Relations and Compliance

Human Resources has the fiduciary obligation of overseeing the legal parameters around employment. The Human Resources department will administer the employer-employee relationship with labour unions (if applicable) and ensure compliance with labour legislation (e.g., the Algerian Labour Law of 1990, Bill 90-11) in relation to grievance handling, discipline; and workplace health and safety (i.e., health and safety regulations).

Human Resources Managers function as a buffer between Management's goal of maximising profit and Management's ability to maintain the lawful rights of workers, thus securing the business from costly lawsuits and damaging reputational consequences.

1.3 The Future of HR: Digitalization and Analytics

There is a transformation happening right now in the Human Resources function (HR). People Analytics takes place of using one's intuition (gut) and begins to utilize data for new ways of recruiting and finding candidates to promote. More and more the decision as to whether or not to hire or promote will be made using predictive algorithms rather than someone's "gut feeling."

The Gig Economy and remote working have changed the definition of what is part of a workforce. HR must now manage a hybrid ecosystem of full-time employees, freelance workers, and robots.

In conclusion, the Human Resources function has come a long way from its early days of merely maintaining employee payroll in the 19th century to its current status as the strategic architect for the future of organizations today (21st century). The Human Resource function is located at the intersection of how business strategies work together

with human psychology, and is responsible for creating an environment where normal people within an organization will be able to produce extraordinary results collectively.

2. Production and Operations Function

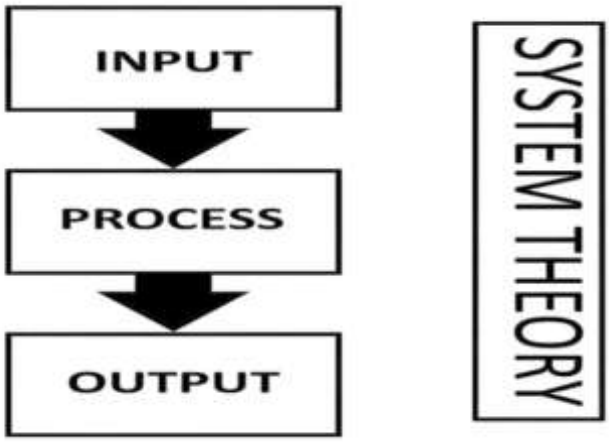
The Technical Core of any business is encompassed in the Production and Operations Function of that business (P.O.M. - Production and Operations Management). In P.O.M., the transformation process actually occurs, regardless of what you make or provide (steel beams or financial advice). There must be a system within a business to convert inputs (raw materials, information, or energy) into outputs (goods or services) that have value for the customer; in economic terms, this means creating Utility. Historically, focus on operations was restricted to production on the factory floor (i.e., "Production") but as a result of modern management theory, the concept of operations has evolved to include the large service sector (i.e. hospitals manage the flow of patients like a car plant manages its assembly lines).

2.1 The Concept of Production Systems

The production system represents a unique layout of activities and resources related to producing a product/service. As such, it is the engine of the company. Its design is critical because it determines cost, quality, and speed of delivery.

According to Stevenson (2021), operations management is the process of managing systems/processes that produce products and/or deliver services (p. 4). The primary goal of operations management is to provide a perfect balance between supply and demand with the most efficient process possible. There are three decisions that drive the strategy for most operations managers to determine how they will meet the needs of their customers:

- Volume - How many units will be produced? (High volume or low volume)
- Variety - How many different types of products are required? (Standardized or customized)
- Variability - How much does demand vary with time? (Consistent or seasonal)



2.2 Types of Production Systems

Generally, production systems are classified based on the volume and variety of output, and knowing these types will help you select the best machinery, layout, and skills.

2.2.1 Job Shop Production (Unit Production)

The Job Shop produces Products on an Individual basis or Small Batches based on Customer Orders. Examples are; custom furniture manufacturing, shipyards manufacturing special purpose vessels, and high-end graphic design firms.

- Characteristics: There is a wide range of product varieties available; however, the number of units produced is relatively low. Use of general-purpose equipment.
- Economic Logic: Flexibility and Quality are emphasised over Speed of Production. Unit costs are relatively high; however, the product will generate a premium price because of the amount of customisation being done.

2.2.2 Batch Production

Batch production is the practice of producing a limited number of an item, stopping to set up a machine for producing another item before starting to produce again. It is typical in the pharmaceutical industry (for example, one batch of aspirin and another batch of ibuprofen) or in bakery operations.

- The volume and variety of goods produced in this method are moderate.
- An additional challenge to batch production is that "setup time" (or changeover time) produces a large economic cost. For example, if the machines take 4 hours to be cleaned between batches, then there will have been 4 hours of lost productivity.

2.2.3 Mass Production (Flow Production)

Mass production, as popularized by Henry Ford, is the ongoing production of inline-defined standardized products in large quantities. Examples are automobile manufacturing (assembly line), beverage bottling, and smartphone production.

- % High volume / Low variety. Equipment is designed for a specific use (dedicated machines). The labor force generally consists of semi-skilled workers performing repetitive tasks.
- Economic Logic: Achieving Economies of Scale results in a significant decrease in the product cost per unit. This can happen because the cost of the fixed capital/equipment is distributed over millions of units. Thus, lowering the cost per unit to levels that will allow the product to be sold to the mass market.

According to Heizer et al. (2017), in order to function, mass production must remain in a rigidly stable state. "...the system has been developed for the purpose of achieving high levels of efficiency...however, it is very much inflexible; to make changes in the product would require extensive, costly retooling of the entire production line" (p. 58).

2.2.4 Continuous Process Production

Continuous production exemplifies the extreme end of the continuum where material flows continuously for a 24/7 period without interruption. Oil refineries, chemical processing plants and steel mills are typical continuous production examples.

- Characteristics of this process include extreme volume with zero variety (the process produces a standard commodity). The process is relatively automated with human operators primarily acting as the monitoring function.
- The remnant constraint is the prohibitive cost associated with stopping the process. For example, it would not be permitted to allow a blast furnace to cool down.

2.3 Operations Planning and Control

After a system has been constructed, it needs to be operated. Planning and Control is in charge of this; it is concerned with the daily decisions necessary to continue operating the factory.

2.3.1 Capacity Planning

Capacity is defined as the maximum load a unit can handle while operating. The manager must match capacity with demand.

- Under-capacity: When you miss potential sales due to not being able to satisfy your production needs (i.e., Opportunity Costs).
- Over-capacity: When machines are not being used and employees are not working at all (i.e., Waste).

2.3.2 Inventory Management

Inventory consists of physical products that are classified into three categories: raw materials, work-in-process (WIP), and finished goods, which all cost the company money when they are on its shelves. The primary objective in managing inventory may be stated as minimizing the costs associated with holding inventory while avoiding stockouts (Krajewski et al., 2019, p. 385). The authors also mention that "Inventory... provides protection against uncertainty; however, there are costs associated with holding inventory, including storage, insurance, and the risk of obsolescence" (Krajewski et al., 2019, p. 385). The EOQ model is one of many modern approaches available to managers in their effort to determine mathematically the optimal quantity to order.

2.3.3 Quality Management

Previously, product quality had been evaluated at final inspection (Quality Control). In contrast to this, the philosophy of Total Quality Management (TQM) is to create product quality at the time that the product is created by incorporating quality assurance within the manufacturing process itself. Quality is "free," meaning it costs less to prevent than to repair defects.

- Six Sigma: A data-driven methodology designed to reduce defects to 3.4 defects per million opportunities.
- Kaizen: The Japanese philosophy of continuous and incremental improvement, engaging all employees in the improvement process.

2.4 Lean Production and Just-in-Time (JIT)

Lean Production, the biggest breakthrough in contemporary operations, has been developed by Toyota via the Toyota Production System – taking aim at "waste" (muda). Lean asserts that all operations that consume resources with no resulting value to customers are wasteful and should not occur.

A key element of Lean is Just-In-Time (JIT). Slack et al. (2016) define JIT as a "pull" system; "rather than pushing product through the factory based upon forecasting, JIT delivers products to the system as a result of customer orders (pull)" (p. 468). Therefore, the amount of inventory is practically zero and parts arrive at the assembly line exactly when required. This makes it extremely efficient; however, if any disturbance occurs in the supply chain (e.g., supplier strikes), it halts the entire factory operation.

2.5 The Service Operations Distinction

As the economies are changing to a focus on services, so are the ways in which Operations Management have been adapted to meet those transformations. The four main differentiating aspects of managing a hotel versus managing an indicator of manufacturing are:

- Services are intangible; there is no way to inventory a service of one night's rest.
- Services are inseparable from the consumer, meaning the consumer is an integral and permanent part of the production process i.e. obtaining a haircut.
- Each service experience will be different; services are heterogeneous.
- There is no way to recover any unsold capacity for services; they are perishable.

In the service industry the "factory" is generally located in the front office area. This means that Operations Management combines with Marketing and Human Resources. Hence, the "production line" is comprised of the Customer Journey.

In summary, the Production and Operations Function is the lifeblood of the economic enterprise. It provides a bridge between the vision and ideals of the Boardroom and the reality of the marketplace. A company may have great marketing and many resources but at the end of the day, if the production and operations function does not produce products of good quality, on time, and priced competitively - they will not be successful.

3. Marketing Function (Concept and Marketing Mix)

The process of creating value through production, followed by extracting that value through marketing, is known as the economic cycle of an enterprise. Without a system that connects a product with a paying customer, the best-manufactured piece of merchandise can simply become a costly item in inventory, therefore creating no return for the enterprise. As the communication link between the enterprise and the market in general, the marketing function is often misinterpreted to mean only "selling" and/or "advertising", while in actuality it is a total philosophy that encompasses the entire organisation according to the principles of modern economic theory. The marketing function requires the marketing practitioner to identify customer needs; create suitable products or services to meet those customer needs and deliver the product or service to the customer in such a manner that it provides value to him or her and profit to the enterprise.

3.1 The Evolution of the Marketing Concept

Marketing did not always have such a prominent role; economies have changed from a scarcity-based economy to an abundance-based economy; thus the role of marketing has drastically changed over time.

3.1.1 The Production Concept (Late 19th Century)

During the Industrial Revolution, demand was greater than supply; the emphasis on production efficiency was paramount; the attitude at that time was that if something was produced cheaply enough, consumers would purchase it. Henry Ford's quote of "Every customer can have a car painted a different colour if they choose black" reflects the time period through which marketing operated in a minimalistic role with distribution only being of concern.

3.1.2 The Selling Concept (1920s – 1950s)

Since mass production could meet consumer demand, many businesses had excess inventory due to increased competition. The emphasis on aggressive selling resulted from this excess inventory. According to Kotler & Armstrong (2018), this is known as an "inside-out" perspective of selling... The sole purpose of the selling concept is to sell what the company produces, instead of producing what the customers want (p. 30).

3.1.3 The Marketing Concept (1950s – Present)

The modern world is characterized by the marketing philosophy known as the marketing concept. The marketing concept is an inverse of the traditional logic - rather than finding customers for your products, you have to find products for your customers. In other words, the process starts with the market and not the factory. Drucker (1973), the management guru, most effectively expressed this difference by stating, “The purpose of marketing is to make selling unnecessary. The purpose of marketing is to know and understand the customer so well that your product or service fits and sells itself” (p. 64.).

Today, this has progressed to the holistic marketing concept, which combines these three aspects of marketing; internal marketing (employees), relationship marketing (customer loyalty), and responsible or social marketing.

3.2 The Marketing Mix (The 4 Ps)

The Marketing Mix is a tactical toolkit used by the marketing manager to carry out the philosophy. The Marketing Mix was first proposed by E. Jerome McCarthy in 1960, and is comprised of four controllable variables the company is able to manipulate in order to create a desired response in the target market. Collectively, the four controllable variables are known as the 4 Ps: Product, Price, Place, and Promotion.

3.2.1 Product: Creating Value

The product represents the integral marketing application it is more than the actual goods or physical items; it encompasses all aspects of what satisfies the customer's need. According to Lamb et al (2018), the product constitutes the basic element within a marketer’s marketing programme. "The product offering is the central element of an organisation's marketing programme ... If there is no product to market, there are no other components of the marketing mix that can gain a meaning" (Lamb et al, 2018, p. 170).

Key Decisions Regarding Products:

- Product Variety - Number of options available with the item (e.g., size/colour).
- Quality/Design - The level of quality and design from an aesthetic and functional perspective.
- Branding - The way that the product is identified to the customer through name, logo, and emotional image.
- Packaging - How the item is packaged to protect it and how the packaging communicates value.
- Services - Supporting the product after the sale through warranty, installation and additional service.

In a service economy (as mentioned in Axis 5), the 7 P's of services marketing expand to include PEOPLE, PROCESS and PHYSICAL EVIDENCE.

3.2.2 Price: Capturing Value

The pricing element, out of all offerings in a marketing mix, generates revenues (the income coming in to the business) while all the other marketing mix elements generate costs (the costs of producing and marketing the product). Pricing is determined by assigning a monetary value to an item (product, service, etc.), yet requires a careful balance between a minimum amount required to cover costs (the "floor") and what consumers perceive the value of a product to be (the "ceiling"). According to Nagle and Müller (2018), strategic pricing is ultimately about maximizing value received, rather than solely covering costs. "Price is the economic sacrifice by the customer that must be made to obtain a product... but it also serves as a signal of quality" (p. 21) Strategies associated with pricing are as follows:

- Cost-Plus Pricing: Marking up the production costs to arrive at your selling price.
- Skimming: Initially charging a higher price to "skim off the top" of the current market (common in technology products).
- Penetration Pricing: Fast market share growth by charging a lower than typical price initially; for example, DZD 9.99 versus DZD 10.00.

3.2.3 Place (Distribution): Delivering Value

The term 'Place' is used to refer to Distribution Channels. The network of intermediaries (wholesalers, retailers, logistics service providers) involved in transporting the product from the manufacturer to the consumer is referred to as the distribution channel. The goal is to locate the right product at the right time, in the right place, and in the right amount.

According to Rosenbloom (2013), Distribution can be an important source of competitive advantage. "Marketing channels provide the method for a firm to transfer the goods and services that the manufacturer creates to the ultimate user" (Page 6).

- Direct Channel: The direct sale to the consumer (i.e., a bakery or an online store).
- Indirect Channel: Utilizing intermediaries (i.e., selling via a supermarket chain).

In Algeria, Distribution is particularly complex due to the combination of modern retail chains and a fragmented network of traditional wholesalers.

3.2.4 Promotion: Communicating Value

Promotional efforts are essential to a company's marketing strategy. They encompass all activities that help communicate product-related benefits and persuade potential customers (those who have not yet purchased) to make a purchase. The combined efforts of a company's various promotional methods and other marketing methods used to communicate with its customers is known as the Integrated Marketing Communications (IMC) mix.

According to Belch & Belch (2021), the IMC mix consists of "coordinating the various promotional elements and other marketing activities that communicate with a firm's customers" (p. 10).

The promotional mix consists of the following elements:

- Advertising: This includes paid presentations of products through non-personal methods (i.e., television, billboards, social media ads, etc.).
- Personal selling: This consists of face-to-face communication (i.e., a B2B sales rep selling to a business).
- Sales promotions: These are short-term incentives designed to stimulate purchases of a product (i.e. coupons, discounts, etc.).
- Public relations (PR): This assists in creating a positive company image and managing crisis situations.
- Digital marketing: This includes the use of search engine optimization (SEO), content marketing, and working with influencers.

3.3 Strategic Marketing Process

Marketing encompasses a series of tactical/service-oriented activities; however, it is a systematic discipline.

- Segmentation - a systematic process of grouping customers into different classes based on they respective requirements (for instance; The automotive or automobile sector could involve using car demographics to categorize the automotive sector into diverse car classes such as "luxury," "family," and "economy" class vehicles.)
- Targeting - which target segments to focus the company on based on the strengths of the company.
- Positioning - the mapping of a product in relation to competing products in the minds of target customers (for example, Volvo is positioned as "Safe" and BMW as "Performance"). The evolution of this strategic overview provides directional guidance for each decision made with respect to the Marketing Mix.

3.4 Conclusion

The Marketing Function represents the strategic direction of the enterprise. Operations provide the product's functionality, finance maintains accuracy in manufacturing cost calculations; however, it is through marketing that the enterprise maintains its relationship with its external environment. In today's competitive environment, the majority of winners will not be determined by who has the best manufacturing facility but instead will be determined by which firm understands their customers most effectively. According to Peter Drucker, there are only two functions in modern-day business: marketing and innovation.

4. Financial and Funding Function

If the Production function is considered the "heart" of the business and the Marketing function considered its "voice," then the Financial function is considered its "lifeblood." Money serves as the medium with which all economic activities are measured (the final outcomes), exchanged (the means), and sustained (the process). The Finance function is responsible for ensuring that the company has enough liquidity to operate; has enough capital to grow; and has mechanisms in place to provide returns to its owners. In contrast to Accounting, which represents a historical recording of economic transactions, Finance looks to the future; it represents the Science of managing money to maximize Wealth. In the modern economy, where there is significant volatility in the capital markets and a tremendous amount of investment alternatives, the Chief Financial Officer (CFO) functions as a strategic architect of the company's future, not merely as a bookkeeper.

4.1 The Concept of Financial Management

Effective management of finances requires efficient acquisition and distribution of financial resources from a variety of sources to support organizational growth and development. The primary goal of financial health is to maximize the wealth of shareholders. To accomplish this, financial managers must consider how their decisions will affect the company's stock price over a period of time; shareholders expect returns on their investments in the form of dividends or appreciation of stock prices for long-term benefit rather than simply maximizing profits within the context of a specific time frame (Brealey, Myers, & Allen, 2020).

Corporate finance is the academic discipline that focuses on how corporations raise capital from outside sources such as banks and investors (also known as capital markets) and then invest that capital into assets in order to create value for shareholders through the distribution of excess cash generated by these investments (Brealey et al., 2020).

Corporate finance has two basic functions:

- Investment decision - What types of investments will produce the highest return? (Identify potential investments to pursue.)
- Financing decision - What means will the company use to pay for these investments, debt or equity? (Determine how the company will raise funds to make investments.)

4.2 The Investment Decision (Capital Budgeting)

The primary function of finance is to determine how to allocate funds. Capital budgeting refers to this process and involves finding the investment opportunities that have a significantly greater value to the firm than the acquisition costs.

To make this determination, financial managers rely upon different quantitative methods to determine the estimated future cash flows of a project and bring them back to today's dollars through the use of discounting.

Ross, Westerfield, and Jordan (2019) stress that "an investment should be accepted if the net present value of the investment is positive and should be rejected if its net present value is negative..." (p. 238) and that the NPV is the true measure of the decision to make the initial investment.

Additionally, other methods will also be utilized, including:

- Internal Rate of Return (IRR)—expected percentage yield from the initial investment
- Payback Period—the length of time required to recoup the initial investment.

4.3 The Financing Decision (Sources of Funds)

A firm must acquire capital for an identified profitable investment. A firm determines its capital structure and the use and mix of debt (borrowed money) and equity (equity interest) to finance its operations.

4.3.1 Internal Funding (Self-Financing)

The most cost-effective and lowest risk source of funds is from a firm's own retained earnings (earnings that are not paid out as dividends to shareholders). Instead of paying out all profits as dividends to shareholders, the business can reinvest some profits back into the business (i.e., Self-Financing or organic funding). This allows the company to preserve ownership control and avoid paying interest.

4.3.2 External Funding: Equity Capital

Equity funding consists of offering parts of a company to others.

- Public companies sell shares of stock on the stock exchange, such as the Algiers Stock Exchange.
- Private equity or venture capital is commonly used by start-up companies to offer shareholders a portion of their company in exchange for financial assistance and mentoring from investor(s).

According to Hillier et al., equity is "a permanent source of funding". "Equity is not a liability in the way that a debt is a liability because there is no obligation to pay back equity - however by selling stock in your company you are diluting the ownership and control of current shareholders" (p. 310).

4.3.3 External Funding: Debt Capital

funds with a formal agreement in which the borrower promises to repay the lender with additional interest cost.

- Banks and Financial Institutions continue to be an appropriate and common source of debt financing for small and medium-sized enterprises (SMEs). For example,

SMEs may use bank overdrafts to finance their working capital and long term loans from banks to finance the purchase of equipment.

- Large companies issue bonds (IOUs) directly to investors in order to obtain funds for large capital purchases.
- The primary advantage of debt financing is the Tax Shield. The Internal Revenue Service (IRS) allows a taxpayer to deduct the interest costs associated with debt financing from their taxable income. By deducting the interest cost, the taxpayer reduces their taxable income and in turn, the total cost of the loan to the taxpayer is reduced.
- The primary disadvantage of debt financing is the Risk of Bankruptcy. If a company does not have sufficient cash flow to pay the interest on its debt during a business downturn (i.e., a recession) then it has the potential for financial distress leading to bankruptcy.

