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GLOBAL RELATIONOF TECHNOLOGYAND ECONOMIC DEVELOPMENT WITHOF ENTREPRENEURSHIP

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| ABSTRACT

Entrepreneurship drives the expansion of businesses and ignites innovative concepts. Harvard Business School characterizes entrepreneurship as "the pursuit of opportunity beyond the resources currently controlled." The potential of entrepreneurship to drive economic development is significant, applicable to individual nations and the global landscape, provided that favorable conditions are in place and individuals pursue entrepreneurship with the appropriate motivations**.** Entrepreneurs, whether operating independently or collaboratively, identify opportunities within both their personal and professional spheres.

| KEYWORDS

Entrepreneur,entrepreneurship, innovation, technology, economic development

| ARTICLE INFORMATION

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Entrepreneurship drives the expansion of businesses and ignites innovative concepts. Harvard Business School characterizes entrepreneurship as "the pursuit of opportunity beyond the resources currently controlled." The potential of entrepreneurship to drive economic development is significant, applicable to individual nations and the global landscape, provided that favorable conditions are in place and individuals pursue entrepreneurship with the appropriate motivations. Entrepreneurs, whether operating independently or collaboratively, identify opportunities within both their personal and professional spheres. They develop hypotheses regarding methods to provide value to customers and conduct systematic experiments to verify their concepts in the era of technological advancement**.** Innovation and tech modernization frequently correlate with successful entrepreneurship. The business landscape operates within a dynamic framework, driven by emerging technologies, evolving consumer preferences, and various influencing factors. In response to these changes, individuals in the business sector must remain attuned to market dynamics to recognize opportunities for innovation and address potential risks and concerns. Many entrepreneurs bootstrap and they keep expenditures to a bare minimum while investing only their own time andtheir personal funds. In some cases, this is adequate to bring a new venture to the point where it becomes self-sustaining from internally generated cash flow. With most high-potential ventures, however, founders must mobilize more resources than they control personally and the venture eventually will require production facilities, distribution channels, working capital, and many more. Again, entrepreneurs face considerable risk, which comes in different form. Demand risk relates to prospective customers' willingness to adopt the solution envisioned by the entrepreneur. Technology risk is high when engineering or scientific breakthroughs are required to bring a solution to fruition. This analytical article will evaluate entrepreneurship in global perspective to depict therelation betweenentrepreneurship, technology and development of earth.

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Introduction :-

Entrepreneurship encompasses a diverse array of fields, including economics and incentives, markets, management and opportunity, processes, sociology and influence, norms, psychology and motivation, anthropology and history, values and culture, regionalism, regulation and firm structure, research and development, as well as technology and engineering, among others. The English word entrepreneur originates from the French word "entreprendre," meaning "to undertake," which leaves considerable scope for creativity and significance in its application.[i]Stevenson, widely known as an expert and a professor and pioneer in entrepreneurship studies at Harvard Business School (HBS), has defined entrepreneurship as the "pursuit of opportunity beyond resources controlled."[ii]Entrepreneurs, whether operating independently or collaboratively, identify opportunities within both their personal and professional spheres. They develop hypotheses regarding methods to provide value to customers and conduct systematic experiments to verify their concepts.[iii]Tom Eisenmann, another HBS professor, explains that "beyond resources controlled" means resource limitations. The founders of a new business are solely responsible for their own financial, social, and human resources at the outset.

Many entrepreneurs employ a strategy known as "bootstrapping," in which they invest their own time and, if necessary, their personal funds, while keeping expenses to a minimum.[iv] Stanford University's Stanford Center provides a little more straightforward definition for Professional Development: "At its core, entrepreneurship pertains to an individual or a small consortium of partners who embark on an innovative venture to establish a new business. An individual with entrepreneurial aspirations diligently pursues a specific business opportunity, taking on the highest level of risk linked to the endeavor. This individual is likely to benefit the most if the project is successful.[v] Joseph Schumpeter, a former professor at Harvard University and Austrian political economist and Finance Minister,[vi] stated, "The fundamental impulse that keeps the capital engine in motion comes from the new consumers' goods, the new methods of production and transportation, and the new markets (which are known as the process) continually revolutionize from within, incessantly destroying the old one and incessantly creating a new one." The fundamental reality of capitalism is this process of Creative Destruction.[vii] Entrepreneurship is widely recognized as a key driver of economic progress.[viii] Entrepreneurship is a broad term that encompasses the initiation of a new venture. However, scholars and policymakers have been in controversy for an extended period regarding its precise definition. An entrepreneur is a person who starts a new venture, taking on the majority of the risks and receiving the majority of the rewards. Social entrepreneurship may endeavor to generate both financial gain and societal benefit; however, the outcomes are frequently inconsistent.[ix] The history of the word entrepreneurship is fascinating and scholars have indeed parsed its meaning.[x] Many profit improvement opportunities are not novel–and thus are not entrepreneurial–for example, raising a product's price or, once a firm has a scalable sales strategy, hiring more reps.[xi]

In this world resource is limited and have there is a constraint. At a new venture's outset, its founders control only their own human, social, and financial capital. Execution risk relates to the entrepreneur's ability to attract employees and partners who can implement the venture's plans.[xii] Financing risk relates to whether external capital will be available on reasonable terms. The entrepreneur's task is to manage this uncertainty, while recognizing that certain risks cannot be influenced by their actions.[xiii]Adam Smith's theory of economic growth is based on the notion that a country's prosperity is determined by its whole output, rather than just gold or agriculture. He thought that economic progress is driven by higher productivity, principally through labor division or work specialization and capital accumulation.[xiv] Smith's theory emphasizes free markets, competition, and self-interest as drivers of economic growth. Within this framework, entrepreneurial activity is a fundamental force for global development. Consequently, the study of entrepreneurship has expanded beyond business and economics into numerous disciplines. This intellectual diffusion has resulted in a fractured, yet rapidly growing, field of study. Its academic origins are often traced to Joseph Schumpeter's arrival at Harvard University in 1932. In 1946, he established the Research Center for Entrepreneurial History in collaboration with Arthur Cole.[xv] The next year, Myles Mace gave 188 Harvard Business School students what might have been the first entrepreneurship course in the United States.[xvi] Entrepreneurship education (EE) refers to specialized training designed to equip students with the knowledge, skills, and motivation to pursue entrepreneurial success across various disciplines. Since its inception, the integration of such programs within higher education has seen remarkable growth. Nevertheless, EE is accessible at all levels of education, from primary or secondary institutions to graduate university programs.[xvii]

Entrepreneurs are passionate and fully engaged in everything they do. They believe in themselves, remain dedicated, and have strong confidence in their projects. At times, this focus and conviction may come across as stubbornness, but it is balanced by their dedication and consistent discipline.[xviii] When he has a deep passion for his work and the confidence to succeed, it is essential to pair it with disciplined execution. Successful entrepreneurs are known for their exceptional discipline, which in their chosen endeavors can often be compared to military-grade precision.[xix]Being objective in his business is never easy, especially when he is deeply passionate about its success. However, it is essential to remain dispassionate and impartial when making decisions, as bias, sentiment, and emotion can ultimately lead to poor choices.[xx]One of the most important qualities of entrepreneurs is self-discipline. Being self-disciplined means putting in the necessary work even when he doesn't feel like it. For those balancing a day job alongside a startup, this often involves working long hours to ensure the business receives the attention it needs to thrive. There will be times when he needs to motivate himself to wake up early or stay up late to move his

venture forward.[xxi] While self-discipline is essential, it is equally important to maintain balance and avoid overworking to the point of burnout. Entrepreneurs also possess a growth mindset—the belief that skills and intelligence can be developed over time. While some qualities may come naturally to certain individuals, continuous personal development is what ultimately drives success. He can cultivate a growth mindset by reframing failure as a learning opportunity, recognizing his limitations, and setting clear goals for self-improvement.[xxii]

Entrepreneurship is often cited as a major engine of economic growth, particularly in the United States. The actual picture is more complicated, however. Here's what leading scholars have to say about the importance of entrepreneurship around the world.[xxiii]Entrepreneurship can fuel economic growth under the right conditions and when people become entrepreneurs for the right reasons.It's not a magic bullet for economic growth, however, particularly in less-developed economies.[xxiv] Technical, social and small product/industrial entrepreneurship can attempt to deliver both profits and societal good although often with mixed results.[xxv]The level of economic development of a country can affect whether entrepreneurship will lead to greater economic growth there.Entrepreneurship is related to starting a business. Its precise definition has long been a matter of debate among scholars and policymakers.[xxvi]We live in an era in which innovation and entrepreneurship seem omnipresent and global in nature, particularly in the area like Silicon Valley or Research. But many metrics of economic growth, such as productivity growth and business dynamism, have been at best modest in recent years.[xxvii] The resolution of this apparent paradox is dramatic heterogeneity across sectors, with some industries seeing robust innovation and entrepreneurship and others seeing stagnation.[xxviii] By construction, the impact of innovation and entrepreneurship on overall economic performance is the cumulative impact of their effects on individual sectors. Understanding the potential for growth in the aggregate economy depends, therefore, on understanding the sector-by-sector potential for growth.[xxix]

For successful entrepreneurs, competition often serves as a key motivator. Modern business has become a fast-paced, relentless race. Imagine it as a survival sprint with hungry lions chasing him—his goal is not to outrun the cheetah, but his competitors. Losing his lead in the market or industry can mean the end of his venture unless he has created something unique that sets him apart and gives him an edge.[xxx] Because competition is vital for market survival, successful entrepreneurs are highly competitive and unwilling to surrender their position. Competitiveness drives them to continually ask why customers would choose their business over others, and the answer lies in their ability to succeed. Additionally, excellent communication is crucial for exchanging information accurately, especially in today's fast-moving world, using various methods including both electronic and interpersonal channels.[xxxi]Successful entrepreneurs are optimistic and consistently focus on the positive aspects of any situation. They strive to improve in everything they do, taking calculated risks and seeing opportunities in every challenge. Instead of dwelling on the negatives, an entrepreneur concentrates on the potential benefits and solutions.[xxxii]

Entrepreneurship is never a one-person endeavor, even for solo entrepreneurs. No matter how skilled he is, the support of a talented and reliable team is essential. Without a capable team, entrepreneurs may fall behind on achieving their milestones.[xxxiii] Having the right team can be a decisive factor in the success of a venture. Successful entrepreneurs typically begin any project with a strong team that helps them make a significant impact. A team does not necessarily mean just employees or associates—it can include freelancers or agencies. The key is having the right people who provide support and bring complementary skills to the table.[xxxiv] The recruitment strategies and career of the renowned Steve Jobs demonstrate the critical importance of having a strong team. Trust is essential in business. Entrepreneurs with high integrity not only follow ethical practices but are also transparent and honest in all their interactions. This fosters trust and builds long-term relationships, which are crucial for business growth and sustainability. The business environment is constantly evolving, with new challenges arising regularly. A successful entrepreneur remains flexible and adaptable, adjusting strategies based on feedback and changing circumstances while keeping their ultimate goals in focus.[xxxv]This analytical article will evaluate entrepreneurship in global perspective to depict the relation between entrepreneurship, technology and development as a global outlookfrom analysis of literature, history, lesson learn of successful entrepreneurs, their thought, story, life, along with discussion/connection of owner, CEOs, managers, of firm/organization (around the globe), entrepreneurship professional, advisers, teachers, researchers, consultant, public and private government official, and many more. How entrepreneurs contribute to economic development also discussed in this paper along with technological effect.

Research Gap :

The French word "entrepreneur" first appeared in the French dictionary in 1723, and defined a person who organizes and operates a business while taking a financial risk in order to do so. Today, an entrepreneur is a person who identifies a need or a want and starts a business to fill that void. And he/she provides little insight into the specific quality and attributes that makes his/her thrive as an entrepreneur and that is appropriate for anyone who is doing business in the 21st century.Entrepreneurship is a critically important driver of economic development and has undergone significant changes over time. Traditional entrepreneurship relies on proven methods and heavily depends on established business models and personal savings. According to a Small Business Administration (SBA) study, 75% of traditional small businesses are funded through individual savings, loans, and grants. This approach typically involves physical locations and direct interactions with customers. Whereasmodern entrepreneurship is different from traditional entrepreneurship. It is shaped by innovation and agility and uses technology and digital platforms. According to a report by Statista, 62% of startups use digital marketing as their primary way

to get new customers. Today crowdfunding and venture capital are also crucial for successful entrepreneurs.[xxxvi]At a fundamental level, all entrepreneurs try to overcome adversity to pursue opportunity with limited resources. According to the U.S. Bureau of Labor Statistics (BLS) states that about 20% of new businesses fail in their first year, 30% within two years, 45% within five years, and 65% within ten years. [xxxvii] The road to success as entrepreneurs is often long and lonely, with brutal hours, massive amounts of stress, and lots of personal/family sacrifice and debt. The benefit to become entrepreneurs is very distinguished and prestigious as it gives us the freedom to become our own boss and the creator of our own future. Again, there exists a clear deficiency in comprehending understanding of m**odern thinking of entrepreneurship along with** relation between technology and economic development with **entrepreneurship in modern era. We must know how to develop**contemporary entrepreneurs for success in modern age.This discrepancy between theoretical frameworks and practical application reveals a significant gap. So, useful research may conduct to address the relation between technology and economic development with **entrepreneurship** as a global perspective.

Research Questions

a. What is entrepreneurship and entrepreneurs in historical and global perspective?
b. How technology effect and impact global activities?
c. Howentrepreneurs help to economic development?
d. What are the lessons learn from successful entrepreneurships?
e. How to develop of successfulentrepreneurs in modern era?
f.

Figure 1:Entrepreneurs mindset, learn and lead.[xxxviii]

Literature Review and Methodology

A comprehensive understanding of the activities that entrepreneurs undertake and the genuine factors that drive a venture to succeed is not currently available. This evaluation and summary of current scholarship is based on a methodical review of literature encompassing several hundred empirical studies and an examination of the biographies of several hundred prosperous entrepreneurs, connecting their actions and cognition to business outcomes. Theories of behaviorism, for instance, those put forward by Watson (1924)[xxxix] and Skinner (1953)[xl], contend that an individual's traits are molded by their surroundings and processes of learning. The capacity for people to develop entrepreneurial abilities by building confidence and learning from their actions is emphasized in Bandura's (1977)[xli] concept of self-efficacy. The viewpoint that entrepreneurial competencies are acquired through formal education, mentorship, and experiential learning is supported by contemporary research[xlii]. Furthermore, current analyses emphasize the way expertise within an industry and professional connections boost entrepreneurial achievement, particularly for more mature entrepreneurs, which strengthens the idea that entrepreneurship is developed progressively.[xliii] Although some innate personality characteristics might provide a benefit, the field of entrepreneurship is mainly formed by acquired knowledge, hands-on experience, and external influences. The conclusion that entrepreneurs are more often made than born is supported by many academic literatures.[xliv]

The utilization of literature reviews as a formal research methodology holds increased relevance and critical importance within modern fields of study such as entrepreneurship. Conventional approaches to reviewing literature frequently suffer from a lack of rigor and systematic process, being performed in an ad hoc manner without adherence to a defined procedure.[xlv] These reviews fulfill a vital function as a foundational element for all research endeavors. They are capable of acting as a platform for the advancement of knowledge, establishing frameworks to guide policy and practice, and furnishing proof of an effect; when executed proficiently, they also possess the potential to generate novel concepts and trajectories for a specific discipline.[xlvi] Furthermore, they provide the foundational justification for subsequent research and theoretical development. When confidence exists that an investigation is constructed upon a base of high accuracy, it becomes significantly more feasible to pinpoint genuine gaps in the research rather than perpetually replicating previous studies, to formulate superior and more exact hypotheses and questions, and, as a result, to elevate the collective standard of research quality.[xlvii] Consequently, it is essential

to maintain a clear research question from the outset and to guarantee the selection of an appropriate methodological approach to address the specific research problem.

Some research shows that entrepreneurship is often shaped by personality traits you are born with and genetics. This idea says that some people are just naturally drawn to being entrepreneurs. This natural draw is supported by qualities they inherit. These qualities include being able to handle risk, being creative, and being a leader (Shane and Nicolaou, 2021)[xlviii].Research that studies twins has made the argument stronger. This research shows that genes play a big part in the desire to start a business. Genes also contribute greatly to success in business (Obschonka and Stuetzer, 2020)[xlix]. Furthermore, certain personality traits are often connected to being an entrepreneur. These include being open to new things, being very careful and organized, and being outgoing. Research shows these traits are often linked to our genes (Zhang and Acs, 2022)[l]. New studies also show that natural thinking skills are important. The ability to solve problems quickly and to believe in yourself are strong signs a person will become an entrepreneur (Karhunen et al., 2023)[li]. While genes can give a person a good starting point, the environment and learning from experience are also very important for success.Other research on whether entrepreneurs are "born or made" has looked at biological reasons. Nofal, Nicolaou, Symeonidou, and Shane (2018)[lii] found that studies in entrepreneurship have mostly forgotten about biological factors.But now, researchers are starting to study how human biology affects entrepreneurship. This research is not in one place. It is spread out in many different publications. This makes it hard for experts to put all the findings together and create a big theory on how biology and entrepreneurship are connected. Other recent studies keep looking at the mix of natural traits and skills that are learned. For example, one 2023 report called "The Science of Startups" looks at how a founder's personality affects whether their company succeeds. Additionally, research shows that many older entrepreneurs around the world use their long experience and their large network of contacts. This often leads to more success compared to younger entrepreneurs. This suggests that knowledge and skills built over time are very important for doing well in business.