4.4 Working Capital Management

Capital budgeting involves predicting spending in the future while managing working capital involves managing the present. Working capital allows a firm to have enough cash to meet its obligations as they arise. Working capital equals current assets less current liabilities.

Berk and DeMarzo (2017) assert that managing this cycle between cash, inventory, and receivables will reduce cash tied up in operations. (p. 860).

- When customers take a long time to pay (meaning receivables are high) then the firm will not have enough cash even though it is making a profit.
- If inventory sits too long without sales then cash will be tied up in that inventory.

4.5 Dividend Policy

Ultimately, the financial function will also determine how profits will be used. There are essentially two options for what to do with profits, which comprise the Dividend Policy, namely:

- Retain: hold the cash to allow for future growth of the business or
- Distribute: pay a cash dividend to shareholders

Both of these options will send a message to the marketplace. For example, a high-growth technology company (like Amazon) typically does not pay any dividends because all profits are reinvested in the business. In contrast, a mature utility company typically pays a high dividend to provide a return on their investment to shareholders who place value on stable income.

In closing, the Financial Function is responsible for being the steward of the company's economic value and balancing risk & return, liquidity & profitability. By making intelligent decisions regarding investments and financing, the Financial Function

will allow the Company to be a viable wealth-producing engine for all stakeholders in the Company.

5. Supply and Inventory Function (Purchasing/Warehousing)

A business is an open system dependent on continuing flows of materials in order to exist. Like a living organism needs food and air, a business needs raw materials, parts and equipment. The Supply and Inventory function provides the responsibility for obtaining these inputs and managing their supply and stock. Supply Chain Management (SCM), the current term for this function, is often considered less glamorous than financial or marketing functions but is the real hero of profit generation. It operates under a very clear-cut and unforgiving principle: if you run out of raw materials in the factory, your production stops, you will stop receiving revenue and will continue to incur costs. Therefore, strategic purchasing and warehousing management is seen as not only a logistics function but a critical factor in gaining competitive advantage.

5.1 The Purchasing Function (Procurement)

In the way that organizations acquire goods and services required to operate and grow their business, purchasing has evolved from a purely clerical role of ordering products to a more strategic purchasing process that's now referred to as procurement. The authors also discuss how purchasing represents both a functional group (i.e., a formal organisation on an organisation's chart) and a functional activity (i.e., buying goods/services) ... aimed at providing an uninterrupted supply of material.

(Monczka et al., 2016) "Purchasing is a functional group (formal arrangement with a corporate chart) as well as a functional activity (the procurement process of goods and services) ... in a manner intended to assure an uninterrupted supply of material, are both examples of functional groups." (p.10).

5.1.1 The Objectives of Purchasing

The five primary goals of supply chain procurement focus on the five rights of the procurement process: the right quality, the right quantity, the right timing, the right price, and the right source.

- Manufacturing firms typically use materials to make up 60% of their cost of goods sold, making cost reductions one of the most effective ways to maximize profits. Specifically, on average, reducing the purchase price of an item by 5% will increase your total profits more than an increase of 20% in the sale of your products.
- Modern companies are starting to treat suppliers as partners instead of adversaries, which has resulted in long-term relationships that will help develop repeatable reliable products/services as well as create innovative opportunities.
- Developing multiple sources of supply is critical to managing risks associated with a disruption in production caused by vendor bankruptcies (e.g., failing suppliers).

5.1.2 The Purchasing Cycle

- Identifying an Available or Required Goods: In order to identify goods, Quotes will be sent out (produced) from the requesting/specifying department (I.e., Producing) through a Purchasing Requisition.
- A Supplier Quotations to Determine Possible Suppliers (I.e., Suppliers from Different Locations) and Cost: By requesting a Supplier to quote on a Supplier Callout, purchasing will obtain an estimated price for the item supplied.
- A Purchase Order Will Be Issued to Confirm the Value of an Items. The PO is a document that serves as a legally binding contract between all parties involved in providing goods.
- On Receipt of Goods, a Receiving/Inspection Process Will Take Place to Compare Items to the Specifying Departments Required Specifications.
- Payment of the Invoice Will be Verified by the Purchasing Department and Will be Forwarded on to the Accounting Department for Payment.

5.2 The Warehousing Function (Inventory Management)

Once items have been obtained, they need to be kept until required, which is where Warehousing comes into play. Warehouses are more than simply a location; they are a dynamic junction between consuming and providing goods, and serve to balance the disparity in supply and demand.

According to Bowersox et al. (2013), warehousing is "a supporting function to all logistics systems and a means of holding goods both at the point of origin and at point(s) of consumption" (p. 235).

5.2.1 Types of Inventory

The three forms of inventory have different economic implications.

- Raw Materials: these are the base elements for making the item (for example, steel, flour).
- Work-in-Progress (WIP): these are the items currently in the process of being made (for example, a car body minus an engine).
- Finished Goods: these are ready-made items available to sell to customers.

5.2.2 The Economic Role of Inventory

There are two primary reasons to hold inventory: The opportunity cost associated with capital being tied up in inventory (e.g., rent, insurance, obsolescence) and the cost associated with holding inventory (e.g., rent, insurance, obsolescence). Three primary economic reasons exist for holding inventory:

- The buffer effect (inventory provides a cushion for uncertainty—if a machine breaks down or a supplier is late in delivering materials, safety stock will allow production to continue).

- Economies of scale (purchasing materials in bulk often results in volume discounts, which may offset the cost of holding inventory).
- Customer service (having finished goods available for immediate delivery results in increased sales to customers).

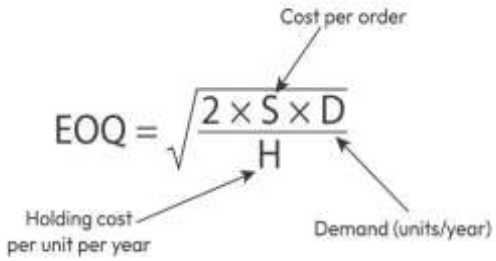
5.3 Inventory Management Techniques

A primary concern in managing inventory is how much money you're going to spend on holding the inventory versus how much money you'll spend on ordering the inventory. Several types of mathematical models and managerial approaches provide ways to balance this trade-off when managing inventory.

5.3.1 Economic Order Quantity (EOQ)

The EOQ Model (economic order quantity) estimates optimal usage and provides recommendations on how best to control inventory levels. The EOQ model takes into account both Ordering Costs (time spent on completing administrative work & shipping products) and Holding Costs (cost associated with maintaining goods in storage and using funds that will be tied up in goods, therefore losing the opportunity for a return on your investment).

Heizer, et al. (2017) specify: "The goal of the majority of inventory models is to minimize overall cost of purchase, shipping, storage, etc., the EOQ finds that point at which the cost of placing an order is equal to the cost of maintaining the inventory item."(p.486)



5.3.2 ABC Analysis (Pareto Principle)

ABC analysis of stocks categorizes stocks into three classifications, divided by value.

- A-Class: High Value Items. High-value items (for example, an engine) account for 20% of the number of items in stock but account for 80% of the total value. High-value items require strict controls and frequent inventories.
- B-Class: Medium Value Items (for example, a tire).
- C-Class: Low Value Items (for example, a screw). Low-value items require little or no controls.

Through classification, the manager focuses on the limited time they have for stock management on those stocks where there is the greatest amount of money at risk.

5.3.3 Just-in-Time (JIT)

Modern inventory management techniques have developed as a direct result of the shift away from holding large amounts of inventory (to Zero Inventory). The Just-in-Time (JIT) philosophy regards inventory as Waste. Through perfect coordination with suppliers, materials can be delivered precisely when required. This reduces working capital, creating opportunities to use the funds elsewhere. Conversely, it also exposes organizations to a higher risk of supply chain disruptions.

5.4 The Digital Transformation of Supply

The future of the Supply and Inventory Function is digitalised. With the introduction of new Warehouse Management Systems (WMS), barcodes and RFID tags are now used by logistic companies and warehouses to track all their items in a real-time basis. Automated Guided Vehicles (AGV) now exist and allow for the transport of pallets without requiring the direct intervention of humans.

In addition, E-Procurement has now become a routine method for businesses to procure from the global market place due to the internet being readily available. This increase in competition amongst suppliers creates downward pressure on prices.

Ultimately, the Supply and Inventory Function provides logistical support to an enterprise. The function is responsible for the physical movement of goods (materials) throughout an organisation as part of the value creation process. The Supply and Inventory Function reduces costs, ensures quality, and provides the flexibility necessary to quickly respond to ever-changing market demands. In an environment with global supply chains, competition will no longer occur at the organisational level; all competition will take place between supply chains.

6. Research and Development (R&D) Function

Enterprises have been around for a long time, and have typically existed in stagnant, or steady-state environments where they would continually create goods/services using the same processes over time. In contrast, a company that continues to create value in the global marketplace must continually evolve; i.e., become extinct if they do not change. The department responsible for preventing companies from becoming "stale" is Research & Development (R&D). This department is usually referred to as the future department because it is responsible for creating new knowledge (understanding), developing new products/services, and enhancing current manufacturing capabilities. Finance is the department that manages daily businesses today; Operations manage daily operations by manufacturing goods/services; and R&D manages the unknown. R&D is the primary engine of a company’s innovation program, transferring the benefits of discoveries made in research to generate revenues.

6.1 The Concept and Scope of R&D

The Research and Development (R&D) arena constitutes a creative assortment of activities across an entire spectrum of research. These activities take place in an orderly manner to enhance the research knowledge base and utilize the research knowledge base to generate new applications.

As defined by Schilling (2020), R&D includes three stages: basic, applied, and development; each represents a distinct phase in the R&D pioneer continuum.

- Basic Research: Basic research is conducted for pure scientific progression by attempting to advance our understanding of physical principles without having a prescribed market application in mind (e.g., research conducted on the characteristics or utility of graphene.). Basic research is considered a high-risk activity and is primarily funded by large corporations or government sources; thus the possibility of receiving financial support is much more likely in comparison to other areas of R&D.
- Applied Research: Applied research takes the findings from basic research and applies the findings to a specific or practical problem (e.g., utilizing the product of basic graphene research to develop a memory storage battery).
- Development: Development is the process of engineering the prototype of a new product developed through both basic and applied research into a marketable manufactured product (e.g., developing the production process for the advanced memory storage battery).

6.2 The Strategic Role of R&D

The rationale for financing research and development (R&D) is the expectation of receiving Schumpeterian Rents or “temporary monopoly profits” that can only be achieved through the successful introduction of a completely new product or service before any competing firms can enter into that market.

According to Tidd and Bessant (2018)," ...unless an organisation is able to transform its offer to the world through product innovation and/or to transform the process with which it creates and delivers its offer, there is a danger that it will be overtaken by competitors" (p. 6).

The strategic roles of R&D within an organisation are as follows:

- Defensive Strategy – To enhance or improve existing products that will enable the organisation to maintain or protect its market share against current and future competitors, e.g. Manufacturer of Smart Phones may add additional features, e.g. a camera.
- Offensive Strategy – To create and develop radical/new products, which will disrupt the existing markets and provide the organisation with a new customer base, e.g. The iPhone.

- Absorptive Capacity – Even if a firm does not do all of the invention itself, an effective R&D department enables that firm to be skilled at conceptualising and learning from the inventions and technologies of other firms.

6.3 Managing the R&D Portfolio

R&D is very risky, and the majority of experiments do fail. Thus, R&D management in its many facets is much like portfolio management–managing together high-risk "moonshots" with low-risk incremental improvements.

Trott (2017) discusses the question of whether to pursue a technology-push (scientific invention) or market-pull (meeting customer needs) approach to new product development...

Technology-Push: When scientific innovative breakthroughs are made they may secure large market shares, but if their inventions do not meet customer needs the products will not sell well.

Market-Pull: Conversely, if marketing identifies a need for a product before there are any inventors with that capability, there may be a lack of breakthrough innovations or a sustainable competitive advantage.

Most successful companies use some mixture of both of these traditional development methodologies to ensure that R&D and marketing have a tighter integration and thus avoid having R&D functions as an isolated "ivory tower."

6.4 Open Innovation

Historically, Research and Development (R&D) has been a controlled and private function. Corporations have safely secured scientists and researchers within laboratories to safeguard intellectual property rights. The transition towards Open Innovation has created an industry-wide change.

According to Chesbrough (2003), the person who created the phrase "Open Innovation," "Companies can and should utilize external sources as well as internal sources for identifying innovative or new ideas in order to drive advancements". Additionally, he mentions that "The boundary of the firm is becoming more permeable, and external parties are becoming an integral part of the innovation process" (p. 43). This means companies are collaborating with academic institutions, newly created businesses, and even their competition (competition-competition) in order to fast-track the development process. In Algeria, the connection between university-based research facilities and engineering-based firms remains one of the most important areas of development for enhancing national competitiveness.

In closing, there is a synergy between the R&D area and the fields of science and economics. Therefore, R&D provides the ability to monetize knowledge by converting it into financial capital, subsequently expecting to then create through that process additional financial capital. Ultimately, R&D is a demonstration of the organization's belief in the future of its business through R&D.

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Axis 8:

Economic Analysis Tools for the Enterprise

1. Cost Analysis (Fixed, Variable, Total)

Having examined the internal operations of the enterprise (from marketing to production), we now consider the quantitative tools that enable management to monitor and evaluate these operations. Cost is the central component of economic analysis. A market-based economy places the cost of resources as the primary limitation of any enterprise. Profit is defined as what remains after all costs have been paid. Thus, understanding the behavior, structure and drivers of cost is not only a matter of accounting; it is at the core of strategic decision-making. In order to price products properly, understand break-even points and identify inefficiencies, managers must break down the costs. This section will breakdown cost classifications (Fixed, Variable, and Total) and their relation to economic performance.

1.1 The Economic Definition of Cost

An accountant measures cost as an explicit transaction that appears in the books. An economist sees cost as being both larger than simply an explicit cost and containing layers and complexity. An economic cost incorporates "any payment made to workers or suppliers as an Explicit Cost plus an Implicit Cost referred to as an Opportunity Cost".

As stated by Samuelson and Nordhaus (2010): "A) The value of the next best alternative use of the resource is called the Opportunity Cost. B) The true cost of a resource is equal to the value of utilising said resource divided by the value of the highest alternative use of that resource." (p. 136)

For example, if an entrepreneur owns the building that houses the factory, there is no accounting cost to the entrepreneur for using the building (there is no rent), but the economic cost would be the rental income earned from leasing that building to another business. Financial statements focus on accounting or explicit costs, while the strategic consideration of resource allocation would include both accounting and economic costs.

1.2 Cost Behavior: Fixed and Variable

The behaviour of costs relative to volume of production is the single most important distinction in managerial economics. When a firm expands its production of widgets, what will be the effect on various types of costs? That is, which types of costs will increase as a result of output increasing and which will remain fixed?

1.2.1 Fixed Costs (FC)

In the short term, fixed costs are expenses that remain constant regardless of levels of production. Even though the company operates without producing any goods at all, fixed costs still exist. Fixed costs can be classified as either 'overhead' or 'sunk costs' after they are incurred.

According to Mankiw (2020), ‘fixed costs are those costs that do not vary as levels of production change...they represent the costs associated with establishing a firm to begin production’ (p. 260).

Examples of fixed costs include:

- Rent: Landlords continue to charge the same amount for rent no matter whether the company is running around the clock or not.
- Top Level Management Salaries: A company's chief executive officer (C.E.O.) will receive the same salary regardless of its sales for any given month.
- Depreciation: The gradual decline in the value of machinery and buildings.
- Insurance: The cost of annual premiums for fire or theft protection.

The economic impact of fixed costs creates a burden associated with financial leverage. Companies with high levels of fixed costs have high levels of 'operating leverage' (i.e., airlines and steel manufacturers). They need to achieve greater levels of sales than their fixed costs to cover their expenses, but once they have achieved this, any additional sales will produce substantial amounts of profits.

1.2.2 Variable Costs (VC)

Variable costs refer to the costs that fluctuate in direct relation to the amount of production or output a firm produces. For every doubling in output, costs associated with variable costs will double. If all output were halted, then other than a very small amount of variable costs, such as some indirect labor and some level of selling costs, all variable costs would fall to zero.

As an example, according to Parkin (2019), "the variables are the variable inputs to generate those outputs; the most common examples of variable costs in the short run are the costs associated with the direct labour used to produce the unit of output and the cost of raw materials used to produce each unit of output" (p. 255).

Examples of variable costs include:

- Raw Materials: Double the amount of steel to produce two cars compared to one car.
- Direct Labour: Hourly wages paid to workers on the assembly line (wages paid per unit or hourly) are an example.
- Energy: Electricity is used to operate the machinery during production; therefore, it is a variable cost.

- Packaging: The boxes or containers and labelling used on the produced goods is considered a variable cost.

Economic Impact of Variable Costs: The marginal cost of a firm's production is primarily determined by the firm's variable costs. A firm should never sell an item below its variable costs during the short-run period, as that would lead to the company losing money for every sale made.

1.2.3 Semi-Variable Costs (Mixed Costs)

Several types of costs are classified as hybrids in terms of both variable and fixed characteristics. Semi-variable or hybrid-costs contain both variable & fixed elements. For example; an employee has a fixed base salary and an added commission based on the amount of sales that he/she contributes (the variable part) is a good illustration of a semi-variable or hybrid-cost. An additional example would be the case of an electric bill. Electric bills typically carry a fixed charge (for the connection-trough fixed) and a usage charge (the variable part). When an organization manages semi-variable costs, the manager can utilize the high-low method or regression analysis in estimating the fixed and variable components in order to develop more accurate forecasts.

1.3 Total Cost (TC) and Average Cost (AC)

The total cost of a production can be evaluated by aggregating the total fixed costs and the total variable costs of the production. Managers, however, are more likely to be focused on the price of a unit of production than they are to be focused on the total production cost, which leads to the definition of an average production cost (alternate term used: Cost Per Unit).

$$TC = TFC + TVC$$

(Total Cost = Total Fixed Cost + Total Variable Cost).

1.3.1 Average Fixed Cost (AFC)

$$AFC = TFC / Q$$

(Where Q is the Quantity produced).

Because TFC is constant, AFC declines continuously as production increases. This is the mathematical definition of "spreading the overhead."

1.3.2 Average Variable Cost (AVC)

$$AVC = TVC / Q$$

AVC is characterised by a U-shaped curve; its decreasing segment reflects the benefit of increasing returns due to the division and specialisation of labour, while the increasing

segment reflects the Law Of Diminishing Returns, which results from excess labourers employed thereby increasing inefficiency through overcrowding.

1.3.3 Average Total Cost (ATC)

$$ATC = TC / Q = AFC + AVC$$

The Average Total Cost curve is shaped like a U.

- When looking at Economies of Scale, the left-hand side of the U shows costs decreasing as production volume increases – therefore making the company more efficient as production volume increases,
- While looking at Diseconomies of Scale, the right-hand side of the U shows costs increase as a result of the company's size and complexity causing it to be unable to manage any longer (being able to manage it efficiently because of the size and complexity).

As Besanko et al (2017) state: "The minimum point of the ATC curve represents the 'Minimum Efficient Scale' (MES)...and is the optimal plant size" (p. 65). This is what a manager will try to operate at in order to increase their competitiveness.

1.4 Marginal Cost (MC)

In the same manner that Average Cost illustrates the average cost of producing one unit of output, Marginal Cost illustrates the incremental cost associated with producing one additional unit of output. The relationship between the two is that:

$$MC = \Delta TC/\Delta Q$$

(where ΔTC is the change in total cost and ΔQ is the change in quantity).

In microeconomic theory, the decision whether or not to produce one additional unit of output is exclusively based on Marginal Cost. As long as the price paid by the customer for that additional unit exceeds its Marginal Cost (i.e., $P > MC$), the firm should produce that additional unit since it will help cover fixed costs and contribute to generating profit.

1.5 Cost Structure and Strategic Strategy

Strategic Risk Profiles are established by assessing the ratio of variable cost(s) versus fixed cost(s), or Cost Structures.

- High Fixed Cost Firms (Capital Intensive): Example: Sonatrach (Oil & Gas), Algérie Télécom These Companies have significant investment(s) in infrastructure. Therefore, to generate maximum production, they must run at full capacity in order to lower average unit costs, this places them at a higher risk of material losses with very little decrease(s) in sales volume.
- High Variable Cost Firms (Labor Intensive): Example: Consulting Firms, Handmade Rug Workshops. Their primary costs are Labor costs. Therefore, these

Companies tend to be more margin-oriented versus being volume-oriented; this gives them the ability to withstand lower sales volumes due to reduced operating costs from decreased levels of activity, this makes them less susceptible to recessionary effects on their performance than Companies with Higher Fixed Costs.

1.6 Conclusion

The cost analysis examines the objective facts about the business; thereby providing an accurate picture of how well the company operates that removes any misleading aspects of profit and/or revenue. The spirit of an organisation will be determined by two groups of people (Management and Employees); if the business entity loses money because of inefficiencies or poor decision making, then it will have to close down. Management can use fixed/variable cost identification to forecast pricing, expansion and outsourcing strategies. They have learned that although they may not have control of market prices, they do have control of their cost structure! In other words, as quoted as old saying: "Revenue = Vanity Profit = Sanity; Cash =Reality!". The cost analysis will provide the business with the tools necessary to maintain the sanity of the organisation.

2. Revenue and Turnover Analysis

Costs show how much an organization consumes and generates based on the agreement of the marketplace, while Revenue provides what is assessed through the market value. Revenue is considered the organizational lifeline and is the "top line" of the income statement from which all expenses are subtracted to determine profit. Although revenue can be said to be a single numerical value that is counted, it must also be considered a variable to analyze. To gain an understanding of the dynamics of turnover (Chiffre d'Affaires), managers can obtain insight into market demands, evaluation of sales performance, and forecasting future cash flow. This section will explore how revenue is generated, define the difference between revenue and turnover, and review the strategic indicators that are used to evaluate sales efficiency.

2.1 The Concept of Revenue vs. Turnover

Both "revenue" and "turnover" are often used interchangeably in business; however, the strict definitions of "revenue" and "turnover" may differ depending on country and financial reporting framework (for example, IASB's IFRS may define terms differently than local GAAP in use).

According to Needles et al. (2014), "revenue" is defined as "the increase in net assets, or the increase in net liabilities, resulting from providing, delivering, or rendering goods or services and/or providing, delivering, or rendering other activities that make up the ongoing operations of the entity" (p.102). This represents the total revenue received by an entity without any deductions.

In British and Commonwealth countries, including Algeria (Chiffre d'affaires in French), "turnover" refers to total net sales derived from the entity's normal operations.

Turnover excludes all income earned outside of the entity's normal course of business, such as interest on bank accounts or the sale of an old truck to a customer.

The focus of economic analysis is on Operating Turnover (CA or TR - Total Revenue), which can be mathematically defined as:

$$TR = P \times Q$$

(Total Revenue = Price per Unit × Quantity Sold).

2.2 Total, Average, and Marginal Revenue

We can look at revenue and revenue behaviour in a similar manner as we did with the analysis of fixed costs and variable costs.

2.2.1 Total Revenue (TR)

Total Revenue is the total amount collected from selling Output.

- In a Perfectly Competitive Market, P remains fixed throughout the total revenue curve. Thus, total revenue will be a linear upward slope starting at the origin. The individual firm has unlimited quantities to sell without having to lower the price to do so.
- In an Imperfect Market (Monopoly/Oligopoly), the firm must decrease the price in order to sell additional units. Therefore, the total revenue curve will be represented as an inverted u; the curve will experience a growth, maximum, and finally decline.

2.2.2 Average Revenue (AR)

The average revenue generated/unit sold is known as Average Revenue.

$$AR = TR \div Q = (P \times Q) \div Q = P$$

In most market structures, the average revenue is equal to the price of the good sold. The AR curve is the same as the firm's demand curve.

2.2.3 Marginal Revenue (MR)

The most important concept for making decision-making is Marginal Revenue. It is the extra revenue received for selling one additional unit of a product.

$$MR = \Delta TR / \Delta Q$$

Mankiw (2020) discusses the impact of an increase in output versus a decrease in price on revenue as follows: "When a monopoly produces one more unit of output, the price will decrease on all units sold... Therefore, in all cases, Marginal Revenue will be lower than Price in an imperfect market" (p. 302).

In an ideal world, one will continue to produce until MR = MC (MC is Marginal Cost).

2.3 Turnover Analysis Indicators

The raw turnover number is not the only way to evaluate a business. To properly determine the quality of turnover and how quickly it happens, managers will use certain ratios or indicators that are specific to their business.

2.3.1 Growth Rate of Turnover

The turnover growth rate will indicate whether or not the business is growing. Is the enterprise on the way up or down?

Growth Rate = ((Turnover n - Turnover n-1) / Turnover n-1) × 100

Turnover growth rates can provide an indication of growth, but they should be looked at relative to inflation. If turnover increased by 2% and inflation is 5%, then the business has actually declined over the previous period when considering real growth.

2.3.2 Revenue per Employee

This is a productivity measurement that responds to the query: how much value does each worker truly create?

Revenue Created/Employee=$Total Revenue/Number of Employees

Brealey et al. (2020) have indicated that high-performing technology companies usually have very high levels of revenue per employee compared to traditional manufacturers, which demonstrates the extent of scalability within the technology sector as a result of differences in business models.

2.3.3 Sales Mix Variance

Revenue is not often from one individual product. Sales Mix Analysis helps to determine the effect on total revenue created by different product lines.

The number of cars sold may be 1,000 economy cars and 100 luxury cars. If the mix of sales shifts toward more luxury cars, this may increase turnover (and profit) even when the total amount of cars sold declines. Understanding the sales mix will help to reduce the risk of aggregate numbers causing a manager to make inaccurate decisions.

2.4 The Determinants of Turnover

There are numerous reasons why turnover (also referred to as revenue) fluctuates. The fluctuations of turnover can be attributed to both internal and external factors defined through the lens of economic analysis.

- Price Elasticity of Demand: Price elasticity of demand refers to a measure of how sensitive customers are to changes in price.

a. In the event that demand is elastic (customers are very sensitive to changes in price), an increase in price will result in a significant decrease in quantity (Q), and therefore a reduction in total revenue (TR).
b. Conversely, if demand is inelastic (customers are not very sensitive to changes in price), an increase in price will result in only a small decline in Q, and therefore an increase in TR.

As explained by Samuelson and Nordhaus (2010, p 70)... "If a firm is experiencing elastic demand and wishes to increase revenue, the firm should reduce its price. Conversely, if a firm is facing inelastic demand, the firm should raise its price."

- Market Share: Firm's market share refers to the percentage of the total market (the "whole pie") which is held by the firm. Generally speaking, in order for a firm to increase its total turnover, it must either take market share from a competitor (i.e. a zero-sum game), or it must increase the overall size of the total market through innovation.
- Seasonal Fluctuations: Certain industries experience predictable seasonal cyclical patterns that affect total revenue. Examples of industries that experience seasonal fluctuations in total turnover include tourism and agriculture. For example, a ski resort derives approximately 80% of its total turnover during the three months corresponding to the ski season; therefore it is critical that the resort manages its cash flow effectively, as it can expect to experience "lean" months with little-to-no revenue.

2.5 Strategic Implications

The Revenue Analysis is an act of creating strategy. There are three different types of strategy related to revenue analysis:

- Volume Strategy charges low prices with little profit but will sell a great deal of products to achieve volume e.g. "Walmart". The goal is to gain as much quantity as possible.
- Value Strategy charges high prices for limited items e.g. "Rolex". The goal is to obtain as much profit as possible.
- Recurring Revenue is known as the Subscription Economy, such as "Netflix". Recurring Revenue from monthly sales will result in a more stable cash flow and greater valuation of a company, than if a company produces only one-time sales.

The above 3 strategies show that Revenue and Turnover Analysis help a business change their "top line" from being a static number, into being an analytical tool that can be used by a manager to make intelligent choices that require the right levers to be pulled) in order to create growth for the company. As stated by Peter Drucker, "The purpose of a business is not to create profit, but to test its validity; turnover is the first question to be asked in the test of its validity."

3. Break-Even Point and Financial Equilibrium

The preceding sections of the paper have examined not only how the costs of doing business are created, but also how revenues that are generated from that business recently have evolved. But, for the manager, these two separate sets of data (outflows and inflows) are only two pieces of information (i.e., the cost and revenue data) without any significance by themselves, because they can only be truly interpreted and understood when they are combined in a way that evidences their economic significance. Specifically, the combination of the two curves gives the reader an understanding of what the financial reality is for the organization at any moment in time. The point at which the cost and revenue curves intersect represents the most fundamental milestone in the life of an organization; this is referred to as the Break-Even Point (BEP). The BEP divides the world into two distinct geographical areas; the "zone of loss" is where the company creates value and "zone of profit" is where the company creates value. Once the organization has crossed the profitability threshold created by the BEP, there exists a larger construct, known as Financial Equilibrium, that reflects not only that the organization has had enough revenue to create a profit but also that the organization has the structural solvency to continue to flourish in the long term.

3.1 The Concept of the Break-Even Point

The point at which total revenue equals total cost, often referred to in French as the "seuil de rentabilité," is known as the break-even point (BEP). At the BEP, the business does not earn a profit or incur a loss; there is zero net income.

Drury (2018) refers to the BEP as the survival threshold. He indicates that CVP analysis is used to evaluate the impact of changes in cost and revenue; that the BEP is the basis for profit planning (p. 187).

There are three strategic reasons understanding the BEP is important:

- Risk Assessment. Understanding the BEP tells the entrepreneur how many units must be sold just to remain in operation. A larger BEP represents increased risk.
- Pricing Strategy. The BEP helps determine the minimum price to charge for products at a given level of activity to cover costs.
- Feasibility Study. Before the introduction of a new product, the manager calculates the BEP to determine if there is enough potential market demand to warrant the new product.

3.2 Calculating the Break-Even Point

To determine the BEP (Break-even Point), we will start by revisiting the difference between TFC (Total Fixed Costs) and TVC (Total Variable Costs) in a business. Because TVCs increase as Sales increase, one cannot receive proft until after You have 'paid back' the variable cost associated with the sale of each unit, in turn, leaving a remaining amount called the contribution margin.

3.2.1 The Contribution Margin

Contribution Margin (CM) is calculated as the difference between Price (P) and Average Variable Cost (AVC) per unit sold. The formula for calculating CM is CM=P−AVC. Horngren et al. (2015) illustrate this idea by stating that the contribution margin explains how operating income will vary as the number of units sold changes…This amount represents the remaining revenue after deducting variable costs and available for "contributing" to the fixed costs of operations (p. 68).

For example, if the bakery charges 1,000 DZD (P) for a cake and its cost of ingredients is 400 DZD (AVC) then the Contribution Margin is calculated at 600 DZD. This 600 DZD does not represent a profit but rather is placed into a “bucket” that will be used to pay fixed costs (i.e., rent). The bakery will only start to earn a profit once this bucket has enough 600 DZD contributions to pay all fixed costs.

3.2.2 The Algebraic Formula

An indicator of the Break-Even Point in terms of the number of units sold (QBEP), where total contribution received by the business equals the total fixed costs in the business.

QBEP = Contribution Margin per Unit = Total Fixed Costs

QBEP = P - AVC =TFC

If the rent for the bakery amounts to DZD 60,000 then the bakery must sell:

QBEP = 60,000/600 = 100 cakes.

If the bakery sells 99 cakes then it incurs a loss. If the bakery sells 101 cakes then it will make a profit of DZD 600.

3.2.3 Break-Even in Value (Turnover)

Managers tend to prefer knowing the target sales figure as opposed to the number of units sold. This is referred to as the Break Even Turnover (CASR). The equation for calculating CASR is as follows:

CASR = Contribution Margin Ratio / Total Fixed Costs

The Contribution Margin Ratio (also referred to as PCM) is necessary to calculate CASR.

3.3 Graphical Representation and Interpretation

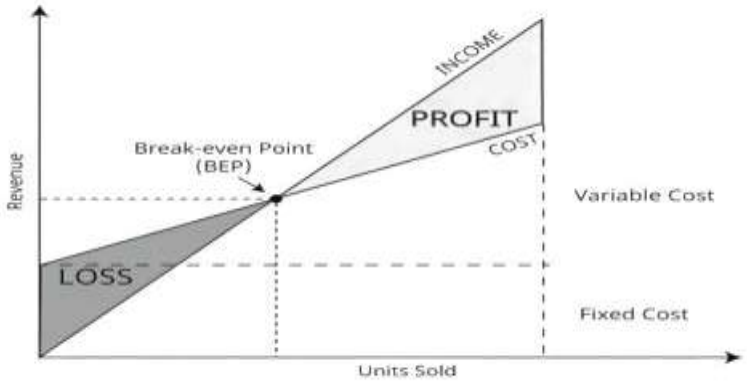
The Break-Even Point, or BEP, illustrates how structure and performance work together. In order to understand the BEP, we must create a Break-Even Chart, which is a

chart that has the "output" (Q) plotted on the X-axis, and the "Value" (Currency) plotted on the Y-axis.

- The Fixed Cost Line is a horizontal line drawn parallel to the X-axis. It shows the "burden" of the company that is the same regardless of the volume of activity of the organization.
- The Total Cost Line starts at the Fixed Cost Line (and not the origin) and slopes upward. The degree of the slope is determined by the amount of Variable Costs.
- The Total Revenue Line starts at the origin (0,0) and slants upward. The degree of the slope is determined by the price.

Where the Total Revenue line intersects the Total Cost line is the BEP.

- The triangle area to the left of the intersection is loss.
- The triangle area to the right of the intersection is Profit.



Needles, et al. (2014) identify that "the angle formed between the revenue and cost line indicates the rate at which the company is generating profit." A larger angle indicates that the contribution margin is larger; therefore, the company will be able to generate profits quickly after the BEP has been reached (p.885).

3.4 Indicators of Safety and Risk

The Break-Even Point (BEP) is a fixed amount; however, the marketplace experiences volatility and price fluctuations, so managers require information about their safety levels. Two particular measures of this resilience are as follows:

3.4.1 The Margin of Safety

The margin of safety is defined as the distance between actual sales and break-even sales, providing the manager with the ability to assess how far sales can fall before the company incurs a loss.

Margin of Safety = Actual Turnover - Break Even Turnover

Margin of Safety = Actual Turnover ÷ Margin of Safety (in %) x 100

A company with a low margin of safety (e.g., 5%) will provide very little room for sales to decline before it becomes bankrupt as compared to a company with a very high margin of safety (e.g., 40%).

3.4.2 Operating Leverage

The Cost Structure is reflected in Operating Leverage. Companies which have a significant amount of their total expenses dedicated to Fixed Costs (e.g. Airlines) demonstrate a comparatively high level of Operating Leverage.

For instance, as soon as a Company generates even a small (incremental) increase in Sales, the profit generated will increase by an extremely large amount (due to the relatively low amount of Variable Cost incurred). Conversely, a Company which has significant amounts of Fixed Costs will incur a large Operating Loss when it experiences a small decrease in Sales.

In Ross et al (2019), the authors define the Degree of Operating Leverage (DOL) as follows:

DOL = % Change in Sales / % Change in Operating Income

High Operating Leverage can be thought of as double-edged sword. High Operative Leverage significantly compounds both Risk and Return.

3.5 Financial Equilibrium: Beyond the Income Statement

The BEP's emphasis on Profitability (Income Statement) contrasts with Financial Equilibrium's emphasis on Solvency (Balance Sheet). An enterprise can be profitable (above BEP) but can still declare bankruptcy if it does not have cash flows to cover its debts. This paradox occurs when the company is unable to obtain sufficient funds to finance its operating cycle.

Achieving Financial Equilibrium involves ensuring that a firm does not have more stable resources than stable uses. In order to ascertain the extent to which this is achieved, it is important to evaluate the relationship between three principle aggregates: Working Capital, Working Capital Requirement and Net Treasury.

3.5.1 Net Working Capital (FRNG)

The Fonds de Roulement Net Global (FRNG) is a measure of the difference between long-term assets and long-term liabilities, or how much long-term financing a company has available to finance the operations of the business.

FRNG=Permanent capital (equity + long term debt) - Fixed assets

A positive FRNG is vital to the company's financial health. It indicates that a company has successfully financed its real estate and equipment with long-term capital, and therefore has additional capital available to finance the day-to-day operations of the company. According to the authors Brealey et al. (2020), matching the maturity of liabilities and assets is one of the basic tenets of sound financial management (p. 825). Using a bank overdraft for short-term borrowing to finance the acquisition of a factory is an example of poor financial management.

3.5.2 Working Capital Requirement (BFR)

The need for cash in the operating cycle, called BFR (Besoin en Fonds de Roulement), is defined as follows:

BFR= One thousand + One Thousand - the amount of accounts payable.

When a company produces an item, they invest cash into inventory, but if they sell the product on credit, they then wait for a certain period of time before collecting the money. This delay causes a “financing gap”. The BFR is a measure of the “financing gap”. An expanding organization may experience a “growth crisis” when their BFR grows at a faster rate than the resources available to them, thereby depleting cash.

3.5.3 Net Treasury (TN)

The last equilibrium indicator is the Net Treasury (Numéro Trésorerie).

NT=FRNG-BRF

- Positive NT=the company is in equilibrium (its long-term surplus (FRNG) covers its operational needs (BRF) and can result in remaining cash at bank).
- Negative NT=the company is out of equilibrium (it will have to rely on high-cost, short-term bank over-drafts to survive).

3.6 Conclusion

The twin pillars of economic security are Financial Equilibrium and Break-Even Point (BEP). The BEP is the point at which an enterprise’s revenues are equal to its costs, thus verifying the enterprise’s viability, or ability to continue operations. Financial Equilibrium addresses the viability of an organization based on the degree to which its assets and liabilities are properly financed throughout their life cycles. A financial expert or manager continuously monitors both BEP and Financial Equilibrium. If a manager’s sole focus on a BEP, there may be an abundance of profit generated from sales volume, yet no cash flow to support such business. Conversely, if a manager focuses solely on the Balance sheet, there could be a great deal of cash but very little profitability. True economic health requires a proper blend of sales volume, and appropriate liquidity resulting from sound accountability practices in financial management.

4. Efficiency, Effectiveness, and Productivity Indicators

Survival in a competitive market economy is determined not by the size of a company or its history but by its performance. But based on what criteria can an enterprise's performance be evaluated? Is profit the only criterion for judging an enterprise's performance? Profit may ultimately be the end result of doing business, but it is most often a lagging indicator of past performance and can be thought of as a rearview mirror that only provides limited guidance. To steer the ship, managers need leading indicators that provide an indication of how efficiently the Enterprise converts inputs into outputs. This is where the three fundamental metrics of economic performance, known as the "Holy Trinity," come in: The three fundamental metrics of economic performance—Efficiency, Effectiveness, and Productivity—are used synonymously in everyday language; however, each term describes a comprehensive view of performance within an enterprise. The sophistication of managers can be determined by their ability to differentiate between doing things right (efficiency) and doing the right things (effectiveness).

4.1 Efficiency: Doing Things Right

Efficiency is a measure of the way in which resources are being used with respect to producing the output that can be created through those resources. Therefore, efficiency answers the question, "Are we wasting anything?" As far as engineering is concerned, efficiency is defined as a ratio where useful output is divided by total input. Economically speaking, efficiency is defined as minimising cost for the output of the same amount of product. Daft (2021) defines organisational efficiency as "the number of resources (input) that are used to produce a unit output … it can be calculated as a ratio to inputs over outputs" (p. 18).

For example, Factory A produces 100 cars and employs 50 employees to do so, while Factory B produces 100 cars and employs 40 employees to do so (both factories assume quality is the same). Therefore, Factory B is more efficient because it produces the same output with less waste out of the amount of resources used through friction.

4.1.1 Technical vs. Allocative Efficiency

Economist divides efficiency into two types or categories:

- Type One : Technical Efficiency: it is about obtaining the greatest output possible using a specific amount of inputs. This refers to the physical processes used to manufacture goods (such as making sure workers do not have to wait on raw materials before they can produce).
- Type Two: Allocative Efficiency: it refers to the very specific mix of goods and services, i.e., those that society or the market values the most, which can be produced at the least cost, given a specific amount of inputs. It also refers to prices, i.e., for each of these goods or services that the company does produce. The company should not purchase expensive gold if it could use inexpensive copper to produce the same good.

4.2 Effectiveness: Doing the Right Things

Effectiveness is the determining factor in whether the organization has achieved its goals. In actuality, effectiveness does not account for how much resource has been consumed to achieve the results; only for what the final result is.

According to Robbins and Coulter (2018) "Effectiveness is generally associated with 'doing the correct thing' meaning the work activity that supports the effort to reach the goal of the organization." (p.8)

For example, a company could produce buggy whips (no waste) and be very efficient, but be totally ineffective, (i.e. no one is going to buy buggy whips today), or a pharmaceutical company could be spending billions in R&D for a rare disease (very low efficiency) and find a cure (very effective).

4.2.1 Measuring Effectiveness

Effectiveness is different from efficiency because effectiveness is a qualitative concept or a concept expressed by using comparative terms while efficiency is a quantitative mathematical ratio. Some indicators of effectiveness are:

- Market Share: Are we outperforming our competition?
- Customer Satisfaction: Are our clients satisfied?
- Brand Equity: Is our reputation increasing?
- Strategic Milestones: Have we successfully penetrated the African market by 2024?