Other people have different ideas. They believe a person's character, behavior, and personality are shaped by many outside factors. These factors include personal will, environment, background, and life experiences. These things build a person's qualities. For example, they shape attitudes, beliefs, motivation, self-confidence, enthusiasm, self-control, and entrepreneurship (Shefsky, 1994)[liii]. Shefsky's main point is that people are not born entrepreneurs. Instead, they are made. Shefsky (1994) tried to show in his whole book that entrepreneurial qualities come from a person's own effort, creativity, and dedication to their work. The entire book was based on this idea. This theory has many supporters. Starting with Watson (Watson, 1924)[liv] to Skinner (Skinner, 1953)[lv], people like Shefsky were linked to behaviorism. This is a learning theory. Bandura (Bandura, 1977)[lvi] also supported this idea.[lvii]

The research starts by looking at basic theories and definitions. This gives a history of how the idea of an entrepreneur has changed. The study pays special attention to important thinkers like Cantillon (1755)[lviii] and Schumpeter (1934)[lix]. Their definitions helped create the modern understanding of entrepreneurship. This history allows for a better understanding of how entrepreneurial traits, like risk-taking and creativity, have been seen over time. The research starts by looking at basic theories and definitions. This gives a history of how the idea of an entrepreneur has changed. The study pays special attention to important thinkers like Cantillon (1755) and Schumpeter (1934). Their definitions helped create the modern understanding of entrepreneurship.[lx] This history allows for a better understanding of how entrepreneurial traits, like risk-taking and creativity, have been seen over time. In this study, a systematic literature review was done. It looked at both the "born" and "made" sides of the argument. The research uses both new studies and old works to look at the case for genetics versus learned skills along with technological advacement. Information was taken from many scholarly sources. These include books, journal articles, and case studies. This was done to compare the ideas about natural traits and environmental factors in entrepreneurial success. Important studies from authors like Shane & Nicolaou (2021)[lxi], Obschonka&Stuetzer (2020)[lxii], and Nofal et al. (2018)[lxiii] give insight into biological and genetic factors. These factors may make some people more likely to become entrepreneurs.

This paper of the process involves a careful examination of different studies including literature. The focus is on the methods they used, like research on twins and the study of personality traits. Along with the literature review, a content analysis is also done. This analysis uses a collection of important publications about entrepreneurship. These include works by famous experts like Druker (1985)[lxiv], Gladwell (2008)[lxv], and Sarasvathy (2001)[lxvi, lxvii]Interviews and case studies of successful entrepreneurs are also used. These provide real-life examples of how experience and networks are important for success.[lxviii]A wide range of literature on entrepreneurship has been thoroughly reviewed, including both the history of entrepreneurship and contemporary views from academic and practical perspectives. This paper presents the key literature used to support the conclusions. The table below outlines the views and beliefs of renowned writers and authors as expressed in their well-known works and theories.

SN: Authors and Year Publication: Books/Chapters/Theories: Concept of Entrepreneurs: Born/Made
1. Schumpeter, J (1934): “The Theory of Economic Development”, Harvard University Press: Born

2. Druker, P (1985): “Innovation and Entrepreneurship”, Harper & Row: Made
3. Gladwell, M (2008): “Outlier: The Story of Success: Made
4. Sarasvathy, S (2001): “Effectuation: The Elements of Entrepreneur Enterprise”, Little, Brown and Company: Made
5. Wasserman, N (2012): “The Founder’s Dilemma”, Edward Elgar Publishing: Made
6. Shaun, S (2008): “The Illusions of Entrepreneurship”, Yale University Press: Born
7. Stephenson, H (1983): “A Perspective on Entrepreneurship”, Harvard Business School: Made
8. Gifford, P (1985): “Worthless, Impossible, and Stupid: How Contrarian Entrepreneurs Create and Capture Extraordinary Value”, Harper & Row: Made
9. Isenburg, D (2013): “Worthless, Impossible, and Stupid: How Contrarian Entrepreneurs Create and Capture Extraordinary Value”, Harvard Business Review Press: Made
10. Wilkinson, M (2015): “The Creator's Code: The Six Essential Skills of Extraordinary Entrepreneurs”, Simon & Schuster: Made
11. Ede, M (2023): “One Shot (Business Case for Success): The Recipe for Top Entrepreneurs & Business Leaders in the 21st Century”, Maple Publishers: Made
12. Busch, C (2020): “The Serendipity Mindset: The Art and Science of Creating Good Luck”, Penguin Random House: Made
13. Ede, M. (2023): One shot (business case for success): The recipe for top entrepreneurs & business leaders in the 21st century. Maple Publishers. Retrieved from Wikipedia: Made

Table 1: Views and believes of great authors in their literatures/theories

Harvard Business School has made a significant impact on the field of entrepreneurship through historical research and the development of various schools of thought. The institution's emphasis on business history, notably via the Harvard Research Center in Entrepreneurial History, has influenced perceptions of entrepreneurial functioning within extensive economic and social frameworks. In addition, Harvard professors have developed ideas such as the "Harvard School" hypothesis, which examines how internal and external factors interact to facilitate entrepreneurial success.[lxix] This Harvard Business School center played a pivotal role in promoting research on the historical role of entrepreneurs. Entrepreneurship as a historical phenomenon has been dramatically influenced by historians affiliated with the center, such as Arthur Cole and Joseph A. Schumpeter.[lxx] The center's research examined how entrepreneurship has evolved over time and how entrepreneurs have impacted economic growth and social transformation in various periods. This historical approach offered significant insights into the enduring patterns and dynamics of entrepreneurship, influencing both scholarly study and pragmatic commercial practices.[lxxi] Harvard has made numerous contributions to entrepreneurship, including the development of theoretical frameworks, historical research, and hands-on educational initiatives. This comprehensive strategy has solidified Harvard's standing as a preeminent university in the field.

In the 20th century, a new wave of entrepreneurship research was sparked by Schumpeter's theory of economic development and the notion of entrepreneurship that was part of it. However, reactions from twentieth-century writers have been fairly divergent. At Harvard University, Schumpeter's academic foundation in the United States gave rise to a tradition of studying entrepreneurship through the lens of economic history. Other scholars have focused on the analytics of Schumpeter's theory, namely, whether the entrepreneur is an equilibrating or disequilibrating force. Other writers distinguish themselves along neoclassical and Austrian lines. In this section, we will explore and discuss the various methods, as well as the writers who developed them. Following Schumpeter's examination of economic history, a tradition of historical studies of entrepreneurship emerged at Harvard University's Research Center in Entrepreneurial History, founded by Arthur H. Cole (1889-1974).[lxxii] Edwin influenced Cole’s interest in entrepreneurship and his views on the subject. F. Gay (1867– 1946), founder of the Economic History Association and a follower of Schumpeter. The entrepreneur, as a destabilizing force of change, holds a significant position in Gay's philosophy of history, which posits that the degree of allowable free competition in society fluctuates according to social necessity. In this system of free competition, the entrepreneur is a self-centered actor and a disruptive force, as noted by Gay (1923–1924),[lxxiii] “there are periods in the rhythm of history when ... that disruptive, innovating energy is socially advantageous and must be given freer opportunity.”

Entrepreneurs create history, according to G. L. S. Shackle (1903–1992), who lived across the Atlantic. Shackle concentrated on the psychological process of making decisions in the business environment.[lxxiv] Shackle (1955) defined two tasks that must be performed early on in his inquiry into the character and substance of economic businesses. One deals with uncertainty, and the other makes choices. These two jobs are connected because making decisions requires improvisation or innovation, which can only occur in a world full of unknowns and uncertainties. Shackle was at his finest when he explained what business decisions are and how people might act within them. He was a smart Marshallian who criticized orthodox economic theory for not recognizing Marshall's most important finding: the importance of time in the realm of affairs. Shackle claimed that time weaves a historical tapestry, and the strands of that tapestry are the results of people's choices. Consequently, “we assume that

we bear responsibility for our actions; that these actions are fundamentally creative, initiatory, and the origin of historical innovation; that each action represents, in a sense, the independent commencement of a new thread in the tapestry woven by time" (Shackle, 1966, p. 73).[lxxv] Shackle perceives his study as an extension of a Keynesian issue, specifically the factors influencing corporate investment. He discovered a fundamental discrepancy within the Keynesian framework. He referred to Keynes's General Theory as "a paradox, for its central concern is with uncertainty, decisions based on conjecture, and situations altogether lacking in objective stability, yet it uses an equilibrium method" (Shackle, 1955, p. 222).[lxxvi] In reaction to this anomaly, Shackle jettisons the equilibrium method – a radical stroke which probably accounts for the failure of mainstream economics to take him more seriously. Shackle's faithful followers are relatively few. The most prominent is Ludwig Lachmann, who also exhibits strong Austrian tendencies.

Nobel laureate T. W. Schultz (1902–1998)[lxxvii] has advanced a theory of entrepreneurship that is fully within the neoclassical paradigm. In contemporary economic literature, Schultz observes a persistent failure to recognize the benefits that accrue to those who facilitate economic equilibration, particularly in nonmarket activities. Schultz, a pioneer in the human capital theory, approached entrepreneurship from this perspective. He criticized the conventional concept and treatment of entrepreneurship on four primary grounds: (1) the concept is typically limited to businessmen, (2) it fails to account for the differences in allocative abilities among entrepreneurs, (3) the supply of entrepreneurship is not treated as a scarce resource, and (4) entrepreneurship is disregarded when general equilibrium considerations dominate economic inquiry (Schultz, 1975, p. 832).[lxxviii] Schultz made two significant moves. He began by redefining entrepreneurship as "the ability to deal with disequilibria," and he expanded the idea to include both market and nonmarket activities (such as time allocation and family decisions). Second, he presented data showing how education affects people's perceptions and responses to disequilibrium. He maintained that Schumpeter's formulation fell short. "If economic growth is considered 'progress,'" stated Schultz (1975, p. 832),[lxxix] "it is a process beset with various classes of disequilibria." Schumpeter's entrepreneur "creates developmental disequilibria," but he did not effectively apply this concept to "all manner of other disequilibria," such as laborers reallocating their labor, or students, housewives, and consumers reallocating their resources, primarily time.

In the 1930s, several second-generation Austrian economists left Europe before the ominous shadow of Hitler's Third Reich spread across the continent. Friedrich Hayek (1889–1992)[lxxx] went to London. Ludwig von Mises (1881–1972)[lxxxi] and Joseph Schumpeter, both students of B¨ Böhm-Bawerk, came to America. Schumpeter soon found a place to work in the United States, while Mises had a hard time. He eventually became a professor at New York University as part of a unique agreement. There, he became the leader of Austrian economics, reaching out to a small but smart group of students and supporters. The concept of a standard supply curve for entrepreneurial talent emerged as a significant point of debate between Kirzner (1979)[lxxxii] and Schultz. Schultz (1980, p. 439)[lxxxiii] criticized Kirzner for neglecting entrepreneurship as a scarce resource (i.e., failure to treat it in terms of a supply curve). According to Kirzner, entrepreneurship, or attentiveness, is a human quality that can exist or not.[lxxxiv] Kirzner believes that awareness, like beauty, cannot be substantially enhanced once nature has conferred its particular allotments. Despite their basic disagreement, Kirzner and Schultz's theories address several crucial concerns.[lxxxv] Both authors regard the entrepreneur as an individual who identifies the potential for profit in a state of disequilibrium and responds accordingly. Both of them think that the idea is quite important and covers a lot more ground than it has been shown to do in economic writing up to this point. The distinctions between the two theories are predominantly established on methodological rather than analytical criteria.

Kirzner and other neo-Austrian economists offer a theoretical alternative to neoclassical economics' general equilibrium paradigm. Their perspective emphasizes change, inaccuracy, and defects in markets and human decision-making, rejecting the comparative-statics, perfect-markets view of economic activity. Their challenge to the prevailing paradigm is not the only one, however, as we have demonstrated that Clark, Schumpeter, and Shackle have all made successful attempts to critique and offer alternative perspectives on the neoclassical framework. The concept of X-efficiency, developed by Harvey Leibenstein (1922-1994)[lxxxvi], is another contemporary challenge that has emerged from outside the German group. Leibenstein's paradigm appears to converge with Austrian theory at several crucial points; yet, neo-Austrian theorists have expressed reservations over its analytical efficacy. Neo-Austrians often regard Leibenstein's concept of entrepreneurship as only an intriguing aspect of the economic landscape, rather than a fundamental component of the economic process. Kirzner (1979a, p. 142)[lxxxvii] has written that Leibenstein's entrepreneurship "is a feature that indeed seems to come into focus when observed through the X-efficiency lens, but the X-efficiency paradigm can be presented without any special reference to entrepreneurs."

Neo-Austrians, on the other hand, see the entrepreneur as the key to comprehending all economic events. The entrepreneur's thoughts and actions elucidate the occurrences within the disequilibrium situation. Schumpeter's theory of economic growth, which emphasized the role of the entrepreneur, led to several studies at Harvard University and beyond that sought to contextualize the entrepreneur within a historical framework. However, over the majority of the 20th century, ideas regarding the nature and function of entrepreneurship predominantly concentrated on one of two issues: the dichotomy between risk and uncertainty, or the contrast between equilibration and disequilibrium. As we enter the 21st century, these problems remain

largely unsolved. Still, writers in the 20th century tended to broaden the definition of entrepreneurship to the point where practically any economic action that involves uncertainty or changing disequilibria has some entrepreneurial aspect.

There are two fundamental explanations offered by economic theory and tradition for why things are produced and distributed in the ways that they are. According to one theory, the pricing mechanism serves as the integrative force and resource allocator in a market economy. According to another, this role is carried out by the entrepreneur. Ronald Coase (1910–1975) was the first economist to question why the entrepreneur, an integrating force, should replace the price system and economic development of nation and globe. In a pioneering article, The Nature of the Firm, Coase (1937)[lxxxviii] questioned why firms are commonly used as resource allocation mechanisms, when economic theory dictates that the price mechanism is an efficient allocator in competitive markets. If the competitive price system is an efficient allocator of resources, why do we have firms? And given that firms exist, does their presence imply market failure or the absence of competition? On the other hand, Arrow (1974)[lxxxix] and Williamson (1975),[xc] Some people have said that the existence of economic organizations shows that the market isn't working. Coase utilized the Marshallian theory of substitution at the margin to examine the internal dynamics of organizations in addressing these inquiries. He said that businesses exist because the price system makes things more expensive, but administrative procedures can make them less costly or even eliminate them. There are many other types of costs, but to Coase, the most important one was the cost of determining the right prices in a market system.[xci] The majority of the other expenditures he discovered are contract and transaction costs for various exchanges. According to Coase, production can be arranged via the pricing mechanism, an impersonal method of resource allocation, or a company's administrative channels under the direction of one or more people we'll refer to as entrepreneurs.

Malmgren's (1961) careful exposition of the costs associated with allocating resources through the price system improved Coase's analysis. Uncertain input pricing and market flaws are the main causes of these expenses. Malmgren (1961, p. 399)[xcii] concluded that “the market operates between firms, but the entrepreneur is the planning and coordinating agent within the bounds of any one firm.” Unlike Coase, he emphasized uncertainty, but confined it to input prices and quantities. Both Coase and Malgrem considered the final end of the production process as fixed, so the entrepreneur’s judgment in either case does not extend to the choice of which product to produce. According to Knight, the rise of the entrepreneur class brings about major changes in the basic form of business organization of a nation. When things are unpredictable, a firm cannot simply leave the organization to chance or rely on a simple formula. Business owners must make their own choices. Companies must recognize that individuals differ in terms of intelligence, judgment, and willingness to take risks. To make informed decisions, a successful firm needs to establish an effective organizational structure. Knight (1921, pp. 269–270) states that it achieves this by encouraging the brave and confident to confront the danger that the unsure and scared wish to avoid. In short, entrepreneurs "insure" the latter group by promising them a certain amount of money in exchange for a percentage of the business's profits.

The Knightian firm exists because the real world doesn't meet all of the conditions for competitive equilibrium that economic theory says it should. Knight believed that the price system is good at dividing up resources between different uses, but it doesn't set the pattern of those uses. Entrepreneurs do that. So, the heart of entrepreneurship is making decisions based on not knowing what will happen. “Any degree of effective exercise of judgment, or making decisions,” Knight (1921, p. 271)[xciii] wrote, “is in a free society coupled with a corresponding degree of uncertainty-bearing, of taking the responsibility for those decisions.” The entrepreneur's collateral promises of set compensation to resource suppliers are an expression of this obligation. Knight shared Schumpeter's interest in elucidating the nature of economic advancement in a market system, which is primarily composed of businesses and entrepreneurs. He used the term "firm" to refer to a fundamental type of business structure where the entrepreneur assumes responsibility, control, and direction.

According to Knight (1921, p. 353), contracting alone does not fully represent the role of the entrepreneur[xciv] because “In the world as it is the interests affected by contracts are never all represented in the agreements.” Knight thinks that entrepreneurs are more than just contractors. They are experts at dealing with uncertainty, and while the contract is one way to lessen it, some ambiguity can never be fully removed. Knight (1921, p. 283) posits that the number of enterprises is contingent, among other factors, on the availability of entrepreneurial abilities.Knight's thesis provided a fair analysis of the roles that risk-taking and risk-management play. Because it did not restrict the firm's ability to offer interim guarantees to its owners, it established a broad class of entrepreneurs. In fact, finding the role of ultimate control in a Knightian company may require a significant climb up the management structure. Knight stated that selecting the individuals who will make the necessary decisions to run the company is the key responsibility of management. A hierarchy of functionaries serves as the fundamental framework for the decision-making organization, with individuals at each higher level appointing the functionaries below them. Therefore, each functionary transfers economic responsibility to a higher level until it ultimately falls on the controlling functionaries (i.e., the guarantors of the contractual remuneration of resource suppliers) by leaving the repercussions of their actions to their selectors. For Knight (1921),[xcv] only this last decision is crucial; all subordinate decisions are routine, and consequently, non-entrepreneurial.

Companies that operate well tend to develop, and bigger companies tend to have strict standards on how people should act. The notion of the corporation as the entrepreneur is likely to face opposition based on methodological individualism. Stauss (1944, p. 126)[xcvi] rejected the notion that the firm is a mere aggregation of decision makers having a collective will be expressed through a system of working rules. Instead, he suggested treating the company as an accounting entity for the sake of general economic research and as a specific, tangible organization when addressing particular difficulties. However, he did not clarify how to make this dual concept of the company operative in economic theory, and it is nearly impossible to detect any indication of Stauss's influence on other authors after more than 40 years. Therefore, in the first half of the 20th century, there was a significant debate over the distinction between the entrepreneur and the firm, as well as whether they could be interchangeable. These issues remain a topic of debate among modern economists. Since the idea of personality different from humans is resisted in most places, the sentiment appears to be maintaining a distinction—albeit an imprecise one—rather than combining the two into one. The relationship—whether symbiotic or not—between the entrepreneur and the type of business organization in which he operates has been brought to light by the controversy surrounding this topic.