4.3 Productivity: The Engine of Wealth

Productivity metrics are based upon the ratio of output to input, and as such combine the dimensions of both efficiency and effectiveness. Nonetheless, productivity metrics represent the physical output of an organization as measured against the physical inputs utilized to produce the output. Thus productivity metrics can be considered the most critical factor influencing a nation's long-term economic development. Samuelson and Nordhaus (2010) define productivity as "the ratio of output to input, and as such it increases when the same quantity of input produces an increased quantity of output" (p. 112).

4.3.1 Partial Productivity

- Output is determined by one input factor.
- The productivity for Labor: Total Output / Total Labor Hours is the most widely used measure. An example of this would be if an employee produces 10 shoes this year and 12 shoes the next year, that employee has increased their overall labor productivity by 20 percent.
- The productivity for Capital: Total Output / Total Machine Hours is the most widely used measure. An example of this would be how much work is actually being done with all of the assets the company has.

4.3.2 Total Factor Productivity (TFP)

Also known as Multi-Factor Productivity, TFP measures output relative to *all* inputs combined (labor, capital, energy, materials).

TFP = Output / (Labor + Capital + Materials + Energy)

An increase in TFP usually indicates technological progress or better management practices, rather than just working harder.

4.4 The Performance Dashboard (KPIs)

Managing abstract concepts requires the use of Key Performance Indicators (KPIs) within a dashboard at modern businesses. Through the Balanced Scorecard created by Kaplan and Norton, managers must consider the Four Perspectives of the organisation simultaneously.

- Financial Perspective: (e.g. Return on Investment - ROI). ROI = (Net Profit / Total Investment) * 100. This is the final measure of financial efficiency.
- Customer Perspective: (e.g. Net Promoter Score - NPS). This measures the success of the organisation in meeting market demand.
- Internal Process Perspective: (e.g. Cycle Time). What is the amount of time it takes to turn a sale into cash? Quicker cycle times represent more efficient operations.
- Learning and Growth Perspective: (e.g. Employee Turnover Rate). Are we retaining the appropriate amount of human capital to produce goods and services in the future?

4.5 Improving Performance: The Manager's Challenge

The objective of conducting economic analyses is not only to assess and measure; but also to enhance them.

- To achieve Enhanced Efficiency: Managers utilize methods such as Lean Management (removal of wasteful resources from a process) and Six Sigma (minimizing errors/deviations from the desired outcome).
- To achieve Enhanced Effectiveness: Managers utilize methods such as Strategic Planning (choosing improved goals) and Conducting Marketing Research (evaluating customer wants and needs).
- To achieve Enhanced Productivity: Managers utilize Technology (automating processes) and Human Capital (providing training).

Heizer et al. (2017) caution regarding the 'Productivity Paradox.' As an example, financial investment in Information Technology may allow for improvements in efficiency (increased speed of data processing), but at times decreases productivity (increased employee idle time due to use of social-networking sites). Due to this fact, it is imperative that assessments are conducted using an inclusive and a complete approach.

As a whole, the economic viability of a company can be represented as a "three-legged stool." The tripod consists of three distinct, yet interrelated components: Efficiency contributes to continued existence by maintaining low operational cost; Effectiveness contributes to continued viability by providing satisfaction to the customer; Productivity contributes to continued growth by allowing expansion of the companies' ability to generate wealth. Through mastery of these three metrics, a manager not only creates a sustainable business; but also designs a comprehensive economic engine that is able to survive any and all economic downturns that may occur within the marketplace.

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Axis 9:

Enterprise Life Cycle and Growth Patterns

1. Enterprise Life Cycle Stages

The idea of enterprises existing as fixed sites are just a theoretical idea that does not last when it is brought into the real world. Enterprises are actually a temporary living entity and also have their own metabolism (cash) system, nervous system (information channels) and their own lifespan. Like other living organisms, enterprises will go through the various stages of growing up; stages being: birth, adolescence, maturity, and old. The predictable evolution of businesses is what is referred to as the Organizational Life Cycle (OLC). Recognizing that organizations experience growth in a predictable manner is essential to understanding their distinct phases, thus creating a need to assess a company's future by examining its historical and current states, rather than the two factors previously examined, thus creating the need for an economist to evaluate a company based on its industry, and size, as well as both chronological age and actual (developmental age).

According to Daft (2021), "Organizations are born, grow old and ultimately die… Organizational structures, leadership styles and administrative systems have a predictable pattern of changes throughout industry life cycles" (p.346). This part of the research paper will examine the four primary phases of the evolution of an organization and provide insight into how different economic, structural and strategic aspects of these phases impact the life of an organization; Start-up Phase, Growth Phase, Maturity Phase and Decline Phase.

1.1 The Start-up Stage: The Entrepreneurial Birth

At the commencement of an organisation, or in the early stage, there is an entrepreneur who transforms their ideas into reality. At this point the company is generally small and have been created without any formal bureaucracy (i.e., no wider filing system) and therefore are mainly founder-led. At this commencement point in the organisation, the company will experience an economic focus on survival and the process of validating the company's business model.

1.1.1 Structural and Strategic Characteristics

From a structural perspective, the start-up is characterized by a lack of formal structures. There is a limited division of labor, with the founder performing multiple roles (e.g., as the general manager, sales manager and production supervisor). Since there is a flat organizational hierarchy, decisions can be made quickly; thus, the company can be very flexible. According to Robbins and Coulter (2018), during this stage, "the organization's energy will be directed towards creating a product/service and surviving in the marketplace," (p. 367).

From a strategic perspective, the start-up uses a niche strategy in an effort to gain a position in the market where larger competitors or incumbents dominate the industry. Innovation will have reached its peak due to the founder's vision being the primary driver of innovation rather than based on market research or data. There is a strong sense of community/camaraderie and employees work many hours and receive relatively low pay in exchange for equity ownership in the company or the prospects for future wealth.

1.1.2 The Crisis of Leadership

Start-up businesses operate in an economic state of uncertainty. Typically, the cash flows (incomes and outgoings) generated during this stage are often negative; therefore, businesses must rely heavily on external sources of finance (bank loans, friends, "angel" investors, venture capitalists). The lack of cash flows consequently impacts on the ability or necessity to invest until break-even point is reached.

When the business begins generating revenues, this typically triggers the transition out of the start-up phase, which is referred to as the Crisis of Leadership. As the start-up company grows (in numbers and revenues), and begins to take on additional employees, the informal or relaxed management style of the founder becomes a bottleneck in the company's operations. This often happens because the founder, who is by design, a "visionary" entrepreneur/inventor and/or salesperson tends to lack any administrative experience or capabilities of supervising a growing number of employees. According to Adizes (2004), founders face the "Founder's Trap," which occurs when they "attempt to do all the work of the business themselves" as the company continues to grow (p. 67). For a start-up to survive, it must professionalize its management or it will not survive—this is what is referred to as an Infant Mortality crisis.

1.2 The Growth Stage: Collectivity and Expansion

When the organization resolves the leadership dilemma (by either hiring executive managers or through changes of the founding leader's style), it moves into a period of significant increase in sales, market share, and physical assets. It has transitioned from being focused primarily upon its survival, to expanding aggressively and establishing distinct core competencies.

1.2.1 Formalization and Delegation

As an organization progresses through the growth stage of their life cycle, the "mom-and-pop" feel of the organization disappears. A clear division of labour begins to develop as the organisation starts to create formal departments (e.g., marketing, finance, production) and a new layer of middle management is created to establish a linkage between the executive team and the day-to-day actions at the frontline level of the organisation. According to Wheelen et al. (2018), during the growth stage of an organisation, "functional structures are created... and the organisation establishes formal processes for budgeting, measuring performance and controlling operations" (p. 289).

From an economic perspective, this typically represents the most exciting time from an organisational perspective. Economies of scale begin to take hold and average costs per

unit begin to decline. As revenues begin to grow at a rate that exceeds the increase in expenses, this will create significant profits and results in cash reserves; however, the firm will continually require more and more capital. In order to fund their inventory, build new locations and expand into new markets, the firm will need to reinvest significantly; as a result, the firm may appear to be profitable based on its Net Income statement (accounting measure), but functionally cash-poor from its Net Cash flow measure (i.e., cash reserves).

1.2.2 The Crisis of Autonomy

The success of an organization's early growth stage creates the basis for a crisis of autonomy as the size of the organization grows beyond the ability of the top managers to control all decisions. As the organization grows, lower-level managers and specialists with technical knowledge want more freedom to make decisions about how to do their jobs, but they are often restricted by the centralization of decision-making that is common in the early years of an organization's life cycle.

Greiner (1998) points out this phenomenon in his book about evolution and revolution in organizations, stating: "lower-level employees become constrained within large, cumbersome centralized hierarchies...the answer to this is to delegate greater authority to lower-level employees" (p. 60). If an organization fails to decentralize, then it will become stagnant, being unable to continue growing due to the weight of the centralization it has created. However, if an organization decentralizes too quickly and without proper control processes, it runs the risk of becoming fragmented.

1.3 The Maturity Stage: Formalization and Control

A company successfully navigating its way through the challenges associated with achieving growth and attaining a dominant or sustainable market position has reached the Maturity Stage of Development. It is during this period that the company is at its finest. The speed of growth becomes predictable; this is when the company is now an operational 'institution,' possessing an established structure of rules, policies, and a developed culture.

1.3.1 Bureaucracy and Efficiency

Maturity is characterized in terms of the bureaucracy of an organization, not in the derogatory manner of the term, but via the definition provided by bureaucrat Max Weber and how a rational/legal authority is manifested within organizations. Organizations achieve consistency and efficiency when compliance with standardized rules, policies and procedures is the basis of their operations. Daft (2021) states that "at the maturity stage an organization has very bureaucratic characteristics...the use of rules, policies and control systems is extensive" (p. 349).

From an economic standpoint, the mature firm is representative of a "cash cow." The heavy capital investment associated with growth has been made, and now the firm is able to harvest the benefits associated with that investment. Revenue growth generally will not exceed GDP or the growth of the industry, although the firm will maximize profitability by focusing on cost management and operational effectiveness. Attention will also be

placed on transforming prior "doing new" activities (effectiveness) into "doing cheaper" activities (efficiency).

1.3.2 The Crisis of Red Tape

Nevertheless, the maturity of an organization's systems can result in them becoming ossified. Due to this ossification of systems, the Organization will experience a 'Crisis of Red Tape.' A risk-averse organization will spend more of its resources on writing reports and justifying existence vs. creating innovative products and interacting with customers.

According to Kotler & Keller (2016), mature markets typically reach the saturation point, and the result is '...a battle among competitors for market share; therefore, significant price competition and increased costs of promotion will occur' (p. 352). If an Enterprise focuses too much on internal compliance, while ignoring the external environment, it will lose its ability to adapt. An Organization that is slow to respond to the external environment due to being risk-averse will become a dinosaur—big and strong, but unresponsive to the "meteor" of technological change.

1.4 The Decline Stage: Obsolescence and Entropy

The third phase, Declaration of Decline, does not occur necessarily; however, the likely outcome of a closed system that does not import any new energy or entropic elements will ultimately lead to the stage of Decline. A Decline of an organization occurs when the organization becomes misaligned with its environment and/or an area/model within an organization becomes misaligned with its environment. Declines can be caused by many different things including shifts in technology (e.g., Kodak's transition to digital photography) as well as changing consumer preferences for products or services, as well as the existence of other organizations that are able to out-maneuver them.

1.4.1 Symptoms of Decay

Decline of organization is not usually abrupt, it usually builds progressively over time and exhibits gradual paralysis of the organization . Declining sales lead to shrinking market shares and ultimately to losses from previously profitable enterprises. To preserve cash through cutting funding for R&D and Marketing often leads to even more rapid decline due to continued decline of R&D and Marketing. According to Cameron et al., there is a psychological component to the decline: "Managers frequently discount the legitimacy of bad news by attributing the decline to external forces such as the competition rather than to their own out-datedness" (p. 23).

The organization deteriorates to the point of toxicity . There is increasing inter-organizational political behavior as managers contend for a share of the shrinking common resources of the organization. The flight of the best talent out of the organization, i.e., brain drain, has the effect of leaving exclusively the mediocre and complacent . The culture of the organization becomes increasingly cynical and no longer optimistic .

1.4.2 The Forks in the Road: Dissolution or Renewal

After an enterprise reaches the decline phase of its life cycle, there are three possible outcomes:

- Dissolution: When an organization goes bankrupt and liquidates, it sells off assets to pay creditors and its legal entity ceases to exist.
- Acquisition: A distressed firm may be purchased by a rival and integrated into that company with little-to-no identity per se, typically to obtain customers of the acquired firm, its intellectual property or both.
- Revitalization (or turnaround): This constitutes the only means of returning an enterprise to a new life cycle, and requires drastic measures that include major changes in senior management, divesting non-core businesses or assets, as well as innovating new business models. Collins (2009) describes this ability to restore fortunes as follows: "Decline is largely self-imposed and Recovery is largely self-determined...however recovery requires returning to the disciplined creativity that created the firm's youth" (Collins, 2009, p. 115). While many call this process 'streamlining' or 're-engineering' an organization, its goal is typically to return the enterprise to either a mature or growing status.

1.5 Conclusion

The Enterprise Life Cycle provides guidance for economic/political managers/entrepreneurs regarding how to deal with various problems associated with enterprises. Problems are often not unique dysfunctions; rather than being the result of an enterpreneur's poor decision-making, they can often be identified as predictable by-products of the enterprise's current developmental stage. For example: New businesses (start-ups) require "vision"; growth enterprises need "delegation"; mature enterprises require "revitalization"; and declining enterprises need "surgery." Identifying the current enterprise stage allows for appropriate application of the economic attributes supplying the mode of existence utilized to develop the enterprise, contributing to successful development.

2. Internal Growth Strategies (Organic Expansion)

While large mergers and hostile takeovers are frequently reported in the media as the most important events related to business and finance, the primary source of growth for the economy continues to be internal growth, also referred to as organic growth. Organic growth (the biological development of an enterprise from a pre-established core) is the process by which a business expands in terms of its size, revenues, and market share by using its existing assets and resources, creating new capabilities, and reinvesting profits. The difference between internal and external expansion is that the latter accomplishes its purpose by acquiring other businesses, while the former is characterized by a gradual accumulation of experience through the creation of new capabilities, rather than through the acquisition of other businesses. In other words, internal growth is analogous to how

trees continue to grow by adding rings to their trunks every year, whereas external growth is analogous to how trees develop through the grafting of branches from other trees. Penrose (2009), writing on the subject of growth, contended that the amount of growth a firm can achieve is constrained by the speed with which its experienced managers can plan and execute their business's expansion. She believed that while growth may refer to an increase in the size of a firm, it ultimately describes an evolutionary process where the growth of a company results from the cumulative advancement of shared knowledge among the members of the organization.

2.1 The Mechanics of Organic Growth: The Ansoff Matrix

A comprehensive analysis of an enterprise's growth trajectory will require consideration of the enterprise's internal expansion options or "vector" for expansion. The Product-Market Expansion Grid designed by Igor Ansoff is the most useful tool for conducting this type of analysis and provides a basic understanding of four different types of organic growth strategies based on the relationship between product types (e.g., new v. existing) and market types (e.g., new v. existing) that drive the enterprise's organic growth.

2.1.1 Market Penetration

Market penetration is a conservative and established route for internal expansion through the additional sale of already available goods or services to the same or existing market place. The strategy's aim is to either take business away from existing competitors, or increase consumption levels from those customers that have already bought from the supplier.

Kotler & Keller (2016) define market penetration as a growth strategy when the business expands sales of existing goods to the current market segment, without changing the existing products.

Market penetration is achieved via price competition, increased marketing or advertising costs, higher sales promotions and similar tactics. An illustration of this would be an Algerian telecommunications company using loyalty bonuses to retain customers or bundling their products/services to enhance their average revenue per customer.

Market penetration provides less risk to the business because there is familiarity with both the product and the market however, the level of risk also directly correlates with the extent of the market (or industry) saturation. Once the market reaches maturity, the marginal benefit from generating new sales via penetrating the market will eventually taper off which significantly reduces the business's ability to achieve objectives.

2.1.2 Market Development

Once the home market reaches saturation, it becomes imperative for an enterprise to explore new areas in which to distribute products or services. The process of delivering existing goods to areas not yet served by an enterprise is referred to as 'Market Development'. These new communities may be geographic (i.e., exporting goods to Tunisia or France) or demographic (i.e., targeting a business-to-business market segment to which they had previously targeted only end-users). Johnson et al. (2017) state that organisations which possess strong and unique core competencies have a greater potential benefit from pursuing market development than those which do not.

A significant advantage of this strategy is that production lines can remain the same while adapting both distribution channels and marketing messages. For example, the Algerian date producer (Deglet Nour) that has successfully grown from an entirely local to an entirely European (supermarket) customer base is implementing a standard market development strategy.

2.1.3 Product Development

On the contrary, an enterprise also has the option of adding new products to their current loyal customer base. Product development can be described as creating new or modified product(s), for an existed market. Thus, it requires a high degree of research and development (R&D) and innovation. Schilling (2020) stresses the need for companies to engage in product development to maintain competitiveness in today's rapidly changing industries with short product life cycles. As such, companies need to continue innovating and replacing their obsolete revenue streams.

Although this option has a higher risk than penetration (due to uncertainties regarding success associated with R&D), as well as the risk of product failure, organic product development is necessary for a company's long-term success. A good example of organic product development would be if an automobile manufacturer were to introduce an electric vehicle to its existing customer base.

2.1.4 Diversification

One of the most extreme types of internal growth through diversification is creating new items for new markets, at the same time. Developing this can happen organically (ex.,

Apple developing the iPhone), but this is also the hardest route because it requires the company stepping out of its circle of competence in both engineering and marketing.

2.2 Drivers of Internal Growth

Organic growth does not occur by chance; it is a consequence of internal drivers that management intentionally develops.

2.2.1 Innovation and R&D

The ability to create new processes or improve existing ones, or create new offerings of value, is essential to a company's ability to grow organically through innovation. This will require an initial investment (in R&D) by the firm as an investment in future growth rather than an expense in the current period of business. Innovation is the "weapon" of entrepreneurs, according to Drucker (2015), because he sees innovation as an instrument of entrepreneurship, which he views as an activity that transforms an asset that has not yet been able to create wealth into an asset that now has the capability to do so.

2.2.2 Human Capital and Learning

The rapid growth of the company enables employees to acquire new skills through their experience (or "learning curve"). This accumulation of experience reduces costs and maximizes quality; therefore, as the company continues to grow, there will be available resources for use in future expansion plans. The accumulation of tacit (non-transferable) knowledge, such as abilities and experience, gives the company a competitive advantage that it is not easily matched by competitors. Barney and Hesterly (2019) state that organic growth is usually better than inorganic due to the fact that it is based on the company's structural foundations established over time; this means that resources that are socially complex (i.e., company culture and reputation) are much more easily developed internally than they are to acquire externally from another company.

2.3 Financial Aspects: Self-Financing

When companies choose to pursue "Organic Growth," a major defining feature of this type of growth is their reliance on Financing from within. Organic company’s will typically make use of their own Retained Earnings to finance any new or expansionary investments made rather than relying on raising large amounts of Debt or Diluting their Equity (by purchasing another company). `The Pecking Order Theory' (Brealey, 2020) states that when companies are looking to finance a project, they will rank their Sources of Financing preferred order to:

- Internal Funds
- Debt
- Equity (last resort)

Self-financing (Autofiancement) allows the original owners of the business to maintain control (over the business). It enforces a discipline on growth, with each

company expanding predominantly as fast as its Profitability can support. This reduces the risk associated with companies becoming Over-Leveraged and in financial Distress.

2.4 Advantages and Disadvantages of Internal Growth

Internal and external growth decisions are governed by underlying tension between the need for control and the speed of implementation of that decision.

2.4.1 Advantages

- Cultural Survival: Merging companies frequently experience failure because of a clash of corporate cultures. Internal growth, on the other hand, retains the unified values and mission of an organization.
- Strategic Direction: Management will maintain total control of the company's strategic direction as it relates to expansion; therefore, management will not be required to make compromises that are typically necessary when working with partners or acquiring other businesses.
- Lesser Risk: A company can adjust its growth strategy on an ongoing basis versus having to take on the risk of experiencing "indigestion" as a result of merging with or acquiring a large, international company. According to Wheelen et al. (2018), internal growth enables the company to safeguard its organizational structure and internal culture, both of which often are disrupted when a company merges with or acquires another.

2.4.2 Disadvantages

- Slow Speed of Development: Developing a new facility and gaining recognition for a brand in an international setting will usually take time and development. Organic growth in a declining, merger-intense business sector is dramatically more difficult since expanding through acquisition would help a company achieve a necessary large-sized scope without much delay (due to other companies merging for a large-scale operation as well).
- Resource Constraints: If a firm does not have sufficient technological expertise and/or possesses related patents on certain technologies. Developing such technology could be significantly less expensive for a company if they simply acquire the company that possesses the technology compared to building the technology from scratch.
- Market Maturity: In a mature market, achieving organic growth becomes extremely difficult since achieving organic growth requires a firm to take a competitor's revenue away, which usually results in companies engaging in destructive price wars to acquire a competitor's customer and revenue.

2.5 Conclusion

Internal development constitutes the foundation from which all enterprises operate. All companies growth (M&A), are refocused on organic growth as an integral aspect of generating value from their acquisitions. Organic growth is a fundamental element mirror

image of a healthy business model; A business that does not have the ability to grow organically is similar to plants that cannot produce energy through photosynthesis; a sustainable existence of such an enterprise (acquisition) is based on the use of available external resources for a temporary basis; therefore, organic growth must be the growth standard for all healthy economic forms. A good manager recognizes that organic growth should be regarded as a major objective and a requisite exercise for all healthy businesses.

3. External Growth Strategies (Mergers and Acquisitions)

The most costly resource in today's competitive capitalist environment is almost always time; therefore, as a methodical and controlled process, internal growth is slow. Rapidly changing market conditions, such as technology disruption, regulatory changes, or aggressive competition, cause many businesses to adopt a strategy of external growth instead of creating new assets internally. The firm expands its operations through Mergers and Acquisitions (M&A), which are methods of doing external growth through combining existing companies or their assets instead of creating new assets. External growth forever changes the way a firm is decomposed within the value chain and, from that point, creates synergies leading to increased value, essentially "leapfrogging" levels of growth and shortened timeframes to acquire market share, or obtaining critical technologies that would take years to build internally.

Gaughan (2018) provides a conceptual framework: "external growth is a change in control … [where] corporations combine their resources to strategically achieve goals too difficult or impossible for them to achieve independently" (p. 12). The purpose of this section is to provide a model for understanding the processes, reasons for use, and the various types of external growth; and to comprehensively analyze external growth from an economic perspective using M&A data to illustrate.

3.1 Concepts and Distinctions: Mergers vs. Acquisitions

The terms "mergers" and "acquisitions" may seem synonymous, but they actually define significantly different types of economic and legal transactions from one another; therefore, in order to provide a useful framework for analyzing these types of transactions, it is imperative that a clear taxonomic distinction be made.

3.1.1 Mergers (Amalgamation)

Mergers involve two independent businesses agreeing to join forces to form a new, single entity, thus resulting in two distinct legal entities merging into one. In a merger of equals, both companies will surrender their existing share certificates and will be provided with new shares of stock in the new business. The new entity will replace the two legal entities that once existed — that is, the acquired and acquirer. Thus, the mathematical representation of the merger as A + B = C will hold true.

According to DePamphilis (2019), "mergers are typically amicable transactions where both companies' boards of directors agree that by combining, the total value created

for their shareholders will exceed what either company could achieve on its own" (p. 45). For example, two regional banks merging into one entity will result in the creation of a national bank.

3.1.2 Acquisitions (Takeovers)

The acquisition of one company by another takes place when an acquirer buys all or a majority stake in its target company either through stock or other assets (i.e., acquiring control). An acquisition can result in the target company either being absorbed into the acquirer, as a separate subsidiary of the acquirer (i.e., "A+B=A), or as the newly enlarged entity of the acquirer. An acquisition can be friendly or hostile.

According to Sudarsanam (2010): "a bidding company continues to exist as an independent entity and the target company no longer exists as an independent entity" (p. 5) after the completion of an acquisition.

3.2 Types of Integration

Depending on the economic relationship between the two businesses merging via external growth strategies (external growth), there are different kinds of external growth strategies.

3.2.1 Horizontal Integration

The merger of two organisations within the same sector, and at the same level of production.

The primary economic reason for horizontal integration is to create market power i.e. by purchasing a rival company, the company will have a greater share of the total market (or total production) than if it had not merged with the competitor, thus reducing competition.

According to Besanko et al., “the implementation of horizontal integration can provide companies with the ability to capitalise upon economies of scale and scope;…horizontal integration can increase a company’s price-setting power.” (Besanko, et al. [2017], p. 182)

For example, if an Algerian soft drink company buys its competitor (juice manufacturer), then that company has now consolidated its position in the beverage market.

3.2.2 Vertical Integration

Vertical integration is the acquisition or amalgamation of firms that produce similar products but operate at various points in the supply chain. As such, there are two main types of vertical integration:

- Backward integration is the acquisition of a supplier (for example, an automotive manufacturer acquiring a tire manufacturer) that secures the supply of raw materials essential to the manufacturer.
- Forward integration is the acquisition of a distributor or retailer (for instance, a clothing manufacturer acquiring a retail store) that secures a distribution channel for the product to be sold.

According to Grant (2019), vertical integration occurs as a result of "transaction cost economics," whereby it can be more economical for an organisation to manage an activity internally rather than having to contract it out to the marketplace (p. 340).

3.2.3 Conglomerate Integration

Mergers and acquisitions between firms in unrelated industries aim to reduce the risk to the firms of changes in one of the firms' respective industries by allowing one firm to benefit from any possible profitable or good conditions in the other firm's business.

However, Brealey et al., (2020) explain that "An investor can easily diversify his or her own portfolio for less money than a company does... The result of many conglomerate mergers is a destruction of value due to at best a poor strategic fit" (p.825).

3.3 Strategic Motivations for External Growth

Although many businesses have experienced high-cost and high-risk mergers and acquisitions (M&A), they continue to engage in these transactions. The economic rationale for pursuing these transactions can be expressed as "Synergy," or the belief that the combined value of the acquired firm and the acquiring firm (1 + 1 = 3) will exceed that of each individual firm separately.

3.3.1 Operational Synergy

Cost indications are one of the primary causes of operational synergy arising from Cooperative However, cooperating combines to eliminate duplicated functional activities (e.g., two HR departments, two corporate headquarters), resulting in greater purchasing scale and production. According to Sherman (2018), this is one of the primary drivers of success and that the "cost savings associated with the removal of redundancy is the tangible basis for achieving 'the low-hanging fruit' of M&A." (p 78).

3.3.2 Financial Synergy

Small businesses typically have higher levels of capital that are at risk in the marketplace. If a small business were acquired by a larger corporation, it would result in reduced costs of borrowing to finance operation is their main reason for doing so. Second, a cash-rich established company can be a source of growth for an early-stage, capital-starved high-growth business; in this case, either company will resolve the financial issue of the other company.

3.3.3 Strategic Realignment and Speed

In certain sectors of the economy, such as high technology or pharmaceuticals, time is of the essence. Developing a new drug or software may take up to ten years. Buying a company that has created either will provide the purchaser with instant access to that capability.

According to Christensen et al. (2011), "There is no faster way than an acquisition to obtain new capabilities... particularly in an environment that is changing quickly" (p. 48).

3.4 The Dark Side: Risks and Failure

While a number of studies have shown the advantages of the M&A (mergers and acquisitions) process, a large portion of M&A transactions do not create shareholder value for the acquiring firm. The Winner's curse is typically the result of companies overpaying for targeted companies.

3.4.1 Cultural Clash

The primary issues that result from the failure of the merger process is not financial in nature but rather the human aspect of merging. The difference in the two firms' cultures can create problems when merging organizations. If workers from the acquired firm feel that they are being conquered or undervalued than they might leave or become disengaged.

According to Stahl and Mendenhall (2005), the process of integrating, "socioculturally is often one of the more difficult aspects... of the merger process and the eventual development of 'merger syndrome', which is characterized by stress and resistance" (p. 15).

3.4.2 Integration Difficulties

The difficulty in integrating the computer systems of the two companies, integrating the suppliers of each firm, as well as integrating the accounting departments of both firms tends to be the logistical challenge that is the least understood. The cost of integrating these systems can become extremely high and can eliminate the projected financial benefits of the merger or acquisition.

3.5 Strategic Alliances and Joint Ventures

Full ownership is not always necessary for the purpose of external growth. The middle ground between total ownership and joint ventures exists in the form of strategic alliances and joint ventures.

- Joint Venture (JV): Two companies create a new, separately registered legal entity for the purpose of undertaking a specific project. Through this means, the two partners share costs, profits and/or risk. A classic example would be foreign oil companies establishing a joint venture with Sonatrach for exploration and production in Algeria.

- Strategic Alliance: An informal and mutually agreed upon relationship established by two firms engaged in similar or complementary activities in order to utilize their resources for a specific purpose; e.g., code-sharing by several airlines.

3.6 Conclusion

Acquiring another company or third party for the purpose of growing your existing business is an extreme gamble. It is important that the M&A concept (mergers and acquisitions) is performed properly to allow your organization to have dominance in terms of market share and to become more efficient at doing what you do. If not performed correctly, M&A can destroy value for the enterprise and keep management focused on issues that do not create shareholder value.

The successful enterprise economist believes that M&A is not a strategy itself, but rather a mechanism (tool) to achieve an objective. Therefore, the decision to acquire another entity should be made with rigor and with very clear estimates ofsynergies to be gained, along with a thorough plan on how to integrate your existing culture will provide a foundation for sustainable and accretive growth for your company over time.

4. Diversification and Focus Strategies

An organization’s strategic evolution frequently encompasses a core tension: the choice between width and depth. Should an enterprise deploy its resources across a series of different markets to mitigate risk and find new value or should it dedicate most of its attention and resources to one market in order to develop improvement and efficiency? This dichotomy creates the framework for the Diversification and Focus strategies. The strategies that an organization employs are strategic decisions not simply operational decisions, as they fundamentally determine what is within the boundaries of the organization. While diversification focuses on attaining growth through scope, focus means attaining growth through specialization. Although the economic rationale for each of the two strategies is in direct opposition to one another, both strategies are ultimately attempting to achieve the same goal: long-term competitive advantage.

4.1 Diversification Strategies: The Pursuit of Scope

Differentiating from your business will involve establishing new businesses and markets that are not part of what your company now does at least. As such, this creates a larger company or "Corporate Portfolio." The most common reason why an individual company may wish to diversify will be because of what is known as Economies of Scope; in that it will cost less to produce two products as one than it will to produce two separate products and, as well, to share a few of the inputs involved in creating the two products.

According to Grant (2019), Diversification means: "Expanding an existing firm's scope into other lines of business" (p. 256), and that line may or may not have any relevance to the existing business of the firm.

4.1.1 Related (Concentric) Diversification

When a business expands into related lines of business, it is called related diversification. Related diversification occurs when a company's core business operations are based on the same or similar set of value chains and value-creating activities (Craig & Jensen, 2004). The similarities between the firms can be technological, marketing, or operational in nature. For example, if an Algerian dairy company decides to branch out into the production of cheese and yogurt, it is participating in related diversification because it will utilize its existing milk supply chain, cold storage logistics, and brand image.

In other words, this expansion will create synergy among the firm's operations, and the result will be that the performance of the whole business will exceed the combined performance of the parts (2 + 2 = 5). According to Porter (1998), "the concept of interdependence between business units is the primary way that a diversified company generates value.... Tangible interdependencies exist because of the sharing of value-creating activities in the value chain" (p. 324). By providing resources such as a sales force or research facility that can be shared across multiple divisions, the company can reduce the costs associated with from producing multiple products and create a higher barrier to entry for competitors.

4.1.2 Unrelated (Conglomerate) Diversification

Diversification through unrelated entries spans industries, none of which have any correlation with the company's current operations. A frequently cited example is a construction firm purchasing a hotel (ex: Holiday Inn) or a television station (ex: ABC). While there is some operational rationale for such acquisitions, the majority of the rationale is financially driven. The firm acts as an internal capital market wherein mature, stable companies provide cash to help fund the development of fast-growth, start-up businesses.

One of the primary advantages of this type of diversification is that it allows the firm to reduce risk. The firm will try to insulate itself from a downturn in an industry by holding a portfolio of diverse businesses. However, many contemporary economists are critical of this strategy.

As explained in Barney & Hesterly (2019), "Investors can create more diversified portfolios than firms can (by using the same firms' stock)... Unrelated diversification often reduces shareholder value due to what has been termed the 'conglomerate discount'" (p. 202). Additionally, the challenge of managing diverse businesses often is beyond the capabilities of management; therefore, inefficiencies will occur.

4.2 Focus Strategies: The Pursuit of Specialization

In stark contrast to diversification and/or specialization strategies, focus or concentration strategy involves dedicating all available resources to just one market segment, product line or geographical location. The rationale for this approach is that if an organization can reduce the size of its operating environment, it has an opportunity to

deliver more effectively to a smaller market segment than it would be able to as a competitor in a larger market. The focus strategy is centered on developing a marketing position within a particular segment and growing that position aggressively.

4.2.1 The Logic of Niche Dominance

A company with a focused business model will not attempt to provide a diverse array of products and services to the marketplace, rather it will attempt to be the best in the world at one specific product type or service category. The firm will develop in-depth knowledge of best practices related to the firm's focus. By concentrating on one area, the firm will develop strong intellectual capital and be able to capitalize on the businesses' intellectual property.

As noted by Hitt et al. (2017), "The focus strategy allows the firm to target its resources on a limited number of activities in the firm's value chain to develop competitive advantages.... p. 118".

The accounting software vendor with a product that sells into a general-purpose, mass market is going to have to compete with all of the global accounting software companies. Conversely the firm building accounting software designed for halal butchery supply chain types will have a competitive position because of its unique expertise and will operate in a smaller niche.

4.2.2 Cost Focus vs. Differentiation Focus

Michael Porter introduced the concept of generic strategies, which divides the strategy of focus into two types:

- Cost Focus- A firm that concentrates on a particular target segment with the goal of being the lowest-cost producer in that segment,
- Differentiation Focus- A company that produces unique value-added products for a particular target segment.

Magretta (2012) assigned meaning to Porter’s framework when she asserted that “the focus strategy is based on the differences between a focuser's target segment(s) and the other segment(s) or groups within an industry...; thus allowing the focuser to optimize its value chain for that defined segment” (p. 115). By refusing to compromise its product to meet the standards of the “average” customer, the focused company creates a high degree of customer loyalty and retains its customers over time.

4.3 The Strategic Trade-Off: "Stick to the Knitting"

Corporate history is characterized by repeated oscillation between the two forms of business organization; diversification and concentration. The conglomerate model of diversification dominated corporate behavior in the 1960s and 1970s. Beginning in the 1980s and continuing through the 1990s, this trend reversed and large companies began to refocus on their "core competencies," that is, what they can do best.

4.3.1 The Risks of Over-Diversification

A company runs the dangers of "strategic drift" when it diversifies too broadly. The diluted focus of management results in the firm becoming a "jack of all trades and a master of none." The increasing bureaucracy needed to manage the complexity of this diversification reduces profit margins, and the firm's lack of significant depth of expertise in a given area increases its vulnerability to specialized opponents.

4.3.2 The Risks of Over-Focus

Though specialization can prove to be an effective method of creating more efficient organizations, there are several drawbacks associated with taking an overly specialized approach. One of the main drawbacks comes from the potential risk of complete failure if the organization becomes highly specialized and unable to find a new niche within which to operate. Mintzberg, et al. (2003) state that "niche strategies may become dangerous should their niche dissipate, or become flooded with the attention of larger competitors" (p. 142).

4.4 Conclusion

The selection with respect to diversification versus a focus strategy is more a condition of circumstance rather than a binary choice. Factors that help to determine how a firm will select one approach or the other will be based on the maturity level of the industry, the resources of the firm and the environmental turbulence. A young firm would

typically have a focus strategy to ensure it will survive. Conversely, an older firm will often utilise a diversification strategy in an effort to grow. However, successful organisations often approach the selection of strategies by creating a balanced approach. These companies will continue to keep the primary focus on their Core Competencies (the roots of the tree) while also expanding their product range and market base (the branches). Therefore, an economist must assess the relative merits of these strategies based upon the level of value that they will create, rather than the total volume of products produced. Without profitability, growth is vanity; without synergy, diversification is waste; and without flexibility, the focus is suicide.

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Axis 10:

Enterprise Culture and Ethics

1. Concept of Organizational Culture and its Elements

In this chapter we have rigorously examined the hard elements of an economic organization: its structure, resources, financial movements, and strategic position. However, an organization is more than just a sum of its capital and labour, or a flow chart of authority. It has a "heart" or "personality" that affects how its people will act when no one is looking. This intangible force is the organization's culture and although it is not found on any balance sheet it is usually the key driver behind whether a strategy will be successful or unsuccessful. Peter Drucker famously stated that culture eats strategy for breakfast to demonstrate the fact that human dynamics will frequently outweigh technical planning. For economists, understanding culture is important because it acts as an effective control mechanism; it is often more efficient than bureaucratic regulations at reducing transaction costs and aligning employee behaviours with organisational objectives.

1.1 Defining the Invisible Force

Corporate Culture encompasses both the shared values and norms of organizations, and anthropologists have identified seven elements or characteristics (the "7 Cs"), which shape and influence the behavior and attitudes of employees. By understanding these elements in your organization's culture, you will be able to leverage them to improve the performance of your organization. At its simplest, Organizational Culture refers to the way an organization operates: it encompasses all of the unwritten and often unrecorded ways that we interact with those around us – at the office, on the job site, or virtually; in person, or online, via phone or text; and with clients or colleagues.

Robbins and Judge (2019) define it as "a system of shared meaning held by members that distinguishes the organization from other organizations." (Page 543). Culture is not something that can be found in a manual; it is learned and developed over time through social interactions. Business cultures develop by answering the question, "What is the process for accomplishing our work here?" Whereas, workplaces that have developed through formal structure (i.e., management) (Axis 6), businesses operate through their social networks.

Culture provides an organization with a way to articulate what is important to it; it is a way for employees to share their excitement, common interests and establish a sense of belonging within the organization. As Alvesson (2013) explains, "Culture is defined as a system of common symbols and shared meanings that establishes the shared understanding of what members of an organization should think or feel about belonging to that organization." (Page 3). Culture is both historic and distinct—historic because it carries forward the culture of founders and previous leaders; distinct because it creates a unique identity for an organization.

1.2 The Anatomy of Culture: Schein's Three Levels

In order to understand the nature of this invisible influence, we must also comprehend the depth of it. One of the earliest and most persistent frameworks of analysing culture was created by Edgar Schein, who considered culture as a multi-faceted entity rather than simply seeing it as a singular entity, indicating that it existed within three distinct visibility levels. According to Schein (2017), "Culture is a pattern of basic, shared assumptions learned by a group as it solves its external adaptation and internal integration problems and which has been proven to be sufficiently valid" (p. 6).

1.2.1 Artifacts: The Visible Surface

Level 1: Artifacts represent the "visible" (e.g., we can see wear on plastic artefacts), Audit, or "tangible" (e.g., books) manifestations of the organization. They are the physical architecture/design of our buildings, the dress code of the employees (casual Friday), the technology (computers) we use, language, and emotional climate (the "I feel good" factor) that we experience when walking into an organization. Artifacts are very easy to see and observe when we enter an organization, but not so easy to interpret the true meaning behind them – for example, casual Friday may indicate an innovative/casual culture or perhaps indicate management's need to cut costs on air conditioning. According to Daft (2021), "artifacts are everything [we] can see, hear, and/or experience from observing members of the organization; however, they are only the tip of the iceberg" (p 386).

1.2.2 Espoused Values: The Justifications

The Espoused Values are found beneath the artifacts. These are the organization's stated strategies, goals, and philosophies; therefore, they are what the organization professes as value. They can often be located in a mission statement or in statements made by the chief executive officer. For example, an organization may have a value of customer first or have integrity as core values. Economists however need to differentiate between what is espoused and what is enacted. For example, if an organization states they value teamwork but the employees who receive promotions are based on their personal sales numbers, their espoused value is illusionary.

1.2.3 Basic Underlying Assumptions: The Unconscious Core

The most profound level of a culture is that of the Basic Underlying Assumptions (Schein, 2017). Basic Underlying Assumptions are taken-for-granted beliefs that have become unconscious and are therefore the basis for what members do (and how they see the world). Because these beliefs are so deeply rooted within the organization, they are rarely discussed or articulated. An example of a basic underlying assumption in an engineering organization would be the belief that truth is ascertained through quantitative measures (e.g., numbers, measurements, etc.). In this type of culture, someone makes an emotional or intuitive appeal to a decision-maker, that person will likely reject the emotional or intuitive appeal, not based on an actual rule (at least no formal rule) but rather due to the fact that emotional and intuitive appeals violate the group's reality (Schein, 2017). According to Schein (2017), "basic assumptions are like theories-in-use that tend to be non-confrontable and non-debatable" (p. 22). To create cultural change, a change in basic underlying assumptions must occur. Thus, cultural transformation can be incredibly difficult to achieve.