One of Drucker's earliest mentors was his father's acquaintance, the Austrian economist Joseph Schumpeter, who instilled in Drucker the value of creativity and entrepreneurship.[xcvii]Peter Drucker fought for the rights and well-being of all people throughout his long and successful career. Drucker believed that everyone should be treated with respect, have a sense of dignity, a significant role in society, and some freedom. Drucker also advised managers that while caring for employees is vital, productivity and success are what ultimately drive businesses forward (Murphy 2023).[xcviii] Drucker states that successful entrepreneurs are committed to making innovation work and that innovation is the very foundation of entrepreneurship. He thought that innovation isn't so much about being smart as it is about finding and taking advantage of opportunities to be innovative (Drucker 2013).[xcix] To highlight Drucker's view that successful organizations are creative and productive, Friesen quotes him: "Stressing output is the key to increasing productivity while looking to increase activity can result in just the opposite."

Drucker describes entrepreneurship as "any business that engages in innovation," not simply small or new enterprises. Innovation is the attempt to make meaningful, targeted changes to a business's economic or social potential. In other terms, innovation is change that leads to greater results. One could argue that Drucker sees innovation and entrepreneurship as synonymous. In his essay titled The Discipline of Innovation (Drucker 2013),[c] Drucker states that most successful innovations result from a conscious, purposeful search for innovation opportunities. Within a business or industry, Drucker identifies seven areas of potential. These include: unexpected events, inconsistencies, procedure requirements, Market and industry shifts, demographic shifts, perception shifts, and new information. The development of the first modern accounting computer by IBM in the early 1930s is an example of an unexpected event. Although banks were not purchasing new equipment at the time, it was developed with them in mind. Luckily, one of the devices was purchased by the New York Public Library. As a result, additional libraries purchased over 100 machines. Rather than losing money, IBM's success increased. Drucker provides further examples of unforeseen events that led to profitable inventions. Because mistakes or problems can lead to valuable inventions, Drucker advises firms to concentrate as much on arising problems as on possible opportunities in their monthly and quarterly reports.

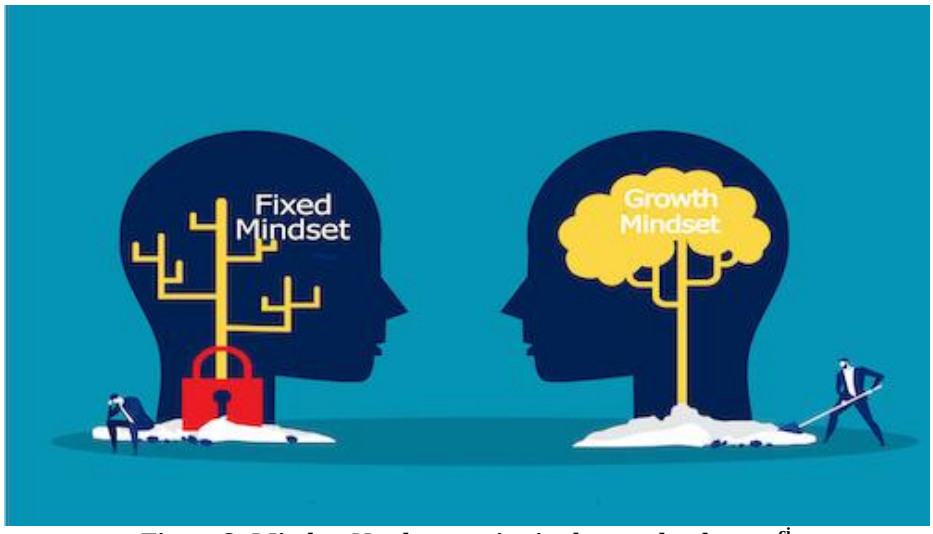

Figure 2: Mindset Need to survive in the new landscape.[ci]

The research found that the skill to create new things, take chances, and lead well is built through focused effort and constant learning. This supports the idea that entrepreneurs are made, not born.[cii] Some people say today's great entrepreneurs, like Elon

Musk, had an easy start. Others say genes are not important. Musk himself said, 'I believe the simple answer to the age-old question is that entrepreneurs are made, not born.' To be successful, entrepreneurs need education (which does not have to be formal) and experience. These are not qualities a person is born with. We all know stories about big companies that failed when the children of the founder took over. Other people did not get a business from their family and were not born rich. They started with nothing and learned how to build a successful business.[ciii]Skills for entrepreneurship are viewed as very important for a business to grow and succeed. In fact, government groups and others use the idea of entrepreneurial skills in their work to help the economy and business. However, the main idea of these skills, how to measure them, and how they connect to business performance needs more careful research and use in the real world.[civ] This paper presents a complete learning material for all entrepreneurs. It is for young or old; small or big; new or experienced; public or private; just starting or finishing. It is for any entrepreneurship or venture to help them succeed and handle challenges, struggles, risk, and failure.

To answer the research questions well, this study uses a mixed-method design. It combines both qualitative and quantitative methods. It also uses serious and wide reading of previous literature and studies. This gives a full understanding of entrepreneurship and entrepreneur quality around the world.[cv] This paper also talks about important insights. It does this through reviewing literature and focused group discussions. It also includes a critical study of all-time great entrepreneurs from around the globe. The study looks at their life, struggle, education, thoughts, views, ideas, and advice. This can show why the institutional setting is so important. It is the path for modern entrepreneurial activities to ensure lasting economic growth and development. To effectively address the research questions, this study adopts a mixed-method research design, integrating both qualitative and quantitative approaches along with serious and extensive literature and previous studies to provide a multi-dimensional understanding of entrepreneurship and its relation with technology and economic development in a global context.

Secondary Data Collection

Comprehensive desk research was conducted to collect secondary data from authoritative sources such as literature, books, journals, recent studies, successful entrepreneurs' experiences of local and global entrepreneurs along with own experience and perspective as both an academician and an industry operators as chairman/MD.[cvi,cvii,cviii,cix,cx,cxi,cxii,cxiii,cxiv] The data and information were critically analyzed to benchmark local and global performance against global successful entrepreneurs and identify the important and driving traits and gaps. This step is essential in answering Research Question b, c, d and e regarding structural and strategic differences.

Historical and Concept Analysis

The evolutions of global entrepreneurship concept and practice along with available literatures have been studied to identify key qualities to become successful entrepreneurs. This involved analyzing huge literatures, academic studies, policy papers, journal, articles, reports, news, and information from social and online media.[cxv,cxvi,cxvii,cxviii,cxix, cxx,cxxi,cxxii,cxxiii] Those are analyzed and evaluated to find out the answer of Research Questions.

Focus Group Discussions (FGDs)

Three semi-structured focus group discussions, interviews, suggestions, advices, were conducted with more than 1000 participants, including senior, mid and lower-level manager/executive like chairman, managing directors, directors, managers, both public and private firms and industries. Participants were selected through purposive sampling to ensure diversity of perspectives. Each session followed a thematic guide exploring perceptions of global competitiveness, infrastructure gaps, labor force readiness, and policy expectations. Content from the sessions was transcribed, coded using NVivo software, and analyzed through thematic pattern recognition to identify dominant issues relevant to the research questions along with individual both face to face and online discussion in different occasion and meeting. Owner of firm/organization/entrepreneurship professional, advisers, teachers, researchers, consultant, public and private government official, and many more are consulted vigorously. Local and international business and industry owners and operators are also given their views and participate in the discussion. Economic, marketing, technical, financial and managerial aspects are also discussed. Those finding are evaluated to find out the answer of Research Question b, c, d and e along with evaluated knowledge and result.

Definition and Idea of Entrepreneurship

Entrepreneurship involves the generation or extraction of economic value, typically requiring a level of risk that exceeds that associated with conventional business practices, and may also encompass values beyond mere economic considerations. Conversely, the term entrepreneur originates from the French language and refers to an individual who establishes and/or invests in one or more businesses, assuming the majority of the risks while reaping the majority of the rewards.[cxxiv] The entrepreneur is often seen as an inventor who generates new ideas, products, services, and business or methods. The process of starting a business is known as entrepreneurship.[cxxv]Entrepreneurship may be define as "a process through which individuals and/or government either on their own or jointly exploit available economic opportunities without being scared by associated risks or inadequate resources under their control."[cxxvi] Another meaning of entrepreneurship is the ability of a person to transform ideas into action. It includes being creative, coming up with new ideas, and taking calculated risks. It also includes being able to organize and manage projects to reach goals. This helps everyone in their daily lives at home and in society. It

also helps employees understand the context of their work and take advantage of opportunities, and it gives entrepreneurs a place to start a business or social activity.[cxxvii] The OECD viewed entrepreneurship as "a motivating force for initiating business ideas, mobilizing human, financial and physical resources for establishing and expanding".[cxxviii]

Entrepreneurship can be broadly defined as the process of creating something new that holds value, which involves dedicating the necessary time and effort, while also taking on the associated financial, psychological, and social risks. The individual who engages in this endeavor is referred to as the entrepreneur, and they ultimately reap the rewards of both monetary gain and personal fulfillment, as well as independence.[cxxix] According to Kuratko and Hodgetts (2017), entrepreneurship involves the passionate application of energy to create an enterprise. Their definition emphasizes key components: the willingness to take calculated risks, teamwork, the creative marshaling of resources, the development of a solid business plan, and a unique vision to discern opportunity where others see only confusion.[cxxx] The European Commission Communication summarizes it this way: "Entrepreneurship refers to an individual's ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports everyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs establishing a social or commercial activity".[cxxxi]