1.3 Key Elements of Organizational Culture

Culture consists of its various structural levels, along with the specific elements that provide employees with the "shared meaning" of the business. These elements act as the mechanism by which the business passes on its genetic code.

1.3.1 Stories, Myths, and Legends

Cultural narratives are among the key methods utilized to transfer cultural information. Narratives circulate through the organisation recounting events related to its founders, rule-breaking behaviour, rags to riches success stories, and reactions to past mistakes. Such narratives create an anchor between present and past and lend legitimacy to current behaviours. For example, the narrative of the founder driving in a blizzard to deliver product creates a culture of dedication to customer service. As noted by Cameron and Quinn (2011), "Stories and myths provide powerful metaphorical representations… to convey the values of the organization and demonstrate who the heroes and the villains are" (p. 94).

1.3.2 Rituals and Ceremonies

Rituals consist of repeated sequences of actions to demonstrate and validate the fundamental values of the organization. Examples of rituals include the annual general meeting and the daily morning coffee meeting. Similarly, ceremonies celebrate major accomplishments, such as "Employee of the Month" recognition or retirement celebrations; however, these events have both social and economic implications (by signalling specific behaviours as desirable/rewarded and belonging within a larger group). Bolman and Deal (2017) argue that "ritual and ceremony provide structure and clarity and give predictability... they form a cohesive unit with like-minded individuals and provide comfort in times of stress" (p. 256).

1.3.3 Symbols and Material Language

A symbol can be an object, act, or event that has meaning for those who receive it. A reserved parking space, the size of an office, or how job titles are assigned within an organization are all examples of symbolic representations. An example of how office space symbolism can vary by hierarchical culture (where there are different levels within the organization) vs. egalitarian cultures (where there are fewer levels in the organizational structure) would be: In a hierarchical culture, the CEO's office may be located on the top floor and have security (a symbol of power/distance); however, in an egalitarian culture, the CEO may be found working from an open-plan cubicle (a symbol of being accessible). The surrounding material environment is a non-verbal form of communication that continuously reminds employees of their level within the organization and the organization's values.

1.4 The Functions of Culture in the Economic Enterprise

Why does an organization devote so much time, money, energy, and human resources to maintain this complex social system? There are several major economic functions that culture serves in providing the basis for an organization's survival and efficiency:

- Define boundaries: Culture provides a way to differentiate between the organization and the external environment. It defines "who we are" versus "who they are."
- Identity and commitment: Culture provides individuals within the organization with a sense of identity. Individuals who identify with a culture are more likely to commit to putting forth efforts and being loyal to the organization, reducing turnover and associated costs.
- Social stability: Culture provides social glue by establishing norms for behavior and thus promoting cohesion, holding an organization together.
- Sensemaking and control: Culture is a central basis for establishing control over employees through well-defined norms and collective values—a "psychological contract" for self-regulating behavior whereby employees conform to the established norms and values without requiring extensive direct supervision.

Kotter & Heskett (1992) state that "Corporate Culture… has a major influence on a firm's long-term economic performance… the closer a strong culture is to the external

environment, the stronger the firm's financial performance will be" (p. 11). Conversely, the authors caution that strong cultures that do not align with the external environment can present obstacles that blind the organization to require changes needed for success.

1.5 Conclusion

The foundation of every business is its organizational culture. Organizational culture consists of a set of values represented in three ways: the visible artifacts of that culture, the visible values or statements of the organization, and the invisible assumptions inherent within that culture, and these three components are connected through the mechanics of storytelling, ritual, or symbols. Understanding the power of culture is very important for both the manager and the economist. Culture is not simply a soft area of human resources; it is a solid economic fact that defines how well or poorly internal transactions are executed and how well or poorly external adaptation is performed. A negative culture can erase capital faster than a market crash, while a positive culture can act as a catalyst in enhancing human potential.

2. Business Ethics and Corporate Social Responsibility (CSR)

No enterprise exists in isolation from the economic environment it operates within. Rather, business activities take place within extensive networks of political and social systems. While the traditional classical economist would view the firm as nothing more than an instrument to increase the wealth of shareholders, in actuality enterprises are now major social actors and their decisions have significant consequences for both society and the environment. Thus, without giving consideration to the ethical aspects of doing business, the study of enterprise economics is lacking. This section will look at Business Ethics and Corporate Social Responsibility (CSR) with an emphasis on the difference between an organisation's internal moral compass and their external responsibilities to society.

2.1 Business Ethics: The Moral Compass

The concept of Business Ethics is a composite of the application of ethical principles and ethical challenges in the marketplace. Accordingly, Business Ethics apply to various areas of business practices at both the individual and organizational levels. In contrast to the law, which only establishes minimum standards for behavior (what a person must do), ethics concerns itself with establishing the highest possible standard of behavior (what a person should do).

2.1.1 Defining the Field

According to scholars, business ethics can be defined as "the study of business policies and practices pertaining to the appropriate way in which to conduct business when there is potentially controversial issues." In addition, Crane and Matten (2016) offer an all inclusive definition of business ethics that states that "business ethics is the study of business situations, activities, and decisions that address issues of right and wrong." The

definition indicates that ethics should not be treated as a separate function; instead, ethics should be the lens through which all economic decisions (e.g. pricing strategies and supply chain sourcing) are evaluated.

Social justice and economic efficiency are often the two competing factors that create the conflict within business ethics. For instance, you can open or relocate a factory to another country because of lower labor standards. From an economic standpoint this is a rational and logical move (you are lowering your cost of production) however from an ethical perspective this is the exploitation of a vulnerable segment of society. Ferrell et al. (2019) assert that "the ethical culture of an organisation is influenced by numerous factors; such as corporate ethical policies, top management's leadership with respect to ethical issues, co-worker influence and the opportunity to engage in unethical behaviours."

2.1.2 Ethical Frameworks in Business

Normative ethical theories are frequently used by managers to solve ethical dilemmas.

- Utilitarianism believes that you should make the decision that provides the greatest good for the greatest amount of people, which is often reflected in a cost-benefit analysis.
- Deontology believes that decisions are based on certain duties and rules, and therefore, some actions (like committing fraud) are wrong regardless of what the outcome will be.
- Virtue ethics focuses on the character of the person making the decision. Rather than asking yourself 'what should I do?' You ask yourself, 'what type of organisation do I want to create?'

2.2 Corporate Social Responsibility (CSR): Beyond Shareholders

Business ethics are the guiding principles for decision-making and Corporate Social Responsibility (CSR) is how an organization manages the impact it has on society through real-world actions and policies. In this way, CSR is an example of business ethics in practice.

2.2.1 The Evolution of the Concept

According to Friedman (2002), it was generally accepted that "the only thing that a business has a social obligation to do is to use its resources and to engage in ways of creating wealth so long as it abides by the rules of the game" (p. 133) until recently. "Shareholder primacy" was the working model for many businesses.

Freeman et al. (2010) argue for the change from a "shareholder primacy" model to a "stakeholder" model, stating, "business is an interaction between customers, suppliers, employees, financial institutions, the community, and management to create value... the executive's role is to manage the interaction of those groups and create value" (p. 24).

2.2.2 Carroll's Pyramid of CSR

The framework which is most commonly used to illustrate CSR is Archie Carroll's Pyramid. This model represents that CSR is complex and is made up of four layers of responsibility:

- Economic Responsibility; (Bottom layer) The firm must be profitable to continue operating.
- Legal Responsibility; The firm must follow the law. The law is the codification of right and wrong by society.
- Ethical Responsibility; The firm must do what is right, fair and just, even if not required by law.
- Philanthropic Responsibility; The firm is a good corporate citizen; it provides resources to improve the area via contributions to the community.

Carroll & Buchholtz (2017) illustrate this hierarchy by stating; "Corporate Social Responsibility is the economic, legal, ethical and discretionary (philanthropic) expectations that society has of organizations at any given time" (p. 36). This definition also modifies CSR to be a fluid concept. What was once seen as philanthropy (ex: providing employees with health insurance) is now an expectation of legality or ethics.

2.3 The Business Case for CSR: Creating Shared Value

People criticize Corporate Social Responsibility (CSR) for costing companies money and cutting into their profit margin. But recent research demonstrates CSR can also give businesses a competitive advantage in their industry. A great way to express this idea is to point to Shared Value (CSV) as an example of a technique to communicate this concept.

2.3.1 From Philanthropy to Strategy

According to Michael Porter and Mark Kramer, companies have to move beyond individual charitable giving and incorporate social value into their overall business model. Porter explains in his book published in 2008, Strategic CSR is different than traditional forms of CSR (which focus primarily on being 'good' corporate citizens), instead it is a way for companies to identify their own unique position within the market—that is, how they can be different from other businesses so that they achieve lower costs or provide enhanced service to customers with specific garment needs. As an example of strategic CSR in action, an Algerian food processor who invests in funding local farmers' education in order to improve crop yields is not simply acting as a charitable organization but rather creating opportunities for improving quality goods as well as securing a steady supply chain for their production operations.

2.3.2 Reputation and Risk Management

Currently, an individual or entity's reputation is an extremely valuable asset in the current information age. The unethical behaviour of individuals or organisations may cause consumers to boycott that organisation or individual, resulting in regulatory fines or

the loss of a "Social License to Operate". In contrast, a strong commitment to Corporate Social Responsibility (CSR) attracts talent; the current millennial and Gen Z workforce largely asks for companies to align with their personal values or beliefs prior to accepting a job offer (Chandler, 2019). Chandler also indicates CSR is a "Strategic Filter...allows an organisation to qualify and quantify risks or opportunities in the environment that the conventional financial accounting approach may overlook" (Chandler, 2019, p.6). By proactively addressing environmental sustainability issues, an organisation will minimise their future liabilities whilst portraying themselves as a leader in the Green Economy.

2.4 Challenges and the Danger of "Greenwashing"

Although CSR can be beneficial to an organization, it is certainly not without its challenges. The greatest of these challenges would be considered "Greenwashing," which is the act of making false claims about environmentally-friendly or socially-responsible products or services.

2.4.1 The Gap Between Rhetoric and Reality

If an enterprise invests more funds in marketing the fact that they are ethical than in actually being ethical, they are engaging in deception and potentially lose the market's trust. This is demonstrates an information asymmetry and an economic crisis because the enterprise deceives the consumer. Blowfield and Murray (2019) explain, "CSR can be utilised as a shield to deflect criticism... or to be used as a smokescreen to conceal the negative impacts of the core operations of the business" (p. 215). Therefore for CSR to be economically substantial it must be results oriented and measurable and not just an add on.

2.5 Conclusion

Corporate Social Responsibility and Business Ethics serve as transitional areas between the two elements that define Corporate Social Responsibility and Business Ethics as a business relationship to society. Through aligning with corporate values, corporate social responsibility, business ethics, social & economic criteria for success, a corporation will establish its identity and reinforce its commitment to the common good. Another way to define this is essentially, the corporation has created a linkage between ethical considerations and social responsibilities as part of the corporate ethos. Corporations seek to improve society while at the same time leveraging their brand and products to create new partnerships with local governments. In summary, the two elements are interrelated and reinforce each other, the corporation have established themselves through efforts to create value for all parties involved. These efforts can be measured through the establishment of Corporate Governance Framework levels.

3. The Impact of Culture on Employee Performance

The traditional approach to labor within the context of enterprise was to view it simply as a factor of production. In other words, labor was defined by hours worked and wages paid. While such an approach may quantify labor, it does not explain why

companies with identical resources, technologies, and payrolls can experience significantly different production output. A significant reason for such differences is the impact of organizational culture. Organizational culture acts as the operating system of the enterprise and produces the tangible economic performance from the raw potential of human capital. Culture is the lens through which employees view their work and is the hidden force that drives employees to put forth discretionary effort. Therefore, when evaluating the performance of an enterprise, one must take into account cultural considerations and not just consider the company's overall performance in terms of employee morale or quality.

3.1 The Transmission Mechanism: From Values to Value

The means by which a non-physical idea such as "values" may be quantified via a physical measure such as "Return on Investment" (ROI) can be explained through the mechanisms of Employee Engagement and Goal Alignment. In a weak or fragmented cultural environment, employees perceive their relationship to the organization as a simple exchange, wherein effort is exchanged for remuneration. Therefore, within an organizational setting characterized by weak or fragmented cultures, employee effort is exerted to the minimum extent necessary to avoid sanctions (compliance).

In contrast, in a strong cultural environment, values become part of the employee psyche. In this cultural context, employees work for reasons beyond a pay check and identify with the organization’s mission. This internalization of values reduces "Agency Costs," which are the costs associated with ensuring that agents (employees) perform in alignment with the best interests of the Principal (owners). Robbins and Judge (2019) state that "a strong culture is signified by the existence of a high level of agreement amongst members regarding what the organization is, what it does, and what it stands for... Unanimity of purpose fosters cohesiveness, loyalty, and commitment to the organization" (p. 546). Employees demonstrating commitment to the organization are more likely to exhibit "Organizational Citizenship Behavior," which is defined as putting forth discretionary effort that exceeds the employee’s formal job description, such as helping co-workers or staying late to assist customers without request.

3.2 The Efficiency of "Clan Control"

From the economic point of view, culture acts as an alternative form of control which, as compared with traditional control methods of "market" or "bureaucracy", would be a much more efficient and effective means of controlling employees without using expensive and rigid systems such as rules, monitoring through surveillance, or monetary compensation. With the clan control system, as opposed to the Market and Bureaucratic Control System, employees are regulated by peer pressure and through common values established in the work group, therefore employees do not steal office supplies because they have been taught that "we do not do that here" as opposed to being monitored by a camera. According to Daft (2021), "Culture may serve as an extremely powerful substitute for formalizing performance...if the employees share the fundamental values of their organization", then they will not require as much direct supervision in terms of working toward achieving the overall objectives of their organization (p.392). By eliminating or

reducing the need to directly supervise employees, the enterprise can simplify its management structure, which in turn significantly reduces the overhead costs for the enterprise (and speeds up the decision-making process).

3.3 The "Strong Culture" Hypothesis and Profitability

The idea that strong cultures lead to better financial results has been tested. The rationale behind this statement is that when a company has a cohesive culture, it will help facilitate communication, diminish conflict, and accelerate the execution of plans. When all employees speak the same "language" and share the same priorities and values, there will be reduced friction in their internal operations.

Kotter and Heskett (1992) performed a longitudinal study with more than 200 companies & found a strong positive relationship between cultural strength and long term economic performance. They stated "companies with cultures that emphasized all of the key managerial constituencies (i.e. customers, stockholders, and employees) and had manager leadership at all levels outperformed other companies in the same industry by a large amount (11)". In 11 years, the revenue growth of companies with performance enhancing cultures was 682% compared to 166% for companies without such cultures.

3.4 The Double-Edged Sword: Adaptive vs. Unadaptive Cultures

The author has cautioned against assuming that a culture is the only thing that drives performance. The author emphasizes that culture does contribute to performance but should fit the outside environment (being Adaptive). For example: "Craftsmanship" as a value would help an established luxury watch manufacturer (high performing) but would be a liability for the startup tech company, which needs speed above all else.

When a company does not recognize and accept environmental change and continues to maintain its strong culture, this strong culture becomes an Unadaptive Culture (an insulated and arrogant culture). Within an Unadaptive Culture, the value system of the organization supports a bureaucratic, risk-averse, and politically focused environment that does not serve the customer base well but rather serves the needs and interests of the company internally. Cameron and Quinn (2011, p. 120) write: “If an organization has a strong culture but does not emphasize adaptability… that organization will become trapped by its culture and will not be able to recognize the changes in the external environment and respond appropriately.”

Unadaptive cultures are known as “cultural lock-in.” Cultural lock-in has been identified as a reason for the downfall of many industrial companies in the 1970s, such as General Motors, which maintained an emphasis on production volume rather than product quality, as consumer demand shifted.

3.5 Conclusion

The influence of an organization's culture is both measurable and significant on an employee's ability to perform. Culture drives employee engagement, the costs associated with supervising employees and the rate at which employees are productive. A positive

culture that is aligned supports the employee's ability to maximize the value they can provide to the organization's people (i.e., as a force multiplier). Conversely, a negative or misaligned culture will drain performance through the creation of conflict and inefficiency (i.e., acting as a tax on employee performance). Therefore, an economists must not view culture as another "soft" side project but rather as an important intangible asset that will need to be invested in, maintained, and at times, depreciated and renewed.

4. Managing Cultural Change

Organizational Culture serves as the "operating system" for the organization, with cultural change resembling writing a new kernel of code with the system continuing to function. Cultural change is one of the most challenging challenges for leaders during the life of a company. Strategies, product offerings, and the physical structure can be changed by the decision of an executive; however, culture, by its nature, is built on long-standing beliefs and history that have been formed through shared experiences. Cultural change generally occurs when there is a significant shift in the external environment (e.g., due to digital disruption, globalization, or the introduction of new legislation); therefore, when an organization's culture becomes static, it becomes a liability. The organization that does not adapt its organization's internal social operating system to the new external environment will eventually become obsolete. Therefore, managing cultural change is a key survival skill, as it is not simply a "soft" skill.

4.1 The Paradox of Cultural Inertia

One of the most difficult aspects of changing any culture is that cultures are created to help ensure stability and predictability, and to help alleviate anxiety. Cultures tell members how to interpret the world around them so they are less anxious when confronted with uncertainty. As a result, when we try to change a culture, we create significant "cultural inertia," which is an extremely strong resistance force. Schein (2017) explains how this happens by saying, "The cultural construct serves as a stabilizing force for an organization... to change the culture requires unlearning many of the deeply seated assumptions that have been ingrained in the culture and therefore psychologically painful for those involved in the change" (p. 339). Thus, cultural inertia acts like an organization's immune system; when an organization has a new leader who tries to introduce new, foreign values into the organization (e.g., an organization that has a long-standing culture of being risk averse and the new leader wants to introduce the concept of "agile risk-taking"), the culture will "attack" the new idea and isolate those who are facilitating the change and revert to the previous condition of the organization.

4.2 The Process of Cultural Transformation

Cultural transformations typically don't occur in one specific instance; they're generally longer-terms endeavors. Many of the successful attempts to establish or manage cultural change utilize a systematic process, using the framework provided by Kurt

Lewin's model of cultural change, which follows an initial 'unfreezing' phase; a second 'changing' phase; and finally a 'refreezing' phase.

4.2.1 Unfreezing the Old Culture

Uprooting old value systems must preceed the rooting of new ones. The first stage of this type of change is referred to as Unfreezing, whereby the infrastructure of the existing equilibrium is destabilized. It is management's responsibility to prove to employees that the existing culture is not only irreparable but also jeopardizes the future existence of the organization. This is typically accomplished through establishing a sense of urgency. According to Kotter (2012), "creating urgency is critical... if there is no sense of urgency, employees will not put forth the additional work & effort necessary to generate change." (Step 1). To establish commitment, leaders must (1) point out the existing gap between the company's current status and what is required by the marketplace, and (2) use data to separate employees from their comfortable positions.

4.2.2 The Intervention: Changing Artifacts and Behaviors

When the company reaches the Frozen stage, the Change phase of the change process will commence. The Basic Assumptions (the deepest and least accessible level of culture) exist at such a deep level of invisibility and identification that Management must change the Artifacts (the most visible and accessible level of culture) and Routines/Behaviors first. Examples include:

- Changing Rites/Rituals (i.e., if the goal is to be more innovative, replace the annual "Compliance Awards" with "Hackathons")
- Changing Stories (i.e., leaders telling the story of the "good old days" and instead creating stories of "new heroes" who represent the desired future state)
- Changing Structure (i.e., physical office layout, organizational charts)

According to Cummings and Worley (2014), "the process of changing behavior often occurs before attitudes change; when you create new behaviors, by structuring and rewarding them, then the underlying culture must ultimately change to fit with the new reality" (p. 520).

4.2.3 Refreezing: Institutionalizing the New Culture

The third stage of change is referred to as "refreezing". This is when a new culture establishes itself as the norm. In order for this new culture to endure, consistency will need to exist throughout the organisation. If an organisation claims to be "transparent" in its operations, but subsequently fires a whistleblower, there will be an immediate reversion of the existing culture to one of cynicism. Once the new cultural values have been established, they should be incorporated into all human resource systems, including hiring criteria, promotion policies, and compensation structures in order to be aligned with the new cultural values.

4.3 The Role of Leadership as Primary Architect

Active modelling of top leadership is critical to effectuating cultural change. Rather than listening to what leaders say, employees pay more attention to what leaders do. For example, if a CEO calls for cost cutting (changing the culture toward being more efficient), but uses a private jet, the efforts to change fail. Cameron and Quinn (2011) explain, "leaders define the culture by what they pay attention to, measure and control... and serve as the primary role model for new behaviours" (p 102).