Entrepreneurship has been defined as both the act of being an entrepreneur and the services that entrepreneurs provide. It is also perceived as a dynamic process that is aimed at increasing capital. This process involves utilizing time, managing risks, and leveraging creativity and innovation to generate new components. Entrepreneurship is a fundamental and limitless asset in all societies. It is a straightforward process that involves integrating resources to generate value.[cxxxii] Peter Drucker defined entrepreneurship as a discipline centered on creativity and deliberate change, rather than just launching new enterprises. He believed that entrepreneurs recognize and capitalize on opportunities arising from change, whether within existing businesses or through new ventures. Drucker emphasized the importance of adopting a methodical approach to entrepreneurship, which involves identifying potential sources of innovation and mitigating the risks associated with change. [cxxxiii]Since the great majority of startups fail, entrepreneurship is frequently a challenging endeavor. Depending on the kind of organization being founded, entrepreneurial activities vary greatly.[cxxxiv] Entrepreneurship can range from a single project that the entrepreneur works on part-time to a business that creates numerous jobs.[cxxxv] Peter Drucker identifies seven sources of innovative opportunities that individuals looking to embark on an entrepreneurial journey should keep under observation. The initial four represent sources of innovation that are inherent to the industry. The final three emerge within the societal context.[cxxxvi]

- The unexpected - An unexpected success, an unexpected failure or an unexpected outside event can be a symptom of a unique opportunity.
- The incongruity - A discrepancy between reality and what everyone assumes it to be, or between what is and what ought to be, can create an innovative opportunity.
- Innovation based on process need - When a weak link is evident in a particular process, but people work around it instead of doing something about it, an opportunity is available to the person or company willing to supply the "missing link".
- Changes in industry or market structure - The opportunity for an innovative product, service or business approach occurs when the underlying foundation of the industry or market shifts.
- Demographics - Changes in the population's size, age structure, composition, employment, level of education, and income can create innovative opportunities.
- Changes in perception, mood, and meaning - Innovative opportunities can develop when a society's general assumptions, attitudes, and beliefs change.
- New Knowledge - Advances in scientific and nonscientific knowledge can create new products and new markets.

According to Peter Drucker, "If you are seeking a new business opportunity, keeping an eye on these seven sources may reveal an innovation opportunity." He outlined five principles that can facilitate the effective utilization of a newly discovered innovation.[cxxxvii]

- Begin with an analysis of the opportunity.
- Analyze the opportunity to see if people will be interested in using the innovation.
- To be effective, the innovation must be simple and clearly focused on a specific need.
- Effective innovations start small. By appealing to a small, niche market, a product or service requires minimal investment and a small team to produce and sell it. As the market grows, the company has time to fine-tune its processes and stay ahead of the emerging competition.
- Aim at market leadership. If an innovation does not aim for leadership from the outset, it is unlikely to be innovative enough to establish itself successfully. Leadership here can mean dominating a small market niche.

The modern concept of entrepreneurship emphasizes adaptability, sustainable practices, and digital transformation in a rapidly evolving world. In addition to being company owners, modern entrepreneurs are innovators, change agents, and problem solvers who utilize data and technology to deliver value and address societal needs. Emerging technologies, such as AI, blockchain, and digital platforms, are reshaping business models and creating new opportunities. Entrepreneurs are leveraging these technologies to develop innovative solutions, enhance efficiency, and expand into new markets. It may include e-commerce platforms, online marketplaces, and businesses that utilize AI-powered tools.[cxxxviii] Technology is no longer just a tool for entrepreneurs, but a core part of their business models.Entrepreneurs are leveraging technology to automate tasks, enhance communication, and expand their reach to wider audiences. It involves utilizing social media, cloud computing, and data analytics to gain a competitive edge.[cxxxix]The modern business environment is characterized by rapid change and uncertainty.Entrepreneurs need to be agile, adaptable, and resilient to thrive in this environment.This includes the ability to quickly pivot strategies, embrace new technologies, and overcome challenges.Addressing systemic barriers faced by marginalized groups and promoting diversity and inclusion are growing areas of focus. Entrepreneurs are developing strategies to overcome these barriers and create opportunities for all. Examples include businesses that target underserved communities, promote fair trade practices, and support social enterprises.

The entrepreneur serves as the central actor in the process of entrepreneurship. Their effectiveness stems from a composite of essential traits, embodying the roles of an innovator, a calculated risk-taker, a motivator, and a proactive problem-solver who drives results. The prevailing consensus is that these individuals are developed, not born, with their capabilities shaped by a combination of familial influence, environmental factors, and education. However, the path of any new venture remains fraught with challenges. Due to pervasive constraints like limited resources, high uncertainty, and inexperience, startups face a notoriously high rate of failure. In response to these challenges and broader societal shifts, a modern entrepreneurial focus has emerged on balancing profit with environmental and social responsibility. This evolution is evident in the growing development of eco-friendly products, the implementation of sustainable business practices, and a heightened commitment to contributing to social good.[cxl] The modern entrepreneurial landscape is defined by a shift in purpose, moving beyond pure profit maximization towards a model that prioritizes creating broad societal value. Contemporary entrepreneurs are increasingly recognized as vital agents of change, driving positive impact by addressing pressing environmental and social challenges. This evolved ethos is exemplified by the rise of enterprises in sectors like renewable energy, sustainable agriculture, and ethical sourcing, whose missions integrate job creation and economic growth with environmental stewardship and social equity.

There are many types of entrepreneurs in today's world. The entrepreneurs may be classified on certain parameters like based on economic development (innovative, adoptive, fabian, drone), according to growth (growth, super-growth), based on type of business (business, trading, industrial, corporate, agricultural), according to entrepreneurial activity (novice, serial, portfolio), according to the use of technology (technical, non-technical, professional), and according to motivation (pure, induced, motivated).[cxli] First-generation Entrepreneurs are those who consist of entrepreneurs whose parents or family had not bein business. The booming Indian economy as led to a multitude of business opportunities, and with deregulation, it has become easier to establish businesses.[cxlii] Also, with a change in the mindset of the middle class, it is now more acceptable to become an entrepreneur. Typically, first-generation entrepreneur is one who starts an industrial initializing innovative skill. He is essentially an innovator, combining different technologies to produce a marketable product or service. As a modern entrepreneur undertakes those assets that aligning withcurrent market scenario. On the other hand, a nascent entrepreneur is an individual who is in the process of starting a new business. However, a habitual entrepreneur is an individual who has prior experience in business. The nascent entrepreneur can either a novice or a seasoned entrepreneur.

Figure 3:Today world needs more capable and visionary entrepreneurs.[cxliii]

A woman entrepreneur is another kind of business owner. Women starting their own businesses is a new thing in emerging countries like Bangladesh, India, and Pakistan. In India, social conventions made it hard for women to work. This is no longer the case. Progressive regulations and other incentives have also made it easier for women to start businesses in a wide range of sectors. Once more, lifestyle entrepreneurs have built a business that fits their own needs and way of life. Their main goal is to make money for themselves and their families.[cxliv]Married couples who collaborate on a business venture are known as copreneurs. "Copreneurs" are married couples who share ownership, dedication, and accountability for a firm. Couples that are copreneurs battle to create equity in their partnerships. These couples are an example of how the systems of labor and love interact dynamically. Smart technology or IT entrepreneurs are now developing a new business platform that propels them to the top of the industry.[cxlv] They are confident, ambitious, innovative, and have acquired creativity in the competitive global environment, creating a niche for themselves.[cxlvi] They are the brave new generation of entrepreneurs who are eager to tackle the world of information and advanced technology, including AI, ML, DL, big data, robotics, and more.

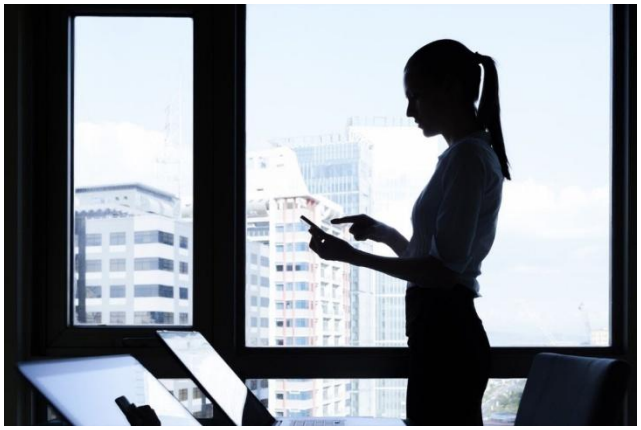

Figure 4: Worldhas huge demand of woman entrepreneurs and they are getting success remarkably.[cxlvii]

Benefit and Impact of Technology in 21st Century

Industrial Revolution and Consequence of World

Industrial revolution is a global phenomenon and continuous process. AI is going to lead to a redefinition and a disruption of service models and products. Although the technical development leads primarily to an efficiency enhancement in the production sectors, new creative and disruptive service models will revolutionize the service sector. These are adapted with the support of big data analyses at the individual requirements of the client and not at the needs of a company. Chronological development of industrialization has been discussed below.