Extreme situations exist requiring that changing the culture means changing the people. "Turnaround" CEOs discover that teams in their organisation have been so entrenched in old ways of working that they are unable to change or adapt. In these situations, replacing highly influential insiders with outsiders having the desired culture's DNA becomes a necessary, if difficult, economic reality.

4.4 Conclusion

The ultimate test for executive leadership lies within the ability of an organization to manage its cultural transformation. Cultural transformation requires both strategic perseverance through a period of significant change and the vision to create a new culture. The Economist indicates that there are significant human, financial, and management resources that an organization must expend in order to implement changes in the organization's cultural values, but beyond these costs are much greater costs for an organization that fails to execute change and develops a strategic drift and ultimate failure. The cultural ability to learn and unlearn is the only way for an organization to have a sustainable competitive advantage in a dynamic and unstable economic environment.

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Axis 11:

Modern Trends in Business Economics

1. The Knowledge Economy and Intellectual Capital

Over the last 50 years, there has been drastic change in the global economy. The shift has moved from an industrial economy in which production was based on physical assets to a post-industrial economy based on intangible assets. The key inputs of production in the 19th and early 20th century were land, labor, and capital. Today the key input is Knowledge. As the economy has changed so too has the structure of the economy and so too has the knowledge-based economy created a new economy where the growth of an enterprise is driven by the production and consumption of intellectual capital. The Value of a Modern enterprise is no longer found in its production facilities and products, but rather within the intellectual capital of the employees of the firm, the patents held by the firm, and the relationships with its customers.

According to the definitions by Powell and Snellman (2004) which state that "the Knowledge Economy is defined as: production and services that are based on knowledge-based (intangible) activities that produce very rapid technical and/or scientific advances as well as continuing obsolescence of the ways in which production and services are provided to/for customers (p.199)", then the critical source of competitive advantage in this new economy is the ability to develop, store and utilize Knowledge.

1.1 From Tangible to Intangible Assets

One of the most significant characteristics of the new global economy is the separation between the market value and the book value of businesses. In the time prior to technology, most businesses had a stock price that closely tracked their physical assets (machines, buildings, etc.). In comparison, for high technology companies like Google (and pharmaceutical companies such as Pfizer), physical assets are only a small fraction of their total value. The difference between the market value and the book value represents Intellectual Capital.

Intellectual Capital, according to Stewart (1997), the first person to discuss the subject, is simply "packaged useful knowledge." (p. 67). It is everything that everyone within an organization knows that provides the organization with its competitive advantage. Unlike physical capital, which has certain economic attributes, Knowledge Capital has its own unique economic characteristics. Knowledge Capital is non-rivalrous (the same idea can be utilized by any number of people at the same time without being depleted), and Knowledge Capital displays Increasing Returns of Scale (the more you use Knowledge Capital, the more valuable it becomes).

1.2 The Structure of Intellectual Capital

Economist and accounting professionals categorize intangible assets into three components; Human Capital, Structural Capital, and Relational Capital.

1.2.1 Human Capital: The Engine

Human capital consists of the competencies, skills, experience, and creativity of all employees in an organisation. This represents the source of innovation; yet, there is a risk associated with it: a business does not own it. Therefore, when employees go home every night, the human capital leaves with them. According to Davenport (2005) "...knowledge workers are the key to innovation, and the growth of any organisation; therefore, in order to manage them successfully, an employer must treat them as if they are investors, who invest their human capital into the organisation in exchange for a return." Thus, a company's ability to retain talent must become a fundamental imperative of the economy; it can no longer be considered as an HR issue alone.

1.2.2 Structural Capital: The Infrastructure

Structural Capital is the legacy of the firm with respect to its worker where little to no credit and value exist for the worker, only as part of the organization or business once he/she has left it behind when he/she goes home. Examples of structural capital include databases, software, patents (for tangible as well as intangible processes), trademarks and processes, and the cultural orientation. Structural capital consists of explicit knowledge which has been captured/measured and instituted/codified by the company. According to Edvinsson, and Malone, 1997, "Structural capital is the supporting infrastructure (e.g., computer systems or processes) on which human capital can be utilized to leverage its contribution to the business." (Edvinsson & Malone, p. 35). Therefore, a brilliant engineer with all of the skills (human capital) is of no value without the laboratory and patent system (structural capital) to commercialize the invention.

1.2.3 Relational Capital: The Network

Customer Capital (or Relational Capital) illustrates the value of the relationships that a business has with its surrounding environment, including its users, its providers, its partners, and its regulators. Its components consist of; brand loyalty, brand reputation, and distribution networks. Within a connectivity driven economy, who someone knows can be just as vital to a company's value as what they know to be true. A company with a strong brand name (Coca-Cola) can price its product higher than a company without such a strong brand name due to the psychological relationship they developed with their customers.

1.3 Knowledge Management (KM) as an Economic Strategy

Knowledge management requires the implementation of a strategy for its management, as this would involve the creation, sharing, usage and management of the knowledge (information) possessed by an organization through a systematic procedure. The economic purpose of KM is to prevent "reinventing the wheel." If an organization has

found a solution to one or more Logistics-related problems at the Oran branch, the KM system ensures that the Algiers branch will receive this information as soon as it becomes available in order to reduce their overall cost.

Nonaka and Takeuchi demonstrated the process of creating knowledge within organizations in their 1995 publication "The New New Product Development Game" by putting forth the SECI Model. The SECI model describes how organizations create knowledge through an ongoing spiral of converting "tacit" knowledge (such as a craftsman's ability to sense something is wrong) into "explicit" knowledge (data that can be documented, saved, and shared) and similarly from explicit back to tacit knowledge.

- Tacit Knowledge is highly individualistic, difficult to record (such as a craftsman's ability to sense something is amiss).
- Explicit Knowledge can be placed on a computer program, transmitted electronically, and can be stored within a database.

The biggest economic challenge of KM is that the most valuable type of knowledge (tacit) is the most difficult to transfer. KM systems attempt to meet the challenge of transferring tacit knowledge through the use of mentoring programs (Socialization) and database repositories (Combination).

1.4 The Challenge of Valuation and Reporting

There exists a significant contradiction in contemporary business economics that the most precious assets do not appear on traditional balance sheets/Accounting standards (IFRS, GAAP). Traditionally, accounting standards have been based on the industrial model, and therefore, have typically only recognised an asset when it has either been purchased or sold. Internally generated goodwill and knowledge had not been recognised. Lev (2001) expresses this discrepancy by saying that "financial statements are no longer useful... they do not include the value drivers of the modern corporation" (p.6).

Therefore, this phenomenon creates a problem for both investors and managers. If managers are not able to measure the return on their investment when they invest in employee development then it will result in them under-investing in employee development. Various models (like the Balanced Scorecard and Skandia Navigator) have been developed in order to measure and capture these 'soft' metrics as well as the financial ones, so that a full picture of the overall health of the business can be presented to all stakeholders.

1.5 Conclusion

The shift from an industrial economy to that of Knowledge fundamentally changes what an enterprise is. An enterprise today is not only a processor of raw materials, but also a processor of information. In this paradigm, the "means of production" are no longer owned by capital, but by the worker—in this case, their mind(s)—which now gives power back to labor. To help economists to understand this new model requires a new toolkit — a focus on innovation rate, employee turnover and brand equity as key predictors of future

cash flows. The successful enterprise in the 21st century will be one that can take advantage of harvesting the invisible yield from its knowledge capital.

2. Total Quality Management (TQM)

The last century taught us that quality is not a premium feature for premium products but an absolute requirement for market access. Companies that viewed quality as an afterthought, regardless of industry or market, were at a severe disadvantage to companies that built quality into their processes. This major change in manufacturing philosophy gave rise to the emergence of Total Quality Management (TQM). TQM is a holistic management approach that requires the integration of all organizational functions (marketing, finance, design, engineering, production, customer service, etc.) to meet the needs of customers and achieve the goals of the organization.

As defined by Oakland (2014), TQM is "a comprehensive and structured approach to organizational management that seeks to continuously improve the quality of products and services through continuous refinements based on continual customer feedback" (p. 4). The transformation that occurs by implementing TQM is primarily economic; TQM changes the cost structure of a firm. What once constituted the "cost of quality" to a firm is now a driving force behind cost reduction through the elimination of waste, the elimination of rework and warranty claims.

2.1 The Core Principles of TQM

The TQM Principles are a set of interconnected parts that are the foundation of TQM. They are not just additional things added on to TQM, but rather they are the structure upon which TQM is built.

2.1.1 Customer Focus

TQM defines TQM's first and most important principle—the obsessive focus on customers. To an average person, the "quality" of a product is defined by how much they believe it will provide them with value (Juran et al. 2010). According to Juran et al., "quality is defined as how well features of the product fulfill customer requirements, provide satisfaction, and do not contain any defects" (p. 5). This customer focus gives rise to the necessity for businesses to continue to develop their internal processes so that they are aligned with what customers want from them, as well as with what customers can buy from them in the market.

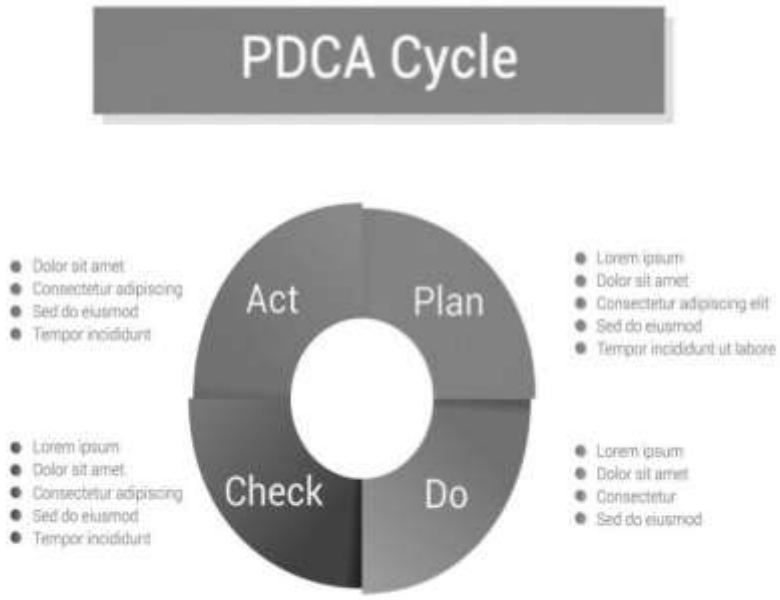
2.1.2 Continuous Improvement (Kaizen)

Total Quality Management (TQM) represents a departure from the idea of "good enough" to pursue a culture of Kaizen (a Japanese term that means to change for the better). Kaizen involves making small, continuous improvements every single day by every single employee. This stands in stark contrast to the "if it ain't broke, don't fix it" mindset. According to Imai (1986), "Kaizen means continual improvement in all aspects

of our lives: personal life, family life, social life, and working life... when applied to the workplace, Kaizen means continual improvements that involve everyone in the workplace, both managers and employees" (p. 3).

2.1.3 Total Employee Involvement

The significance of quality cannot be relegated to a "Quality Control Department." Total Quality Management gives each employee (including from upper most management, or "C-Level" Officers to janitors) the ability to identify issues and propose solutions, thus utilizing the “tacit knowledge” of the employees and using the intellectual capital of the shop floor to resolve system economic inefficiencies.



2.2 The PDCA Cycle: The Engine of Quality

The PDCA Cycle (Plan-Do-Check-Act), or Deming Cycle is an essential methodological process in Total Quality Management (TQM) and employs a rigorous scientific approach to problem-solving.

- Plan - Determine the problem and perform root cause analysis.
- Do - Deploy the solution on a small scale.
- Check - Assess to see if the solution produced desired results by measuring actual progress toward completion.
- Act - If successful standardize the solution for the entire organization.

According to Deming (2018) the PDCA Cycle is a "flow diagram for learning and for improving a product or process" (p. 88). By continually working through these steps and creating an upward performance spiral, it will ultimately increase performance.

2.3 The Economic Impact: The Cost of Quality (COQ)

According to both the economist perspective and TQM's economic analysis, the concept of the Cost of Quality (COQ) is an attractive element of TQM. This COQ framework has been introduced into TQM by Armand Feigenbaum and consists of four types (categories) of costs of quality:

- Prevention Costs: Money spent on preventing defects from occurring (e.g., personnel training, reviewing designs before production).
- Appraisal Costs: Money spent in the process of inspecting products to find defects (e.g., testing of products, performing audits).
- Internal Failure Costs: Money related to defects that happen to a product prior to having that product reach the customer (e.g., scrap or rework).
- External Failure Costs: Money related to defects that happen to a product after having reached the customer (warranty claims, lawsuits, damage to reputation).

Essentially, the TQM-related economic insight is that it is less expensive to Prevent than to Correct; for every $1 spent on Prevention, a firm will save $10 on Appraisal and $100 on Failure (Feigenbaum, 1991, p. 82). “Quality is essentially how to manage the organization... and will cause a significant decrease in total cost of doing business.” Thus, TQM is not a cost center; rather, it is a profit center.

2.4 ISO 9000 and Standardization

Companies frequently pursue certification under the ISO 9000 series of standards to demonstrate their dedication to delivering high-quality products and services within a global context. The two concepts of ISO and TQM are not the same; however, ISO is viewed as the starting point for all organizations seeking this level of quality while TQM focuses more on ways to improve the organization’s overall performance. For example, an Algerian company wishing to sell products in Europe will likely be required to have an ISO 9001 certification as a type of non-tariff barrier; this certification demonstrates to the buyer that the seller has an established system for managing quality.

According to Goetsch and Davis (2016), “ISO 9000 registration has become an absolute requirement for companies wishing to operate and do business in many different markets” (p. 245); therefore, registering as an ISO-9000 supplier allows for greater confidence on behalf of the customer that the seller can deliver on their promises regarding product and service quality.

2.5 Conclusion

Total quality management (TQM) is the discipline which guarantees that an organization continues to be economically viable (as such, it represents the next stage in the development of TQM). In essence, TQM is focused upon shifting the enterprise's attention from volume to value. Today, with global supply chains and instantaneous consumer feedback, the failure of a single product to meet the defined requirements can result in substantial damage to a company's brand in a very short amount of time.

Organizations can create a significant competitive advantage through the integration of quality into the fabric of the company and develop a strong and sustainable connection to the consumers they serve.

3. Startups and Entrepreneurship

The traditional economic models of the 20th century portrayed an image of large and established companies that were attempting to create stability and efficiency by means of economies of scale. In contrast, the 21st century economy is defined by agility, disruption, and the speed at which new markets are created. These changes have brought Entrepreneurship and the Startup to the forefront of economic analysis. Startups are no longer considered to be fringe participants in the economy; they are now regarded as the primary driver behind job creation and technological innovation. An economist must adopt a new perspective in order to understand a startup from an economic standpoint; therefore, traditional production functions must be expanded to include the concepts of uncertainty, risk capital, and rapid growth.

3.1 The Economic Nature of Entrepreneurship: Creative Destruction

To understand the entrepreneurship applies to firm development you must first define the role of an eneterpreneur as usng the classical economic words of Schumpeter, who views a healthy economy as a non-static environment, which is constantly changing by innovation creating turmoil in the marketplace. The term he coined for this process is "creative destruction".

Schumpeter (2021) defines this process of creativity and destruction within an economy as "a process of incessant revolutionising of the economic structure within itself, by destroying the old one constantly while creating a new one constantly" (p. 83) . In this definition, the eneterpreneur is not just an individual who manages the combination of labour, capital, etc., they are an agent of change therefore introducing new combinations of products, production processes and markets which will replace existing products, markets.

Drucker (2014) expands upon the definition of entrepreneur by defining entrepreneurship, as a discipline rather than an individual personality. He states "innovation is the specific tool of entrepreneurship... as the action which grants new capabilities to resources in creating wealth"(p. 30). An Entrepreneur uses innovation to move resources (labour, capital, etc.) which are currently located in a low productivity/return/efficiency area, to a location which generates higher productivity/return/efficiency thereby raising the aggregate economic growth of the economy.

3.2 Defining the Startup: Search vs. Execution

The idea that a startup is a simple smaller version of a large enterprise (business) perpetuates the same fallacies that lead to terrible strategy decisions. The startup has both

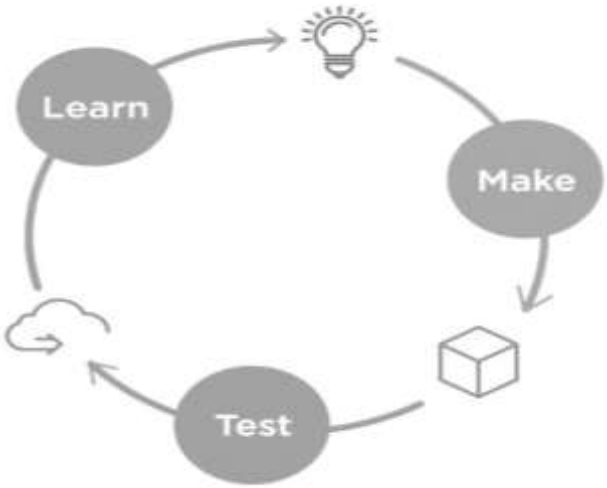
a different structural and a different goal (teleological) definition from a typical Small and Medium Enterprise (SME). SMEs (e.g. local bakeries) perform a known, already established, business model to provide a moderate rate of growth in a market with an established demand; while a startup is built with the intention of rapidly growing and functioning in extreme uncertainty.

Per Blank and Dorf (2020), startups are defined by searching for a business model that is repeatable and scalable through temporary organizational structures (p. xvii). The key word is search: established companies are executing based on what they have already learned, while startups are searching for what they do not yet know (e.g. Who is the customer? What will the product or service be?).

Further defining a startup, Ries (2011) adds that it is also a "human institution that is created to provide a new product or service in an extreme uncertain environment…" (p. 27). This definition directly ties to the operation relative to the economic environment, which is that a startup operates in a market where the supply and demand curves are only in the process of being established and the primary asset of a startup is not capital, but the speed at which the startup can acquire new knowledge.

3.3 The Lean Startup Methodology: The Economics of Speed

Due to the high costs associated with market failures and unpredictable market conditions, applying the traditional "Waterfall" model of product development (i.e., writing a business plan, raising funds, building a product in isolation, and then launching it) to startup companies is not a good economic model for these types of businesses due to the 'potential' for a product no one will buy. The alternative method to the traditional "Waterfall" approach, the "Lean Startup" methodology takes much more of a scientific approach to the creation of a business.



3.3.1 The Build-Measure-Learn Feedback Loop

The feedback loop is the fundamental economic unit of the Lean Startup, where the purpose of using this framework is to develop products based on ideas and gather data on how customers respond to them, which helps in determining whether or not a team should pivot or persevere with its product. The sooner a business can get through the feedback loop, the more likely they will be able to discover a viable business model before running out of funds. Ries (2011) states that "the only way to win is to learn faster than anyone else... validated learning means Providing demonstrable and demonstrable evidence that a team has gained knowledge about a startup's current and future state"

3.3.2 The Minimum Viable Product (MVP)

In order to reduce the amount of needless effort (muda), many new businesses employ a Minimum Viable Product (MVP) to test their ideas. An MVP does not mean creating a low quality product, but rather creating the first version of your product that will allow your group to gather the greatest amount of validated feedback about your customer with the minimum amount of effort. From a economic perspective, using an MVP will lower the opportunity cost of not using your time effectively. Instead of taking 2 years to create the perfect platform for your customers to use, an MVP would allow you to release to the marketplace a minimal viable version of your product in 2-months and gain confirmation of your hypothesis from real customers.

Osterwalder and Pigneur (2010) describe how one can use the Business Model Canvas to help define these hypotheses. They state that "A business model describes the rationale of how an organization creates, delivers and captures value" (p. 14). The MVP is used in conjunction with the Business Model Canvas to continually adjust the Business Model Canvas based on the feedback received from customers, which is referred to as the "Customer Discovery Process."

3.4 Financing the Startup: The Venture Capital Cycle

Many start-up companies have not been able to use bank financing because of the lack of collateral. Additionally, the high-risk/high-reward profile is not suitable for getting debt financing because debt financing requires steady cash flows to cover payments of interest. This has created a market failure, which led to the rise of venture capital funding.

3.4.1 The Economics of Equity Funding

Venture capitalists (VCs) supply equity capital in exchange for a proportional share of ownership in a business. According to VCs, equity capital is usually attained based on the 'Power Law'—the majority of VCs have their financial loss mostly covered by one or two "unicorns" (Valued $1 Billion Dollar or more). As explained by Metrick and Yasuda (2021), "Venture Capitalists are intermediaries between investors and entrepreneurs…they attempt to reduce the information asymmetries and moral hazard through extensive oversight and staged financing" (p. 4).