INDUSTRY 1.0: INDUSTRIALIZATION or Industry 1.0 is known as the beginning of the industrial age, in 18th century. For the first time, goods and services were produced by machines. Besides the first railways, coal mining and heavy industry, the steam engine was the essential invention of the first industrial revolution; steam engines replaced many employees, which led to social unrest. At the end of the 18th century, steam engine was invented and introduced for the first time in factories in the Great Britain and it was a great driving force for industrialization, since they provided energy at any location for any purpose.[cxlviii]

INDUSTRY 2.0: ELECTRIFICATION The second industrial revolution began at the beginning of electrification at the end of the 19th century. The equivalent of the steam engine in the first industrial revolution was the assembly line, which was first used in the automotive industry. It helped accelerate and automate production processes. The term Industry 2.0 is characterized by separate steps being executed by workers specialized in respective areas. Serial production was born. At the same time, automatically manufactured goods were transported to different continents for the first time. This was aided by the beginning of aviation.[cxlix]

INDUSTRY 3.0: DIGITALISATION The third industrial revolution began in the 1970s and was distinguished by IT and further automation through electronics. When personal computers and the internet took hold in working life. So, from this age, global access to information and automation of working has taken placed. Moreover, human labour was replaced by machines in serial production. A process that was intensified in the context of Industry 4.0 was already in the offing at that time.[cl]

INDUSTRY 4.0: AUTOMATIZATION The term Industry 4.0 means in essence the technical integration of cyber physical systems (CPS) into production and logistics and the use of the 'internet of things (IoT)' or connection between everyday objects[cli]and services in (industrial) processes including the consequences for a new creation of value, business models as well as downstream services and work organization.[clii] CPS refers to the network connections between humans, machines, products, objects and ICT (information and communication technology) systems.[cliii]Within the next few years, it is expected that over

hundred billion connected machines will exist throughout the world. The introduction of AI in the service sector distinguishes the fourth industrial revolution from the third.

In the field of industrial production, the term 'automatization' is characterized essentially by four elements: 1) The production is controlled by machines. Owing to the use of intelligent machines, production processes will be fully automated in the future, and humans will be used as a production factor only in individual cases. The so called 'smart factory', a production facility with few or without humans, is representative of this. 2) The real-time production is a core feature of Industry 4.0. An intelligent machine calculates the optimal utilization capacity of the production facility. Lead times are short in the production process, and standstills, except those caused by technical defects, can be avoided. Within the value creation chain, the coordination of materials, information and goods is tailored exactly to demand. Stocks are kept to a minimum, but if materials needed for production fall below a certain level, the machine orders more. The same applies to finished products; the machine produces depending on incoming orders and general demand, thus reducing storage costs. 3) The decentralization of production. The machine is essentially self-organized. This includes a network of the manufacturing units. In addition to material planning, the handling of orders is also fully automated. 4) The individualization of production even down to a batch of one unit. The machine of the future will be able to respond, within certain limits, to individual customer requests. No adjustments to the machines by humans are required. As a result, changeover times are eliminated. The smart factory adds certain components or, in a context of optimum distribution throughout the entire process, adapts individual stages of production to correspond with customer requests.[cliv]

The term Industry 4.0 thus stands for the optimization of components involved in the production process (machines, operating resources, software, and many) owing to their independent communication with one another via sensors and networks.[clv] This is supposed to reduce production costs, particularly in the area of staff planning, giving the company a better position in international competition.[clvi] Well-known examples from the field of robotics and AI are the so-called 'smart factories', driverless cars, delivery drones or 3D printers, which, based on an individual template, can produce highly complex things without changes in the production process or human action in any form being necessary. Well-known service models are, for example, networking platforms like Facebook or Amazon Mechanical Turk, the economy-on-demand providers Uber and Airbnb, or sharing services, such as car sharing, Spotify and Netflix. Studies show that merely due to sharing services the turnover of the sector will grow twentyfold within the next ten years. Old industry made progress by using economies of scale in an environment of mass production, but the new information economy lives on networking effects, leading to more monopolies.[clvii]

Today, advanced technology like IoT is revolutionizing computing by introducing networked devices into our daily lives that acquire and analyze information to serve an ever-increasing number of services and human life. IoT makes other technologies smarter by enabling automation, personalization, and remote control via networks of Internet-connected sensors.[clviii] At the same time, IoT technologies raise significant privacy concerns, which may hinder their wider adoption. IoT applications range from smart homes and wearable gadgets to industrial automation, agriculture, healthcare, transportation, ecosystem, warfare, business, education, so on. The IoT has the potential to completely transform our lives by enabling smarter, more connected, flexible, more relax, and more efficient systems. IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives. IoT will influence more in technology, and more things will become internet-connected in future. It is an analytical paper to depict the influence of IoT on technologies and devices in our usual life, business, industry and other sectors along with challenges and suggestions for best harvest in this modern era.[clix]Throughout the world, billions of embedded internet-enabled sensors provide an enormous amount of data that businesses can utilize to improve operational safety, track assets, and reduce human operations.[clx]

Machine data can be used to predict whether equipment will break, giving manufacturers a heads-up and avoiding lengthy periods of downtime.[clxi]IoT devices can also be used by researchers to collect data, information, and other intelligence about client preferences and behavior, market demand, future requirements, potential risk, and so on. However, those may be serious implications for privacy and security.[clxii]IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives. At the same time, IoT will have a serious influence on other technologies, and in the future, more things will be internet-connected. Today globally, there are around 17 billion active IoT devices, and more than 85% of firms have boosted their technical efficiency by implementing IoT technology into their products. The Internet of Things has been named 'the next wave of innovation' as its impact on people's day to day lives evolves.[clxiii]In fact, IoT is critical for operating large-scale businesses and the service industry in the twenty-first century. Furthermore, it was shown that IoT has a considerable impact on decision-making and corporate operation management.[clxiv]

The 4th Industrial Revolution (4IR) will transform industries, service and other sectors so significantly that much of the work that exists today will not exist in next 25 years. It is crucial for us to understand the impact of these changes on all areas of our lives, including academic and learning institutions.[clxv]Currently, all graduates are confronted with a technologically transformed world in which AI, IoT, ML, Big Data, Cloud and Edge Computing, and social media create diverse opportunities and challenges for conventional education systems. As students consider their post-diploma or post-graduation lives, formal

academic and learning institutions are pondering their fate, particularly in regards to employment. Nearly all contemporary technologies propelled by AI are transforming the world to such an extent that social concepts such as 'post-work' are increasingly defining the present era. This period requires skills that are not identical to those required during the Third IR, when information technology (IT) was the primary driver. It is estimated that artificial intelligence will be a US$ 15 trillion industry within the next seven years. Millions of unskilled and traditionally trained individuals will be laid off.[clxvi]On the other hand, millions of jobs related to modern and hi-tech skilled will be created in the next few years.[clxvii]

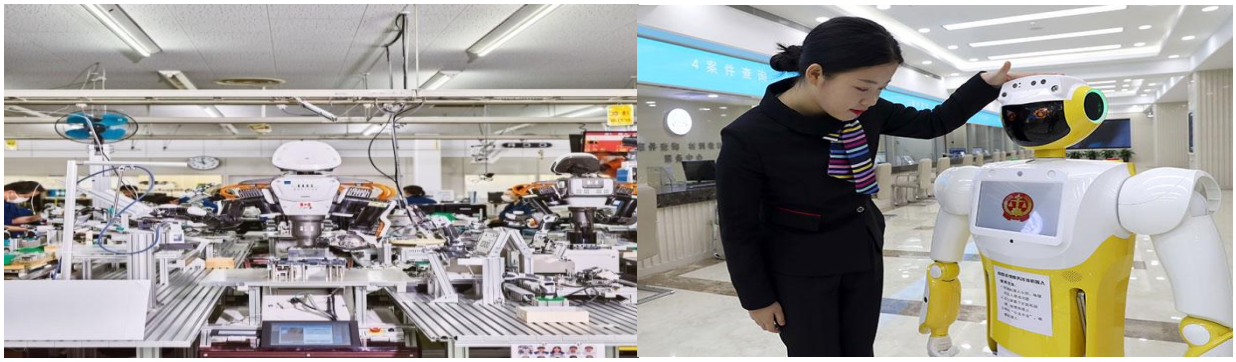

Figure 5: In future robots will work with human[clxviii] and Technological revolution relate technology and human[clxix]

Advantage and Effect of Advance Technology

Today, advanced technology like Internet of things (IoT) is revolutionizing computing by introducing networked devices into our daily lives that acquire and analyze information to serve an ever-increasing number of services and human life. IoT makes other technologies smarter by enabling automation, personalization, and remote control via networks of Internet-connected sensors.[clxx] At the same time, IoT technologies raise significant privacy concerns, which may hinder their wider adoption. IoT applications range from smart homes and wearable gadgets to industrial automation, agriculture, healthcare, transportation, ecosystem, warfare, business, education, so on. The IoT has the potential to completely transform our lives by enabling smarter, more connected, flexible, more relax, and more efficient systems. IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives.