3.4.2 Stages of Financing

The Start-Up Finance Lifecycle (SFL) has four stages of funding creation, initial investor participation, continued funding as growth occurs, and eventual exit. These include:

- Seed Funding Participating angel investors or incubators (wealthy people) in building a prototype (stage 1).
- Series A Amount of funding raised from professional venture capitalists (VCs) to develop/progress the product; develop user base (stage 2).
- Series B / C Expansion Funding of your start-up's operations acquired whilst seeking new growth (stage 3).
- Exit - Event which provides liquidity for owners/investors either through a public offering (IPO) or acquisition by a larger company.

3.5 The Entrepreneurial Ecosystem

Through the concept of Entrepreneurial Ecosystems, economic analyses recognize that successful startups are embedded within Entrepreneurial Ecosystems which are found in geographic locations such as Silicon Valley, London, and in developing cities such as Algiers and Lagos. An Entrepreneurial Ecosystem reduces the cost of doing business because it provides access to Resources such as Talent, Capital, Mentorships, and Specialized Services.

Feld (2020) identified the characteristics of a successful ecosystem indicating that the ecosystem must be "entrepreneur-led...where the entrepreneurs are committed to the local area long term and who are willing to give back with no expectation of an immediate return" (Feld, 2020, p. 25). Due to the density of the ecosystem there are many opportunities for "knowledge spillover" that allow for greater innovation within the ecosystem.

3.6 Conclusion

The dynamic technological and entrepreneurial sector represents the future of business within the framework of enterprise economics; ultimately, this area is a test ground for the development of the future economy. Although the number of failures among startups is very high, their overall contributions to economic growth and renewal through increased productivity are essential to the economy as a whole. In studying the relationship between startups and the economy, students learn to distinguish between optimizing what is currently known and identifying what is yet unknown - a process that requires human initiative, a willingness to take risks, and the ability to persist through adversity to create value.

4. Sustainable Development and the Green Economy

The enterprise has long adopted the linear paradigm of "take, make, waste" as the primary business model. Businesses had long operated on the assumption that nature never

exhausted the supply of raw materials, and that the environment was just an infinite disposal system for the waste they dished out. However, this linear method of production and service delivery is neither environmentally sustainable nor economically feasible today. The 21st-century enterprise must address the Sustainability Requirement - meeting the needs of today without compromising the ability of future generations to satisfy their own needs. Moving toward a sustainable future is not only a moral imperative but also the basis for new ways of doing business in the developing Green Economy, where profitability is completely dependent upon protecting the environment and nurturing the earth's resources for future generations.

Sachs (2015) describes sustainable development as an integrated holistic analytic framework consisting of economic development, social inclusion and environmental sustainability. Therefore, for the enterprise, sustainable development requires a "Triple Bottom Line" philosophy whereby businesses measure their success based on Profit, People and Planet.

4.1 The Economics of Sustainability: Internalizing Externalities

The premise for implementing the green economy is to correct market failures that result from negative externalities. Negative externalities occur when production by firms generates costs for society (e.g., environmental pollution) that are not recorded in the financial statements of those firms. Historically, firms have socialized the costs associated with production and privatized the profits. The most commonly cited example of the costs associated with production is climate change; according to Stern (2007), "climate change is the greatest market failure the world has ever seen" (p. 1).

In a Green Economy, firms internalize external costs associated with production (e.g., an increase in production costs) through mechanisms such as carbon taxes, emissions trading systems, and increased regulatory burden. This new approach creates a new cost structure for the firm, as the external cost of pollution now becomes a line item in the firm's operating statement. As a result, those firms that reduce their environmental impact will see a reduction in their operating expenses relative to the competition and will create an opportunity for competitive prices. Therefore, the profit motive and the protection of the environment become aligned.

4.2 The Circular Economy: Closing the Loop

The practical application of sustainable economics in business refers to moving from a linear to a Circular Economy. This model seeks to separate economic development from the use of physical resources. The Circular Economy is built on three principles: eliminate waste and pollution, keep products and materials (at their highest value) in circulation, and provide a new natural environment.

As stated by Webster (2017), a circular economy is "restorative and regenerative by design", and replaces the concept of end-of-life" with "restoration" (p. 16). Products will be developed to be disassembled and reused. For example, instead of selling cars (transferring ownership), an automobile manufacturer may provide leasing of mobility

(retaining ownership). At the end of the lease, the manufacturer recovers the car, remanufactures the engine, and recycles the steel.

This transformation from waste to an asset is happening in companies that practice circular economics. An example of this is in Algeria where a furniture company utilizing the sawdust produced in their manufacturing to create bio-energy. This allows them to reduce both their dumping costs and their energy bill.

4.3 Green Innovation and Eco-Efficiency

Innovation is being stimulated by sustainability. Eco-Efficiency is a management philosophy that aims to generate increased value while reducing impacts. "Doing more with less" entails producing each unit of output with fewer resources of all types, including energy and water. According to Esty & Winston (2009), in their book Green to Gold, environmental issues can be used as a potential source for competitive advantages. The companies that take this approach will be able to lower their costs, stimulate innovation, and increase their revenues (p. 10).

Examples of green innovations include the following:

- Process Innovations: Changing a manufacturing process by using non-toxic chemicals to create a process that is less expensive to comply with regulations and create happier workers;
- Product Innovations: Creating new biodegradable packaging materials and creating energy-efficient appliances that appeal to the environmentally conscious consumer;
- Business Model Innovations: Using dematerialization to reduce physical goods and shifting to provide a digital service instead of a physical product.

4.4 Risks and Opportunities in the Transition

Both existential threats and substantial potential benefits are available to businesses that move toward a sustainable economy.

4.4.1 Transition Risks

Legacy businesses that do not transform into sustainable companies will have "stranded" assets – i.e., assets that can no longer be turned into a profitable business because of market or regulatory changes. For example, coal mines/ diesel engine manufacturing plants may be identified as liabilities instead of assets if regulations prohibit the production of these products. Carney (2015) noted the existence of a “Tragedy of the Horizon”, whereby the effects of climate change occur outside of the normal business cycle; leading to the mispricing of risks. Because of the uncertainties associated with the future of carbon, every business will need to establish a scenario analysis process to determine whether they will be able to survive in a low-carbon economy.

4.4.2 Green Opportunities

On the other hand, the green economy is the greatest investment opportunity in history. There is an enormous increase in demand for renewable energy, sustainable farming, electric transportation, and eco-friendly construction materials. Raworth (2017) states “Doughnut Economics” – that the safe and just space for humans is between the social foundation (the requirements of individuals) and the ecological ceiling (the limits of nature and land). Companies operating in this “doughnut” will be in an excellent position to succeed in a limited resource environment.

4.5 Corporate Sustainability Reporting

Similar to financial capital that requires transparency through reporting (Axis 8), natural capital also has the same need for responsible accountabilities. Companies that are now using Environmental, Social and Governance (ESG) reporting standards to produce reports (e.g., Global Reporting Initiative [GRI]) on their carbon footprint, water usage, and waste management practices are becoming increasingly commonplace. Therefore, investors and other stakeholders can see what type of company they are investing in as a result of these reports. According to Eccles et al. (2014), "sustainability companies, when compared to their traditional counterparts, have a significantly greater level of financial success within the stock market and for aggregate accounting measures for a sustained period" (p. 2835). By maintaining transparency firms build trust that will allow them to acquire lower cost lines of credit and attract more long-term investors.

4.6 Conclusion

Sustainable development is no longer an afterthought to philanthropy; it now provides a basis for the economic rationale for all businesses. The Green Economy redefines the meaning of efficiency in business to also mean thermodynamic efficiency in addition to financial efficiency; therefore, it will require the enterprise to create innovations that respect the limits of the planet. In the face of the climate crisis, the enterprises that will succeed in the global economy are those that can convert the constraints imposed by environmental issues into economic opportunities, thus showing that it is possible to earn profits without destroying the planet's resources.

5. Economy and Artificial Intelligence (AI)

In the history of the evolution of the economy, there are many instances of what are known as General Purpose Technologies (GPT), these GPTs are of great effect since they fundamentally transform the way that production occurs throughout different sectors. Well-known examples of GPTs would be the steam engine, electricity, and the internet. Today, Artificial Intelligence (AI) is viewed as the newest and perhaps most disruptive, GPT. To the economist, AI is more than a new advancement in the field of computer science; it is a true shock to the supply side of the economy, it is a shock that will lead to fundamental changes to the relative costs of capital versus labour, re-evaluate what

constitutes a competitive advantage, and redefine the very boundaries that exist within a firm.

5.1 The Economic Definition: A Drop in the Cost of Prediction

To determine the economic impact of artificial intelligence, you must not only consider its incredible technical complexity associated with neural networks, but also its new economic value. Generally speaking, the current wave of artificial intelligence (machine learning) represents a significant reduction in the costs associated with predicting. Economists appreciate when the cost to produce something decreases, two things typically occur; an increase in the demand for the commodity or service, as well as a corresponding increase in the overall value of the goods or services that complement it.

One of the leading experts in the field of machine learning, Agrawal, et al., put this together very succinctly when they articulated, "The new economics of AI will be about reducing the costs of predicting" (2018). As the costs associated with predicting continue to decline (in a reversible fashion), it will be used not only for predicting problems that have previously been classified as prediction problems within the business environment (e.g. inventory control), but also for predicting problems that may not have previously been viewed as being prediction problems (e.g. predicting which way to go while getting from point A to point B).

By redefining business decision making as a prediction problem (e.g. determining which individual will make a good employee or determining which component of your production machinery is likely to fail), businesses can utilize inexpensive algorithmic predictions instead of using more expensive human predictive capabilities.

5.2 Labor Markets: Substitution and Complementation

The area of greatest contention within the discipline of AI economics is the effect of AI on the labor market. Does AI serve to replace/have a negative impact on workers (substitution effect) or to improve productivity (complementation effect)? The answer appears to hinge upon the nature of the specific tasks performed by an individual worker.

5.2.1 The Task-Based View

There are different types of jobs comprised of different types of tasks. Artificial Intelligence can perform many (but not all) of the repetitive (or routine) cognitive jobs which include Data Entry, Basic Data Analysis, Being able to understand what the computer says before making a decision about how to proceed with that information requires high levels of Empathy and Creativity as well as the ability to create a Strategy and applying Complex Physical Dexterity while performing work in Unstructured Environments. According to Brynjolfsson & McAfee (2014), "computers and other digital technologies, like the steam engine and its successors, have augmented and improved man's thinking ability". (p. 8)

AI has the effect of creating a Tornado Effect within the Job Market, Human beings that have High Level Skills (i.e., Doctors using AI to Aid in making better Clinical

Diagnosis) will experience Increased Productivity as well as Wage Increases; whereas, Individuals with Low-Level skills (i.e., Workers providing Service Functions that require Human Relationships) are protected and have Stable Wages; and the Highest Rate of Job Displacement will happen to the individuals with Middle Level Skills performing Repetitive (or Routine) Cognitive work.

5.2.2 The Value of Judgment

As the costs associated with producing predictive insights decrease, so too does the value of human judgment—the skill required to decide what can be predicted and how to use that prediction. Human judgment will come to serve as the scarce complement to the plentiful supply of predictive capabilities created by artificial intelligence. Agrawal et al. (2018) state that "Prediction is not a decision... it is an input into a decision that requires the use of human judgment" (p. 74). As such, the role of the human worker will continue to evolve from processing data to interpreting data by applying the relevant ethical and strategic context.

5.3 Data as the New Factor of Production

In this era of Artificial Intelligence (AI), the role of data has changed dramatically from being just a history of previous transactions, to now becoming an essential resource for producing products; similar to how land, labour and capital have always been necessary to produce goods. Data plays a critical role in training Machine Learning (ML) algorithms, and the relationship between data and ML algorithms creates a new economic dynamic known as Increasing Returns to Scale.

In traditional manufacturing (non-AI), capital goods experience diminishing returns (the 100th capital good will produce less value than the 1st), whereas in the era of AI; data leads to better algorithms, which attracts more users, which creates increased amounts of data. As such, these interactions create what has been referred to as the “Data Flywheel,” which benefits large incumbents while creating natural monopolies. According to Lee (2018), "in the age of AI, data is the new oil, but unlike oil , data is an infinite resource that can be reused and produce multiple times the amount of value that was generated originally " (p 16)

As a result, companies must begin to view their data infrastructure as a strategic asset rather than an IT cost. The valuation of companies is shifting away from being based upon the physical assets of these firms and will increasingly be based upon the quantity and quality of the proprietary data held by these companies.

5.4 Algorithmic Management and the Firm

AI technology will start to change how companies organize themselves internally (Axis 6). Middle Managers have traditionally been used to manage employees, distribute resources, and report to Top Management. With AI, Algorithmic Management can be utilized in which tasks are assigned, performance measured, and behavior nudged by an automated software platform.

According to Davenport (2018), “AI will automate many administrative tasks… allowing Managers to focus on strategy, innovation, and development of people” (p. 120). This can flatten the organization, however, black box management can introduce an ethical and legal challenge to transparency and bias by making the hiring, firing, and promotion decisions opaque and based on an algorithm.

5.5 Competitive Advantage: The Winner-Takes-All Dynamic

Artificial intelligence (AI) has changed the nature of competition (Axis 4) by turning what were once low- or moderate-barrier-to-entry industries into high-barrier-to-entry industries for companies that want to develop their own robust AI technologies. The companies that successfully build robust AI technologies will need three things: (1) access to vast amounts of computing power; (2) access to very limited quantities of talent; and (3) access to very large amounts of data (in order to train and improve their AI systems). Industries that have a concentration of these resources will likely see the rise of "winner-takes-all" type of markets.

A company that has a small advantage over another company in terms of AI will be able to provide a product that has a marginally superior quality level than the competing company's product. The company that produced the marginally superior product will capture all of the market and collect a large portion of the data required to continually improve its product. The authors of Big Data, Mayer-Schönberger & Cukier (2013), warn that "the true value of data is to consolidate power ... [and] big data will create a challenge for [the] competitive nature of [the] marketplace because it gives an advantage to those who have generated and collected the most data" (pg. 130). Thus the Algerian firm faces a challenge in competing with large global companies that have large amounts of data; they must go to vertically specialized (i.e., developing niche) markets to find data that large generalist AIs cannot collect and utilize (for example, developing AI used to collect or manage logistics for locally produced agricultural commodities or to manage energy logistics).

5.6 Conclusion

The way in which businesses produce goods and services is undergoing dramatic change due to the impact of artificial intelligence (AI), which should no longer be regarded as a concept of the future, but rather as an existing industry based on redefined production functions. In this sense, AI has transformed the act of predicting outcomes from an art form to a commodity; it has created new forms of capital that are based on data; and it creates the need for employees capable of exercising high-level judgement in their decisions on behalf of an organization.

The traditional company that effectively deploys AI to optimize its operations and deliver value will ultimately be the successful company of the next decade—not necessarily a "tech" company, but rather an organization with deep roots in technology with a strong business case for implementing innovative technologies to produce value for its customers.

The economist sees AI as a catalyst to accelerate business velocity (the speed at which transactions occur), thus requiring organizations to adapt more quickly than ever before, and as a result, requires businesses to rethink fundamentally how they create and capture value.

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General Conclusion and Future Outlook

The Enterprise as a Living Organism

This Scientific publication has conveyed an intellectual journey through the economics of enterprise that started by clearly defining the ontological boundaries of firms. Instead of utilizing a simplistic view of the enterprise as a black box into which inputs are transformed into outputs through a magical process, we have established that the economic enterprise is a complex, open sociotechnological system. Following Axis 1 and Axis 2, we traced the evolution of the enterprise from a craft-based pre-industrial age to multinational conglomerates of the current era. The historical evolution of the enterprise provides a singular conclusion; that the enterprise is not a static edifice, but rather a dynamic living organism that will either adapt to the changing environment or cease to exist.

Throughout the central axes of the Scientific publication (Axes III to VIII), we have disassembled the machinery of the firm in order to understand the physiology of the firm. For example, it was shown that the Internal Environment of the firm serves as a reservoir of resources and core competencies that must be thoroughly diagnosed; however, it was also demonstrated that no firm exists in isolation; therefore, the External Environment, as analyzed by PESTEL analysis and Porter's Five Forces analysis, continually places external pressure on the Internal Environment of the firm. The survival of the enterprise is contingent upon the ability of the enterprise to achieve a strategic equilibrium between internal capabilities and external opportunities. This strategic equilibrium of the enterprise is achieved by establishing a rigorous organizational structural framework (Axis 6) that supports the effective performance of operational functions (Axis 7) through the disciplined application of quantitative analysis (Axis 8). Attaining the skills to effectively utilize cost analysis, break-even analysis, and the analysis of financial equilibrium is fundamental to the continued existence of businesses and is therefore the grammar of business survival.

The Human and Ethical Dimension

The enterprise cannot be seen as purely mechanistic, and as noted in Axis 10, the "soft" dimensions of culture and ethics are generally more challenging to manage than the "hard" dimensions of finance and production. We argue that the enterprise is composed of a community of human beings. The economic performance of that enterprise is fundamentally linked with the organizational culture of the enterprise. Organizational culture, therefore, serves as an invisible force that determines how people behave when no one is watching. We have also demonstrated that profitability and ethics are not zero-sum propositions. In the long term, Corporate Social Responsibility (CSR) must be viewed as a necessary requirement for the economic legitimacy of the enterprise. An enterprise that neglects its social contract risks losing its "license to operate," irrespective of its financial efficiency.

The Imperative of Mutation: From Stability to Agility

As we gaze upon the horizon, we see Axis 9 (Life Cycle) and Axis 11 (Modern Trends) serving as the guiding compass for our future. The traditional pattern of company growth—start-up, growth phase, maturity and decline—is increasing in speed. Companies are experiencing a decline in their lifespans. According to El Oued university students, the future Algerian economy's future managers and entrepreneurs will experience a complete change in how they view and manage their businesses, as stability within traditional bureaucracies no longer exists in an age characterised by agility.

Three concurrent revolutions will shape the future of the enterprise:

- The Cognitive Revolution (AI and Knowledge): We are shifting away from economies based on labour and physical resources toward those driven by the mind. Intellectual capital has replaced physical capital as the foundation for value creation. The integration of Artificial Intelligence (AI) will not only automate work but rather change the very nature of forecasting and decision-making. The enterprises of the future will be 'learning organisations', viewing data as a production input and managing knowledge as their most valuable asset.
- The Ecological Revolution (Sustainability): The linear economy of 'take, make, waste' is an obsolete economic and biological model. The Green and Circular Economies represent the future markets. The limitations of the earth's biosphere are not to be disregarded as externalities but instead are becoming integral to enterprise design. For Algerian enterprises, there are numerous opportunities to develop innovative products and services in the areas of renewable energy, sustainable agriculture, and waste-to-value or upcycling, thereby transforming ecological challenges into competitive advantages.
- The Entrepreneurial Revolution: Traditional hierarchical structures within companies are rapidly being replaced by the flexibility offered by startups and the Lean technique. All enterprises, regardless of their size, must begin to incorporate entrepreneurial culture (experimentation, agility, and scaling) into their operations; state-owned companies must start acting as entrepreneurs.

Future Outlook: The Role of the Algerian Manager

The stakes are very high in Algeria's economy during this transition from a hydrocarbon-based, rent-seeking economy to a more sustainable diversified economy based on knowledge. The onus of this transition will rely heavily on businesses. This Scientific publication provides both tactical and strategic tools for making this transition successful.

The future manager will need to understand multiple disciplines of expertise by being able to interpret financial statements as an accountant, analyze macroeconomic trends as an economist, and motivate others as a psychologist. The enterprise will serve as the primary driver for development; it will create jobs, generate tax revenue, and facilitate innovation.

Final Words

To summarize, "The Economics of Enterprise" is an open invitation, not a closed Scientific publication. The theories and models contained within are simply maps; real-life experiences are the territory. The territory is a world that is ever-changing, uncertain, complex, and ambiguous.

Therefore, as an academic, we encourage you and other students using the information in this Scientific publication to take these very valuable tools and utilize them. Memorizing a definition of a "matrix structure" or a formula for "total cost" is of no consequence if you do not explore how to use those tools in building an El Oued-based start-up exporting dates globally. You better know how to restructure a local factory to be more energy-efficient (that will likely involve using various theories). You need to look at the importance of creating an ethical work environment to attract a talented workforce.

An enterprise is a vehicle for human creativity; it is a place where new ideas become reality. As you leave university and enter the marketplace, keep in mind that the ultimate goal of every enterprise is not just to provide profits to shareholders. The ultimate goal of every enterprise is to provide positive contributions to society. Whether or not the revitalization of our national economy occurs depends solely on your ability to create and build innovative, ethical, sustainable, and strong enterprises. The theories presented in this Scientific publication end here; it is now time for your practical experience to begin!