IoT will influence more in technology, and more things will become internet-connected in future. It is an analytical paper to depict the influence of IoT on technologies and devices in our usual life, business, industry and other sectors along with challenges and suggestions for best harvest in this modern era.[clxxi]Throughout the world, billions of embedded internet-enabled sensors provide an enormous amount of data that businesses can utilize to improve operational safety, track assets, and reduce human operations.[clxxii] Machine data can be used to predict whether equipment will break, giving manufacturers a heads-up and avoiding lengthy periods of downtime.[clxxiii]IoT devices can also be used by researchers to collect data, information, and other intelligence about client preferences and behavior, market demand, future requirements, potential risk, and so on. However, those may be serious implications for privacy and security.[clxxiv]IoT has the potential to develop industries efficiency, increase productivity, and improve our daily lives. At the same time, IoT will have a serious influence on other technologies, and in the future, more things will be internet-connected. Today globally, there are around 17 billion active IoT devices, and more than 85% of firms have boosted their technical efficiency by implementing IoT technology into their products. The Internet of Things has been named 'the next wave of innovation' as its impact on people's day to day lives evolves.[clxxv]In fact, IoT is critical for operating large-scale businesses and the service industry in the twenty-first century. Furthermore, it was shown that IoT has a considerable impact on decision-making and corporate operation management.[clxxvi]

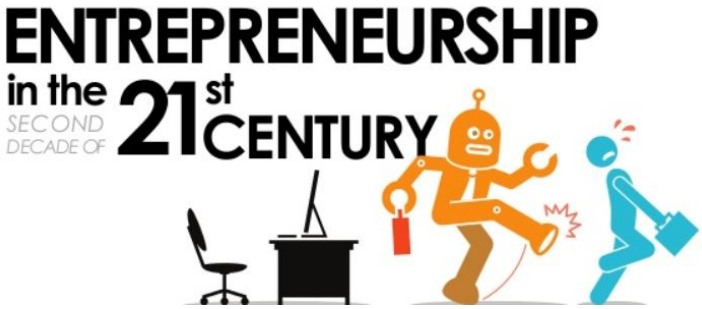

Figure 6: What is Entrepreneurship in 21st century.[clxxvii]

Nowadays, Artificial Intelligent (AI) has been around everywhere for a great deal of time. The benefit of AI is steadily improving our everyday life. The technology is being used for robots that welcome at shopping centers or online search engines for offering suggestions.[clxxviii] Today, AI simulates human analysis in AI systems. It is the ability of the computer program to think and learn. Everything can be taken to be AI, if it involves a program that does something and that we usually think depends on human intelligence. Innovations in the AI space have led to several benefits across multiple industries and different sectors.[clxxix] Today, AI and other technology experts are saying, the rise of AI will make most people better off over the next decade, but many have concerns about how advances in AI will affect and what it means to be human? to be productive and to exercise free will. The automation revolution will have a tremendous impact on the fundamentals of business and society, as well as on the innovation and productivity potential. Big data, ML and Blockchain technology has the potential to impact most industries across the globe in the near future[clxxx]. AI can improve data backup and disaster recovery planning and policy from an IT standpoint to ensure smooth company continuity. The elements for successful technology and IT leadership continue to evolve, but the requirement for strong business strategy, vision, and IT management, as well as a knowledgeable approach to risk, compliance, and outsourcing. But AI remains as important as ever. [clxxxi]Digital existence is enhancing human potential while upending long-standing human activity.

In 21st century, more than half of the world's population now uses code-driven systems, which present both extraordinary potential and challenges that have never been seen before.[clxxxii] Now question arises as will people be better off than they are now as algorithm-driven AI continues to spread? AI will have an impact on the entire agricultural and food value chain, from farm to fork, both now and in the future. Next-generation car or automotive technologies will be influenced by AI, and this will change how cars, trucks, and powertrains are designed and produced.[clxxxiii] AI will influence the tech developments of the global aviation and aerospace sectors. It will also influence space travel and communications, road traffic, airport operations and management, air traffic control systems, and future trends in flight and aviation transport related industries.

AI will influence the technology innovation transforming all parts of the construction and civil engineering sectors leading to improvements in cost, safety, efficiency and quality of construction.[clxxxiv] AI will have an impact on smart phones, tablets, and wearable tech gadgets, as well as how people live, work, and consume services, prompting businesses to establish their own methods for dealing with such use at the back end and capitalizing on it at the front end.[clxxxv] The experts predicted networked AI will amplify human effectiveness along with threaten human autonomy, agency and capabilities.[clxxxvi] Computers might be as smart as or smarter than humans when it comes to things like making complicated decisions, learning, reasoning, pattern recognition, visual acuity, speech recognition, and language translation. Smart systems in neighborhoods, cars, buildings, utilities, farms, and business processes will save time, money, and lives and give people the chance to enjoy a more personalized future.[clxxxvii]The use of AI in healthcare is hopeful, with applications such as diagnosing and treating patients and assisting senior citizens in living fuller and better lives. They were particularly enthused about AI's involvement in broad public-health programs based on vast amounts of data that may be collected in the future years on everything from personal genomes to nutrition.[clxxxviii] AI would abet long-anticipated changes in formal and informal education systems.

Figure 7: Use of Robots and AI in industry and education system[clxxxix, cxc]

If we look around now, we found that our society is changing due to the extensive use of AI, ML and IoT in daily operations. If we go to a healthcare facility, an AI-powered machine will check our pulse, and if we go to an internet store, we will see a recommended list customized by an AI tool. Actually, these are only a few examples of the benefits of AI in our daily lives. AI will provide a lot more in the future. With time, more industries, service sectors, and organizations will embrace this transformative technology to improve every human activity working process.[cxci]AI can help simplify and speed up processes in the community, society, country, and world by making the workplace more efficient, helping us make better decisions, or giving us direct help. AI can help by finding and fixing problems that people might not be able to see or fix on their own. But some people don't see the benefits of AI because they think it will cause people to lose their jobs and become less smart. In

fact, speed, precision, efficiency, and scalability are the **most important benefits of AI.** The 4IR will transform industries, service and other sectors so significantly that much of the work that exists today will not exist in next 25 years. It is crucial for us to understand the impact of these changes on all areas of our lives, including academic and learning institutions. **According to a recent survey PwC of CFOs, while the COVID-19 crisis has led 70% of companies to cut back or defer planned investments, just 22% has said their companies are curbing investments in *digital transformation*.**[cxcii]Currently, all graduates are confronted with a technologically transformed world in which AI, IoT, ML, Big Data, AR, VR, Cloud and Edge Computing, and social media create diverse opportunities and challenges for conventional education systems. As students consider their post-diploma or post-graduation lives, formal academic and learning institutions are pondering their fate, particularly in regards to employment. Nearly all contemporary technologies propelled by AI are transforming the world to such an extent that social concepts such as 'post-work' are increasingly defining the present era. This period requires skills that are not identical to those required during the Third IR, when information technology (IT) was the primary driver. It is estimated that AI will be a US$ 15 trillion industry within the next seven years. Millions of unskilled and traditionally trained individuals will be laid off.[cxciii] On the other hand, millions of jobs related to modern and hi-tech skilled will be created in the next few years.[cxciv]

Today, the adoption of AI and its impact on businesses and society around the world stands at a turning point. The global AI adoption rate grew steadily and now is more than 35%. And in some industries and countries, the use of AI is practically everywhere and every sectors. AI is rapidly providing new benefits and efficiencies to organizations around the world through new automation capabilities, predictability greater ease of use and accessibility, and a wider variety of well-established use in all cases. AI is both being applied through off the shelf solutions like virtual assistants and embedded in existing business operations like IT processes. Encouraging evidence found about the importance of accessibility. Now, 44% of organizations are working to embed AI into current applications and processes. The IBM Global AI Adoption Index has provided insights into overall AI adoption around the globe, the barriers and challenges that are hindering AI from reaching its potential, and the use cases; sectors, industries and countries where AI is most likely to thrive. Today, AI offers a playbook for 42% of companies that report exploring the use of AI and a window into the AI trends and challenges that are likely to come. The data, commissioned by IBM, sheds new light on the deployment of AI across 7,502 businesses around the world. From where, 500 in each country, United States, China, India, UAE, South Korea, Australia, Singapore, Canada, UK, Italy, Spain, France and Germany; and 1,000 in Latin America like, Brazil, Mexico, Colombia, Argentina, Chile and Peru. The polling was conducted online through Morning Consult's proprietary network of online providers from 30 March through 12 April 2022.[cxcv] As we know that, IBM led the industry in the number of AI, cloud, quantum computing and security-related patents granted. However, Darío Gil, Senior Vice President and Director of IBM Research have said that. 'The world needs scientific thinking and action more than ever. IBM's sustained commitment to investing in research and development, both in good and in challenging times, has paved the way for new products and new frontiers of information technology that have greatly benefited our clients and society.'[cxcvi]

Now, AI has been around everywhere for a great deal of time. The benefit of AI is steadily improving our everyday life. The technology is being used for robots that welcome at shopping centers or online search engines for offering suggestions.[cxcvii]Today, AI simulates human analysis in AI systems. It is the ability of the computer program to think and learn. Everything can be taken to be AI, if it involves a program that does something and that we usually think depends on human intelligence. Innovations in the AI space have led to several benefits across multiple industries.[cxcviii] Today, processes are effective and efficient, convenient technologies are extensively available, and forecasts are more accurate.AI and other technology experts are saying today, the rise of AI will make most people better off over the next decade, but many have concerns about how advances in AI will affect and what it means to be human, to be productive and to exercise free will. The automation revolution will have a tremendous impact on the fundamentals of business and society, as well as on the innovation and productivity potential. Blockchain technology has the potential to impact most industries across the globe in the near future[cxcix]; heralding in a new age of consumer trust and optimization. AI can improve data backup and disaster recovery planning and policy from an IT standpoint to ensure smooth company continuity. The elements for successful technology and IT leadership continue to evolve, but the requirement for strong business strategy, vision, and IT management, as well as a knowledgeable approach to risk, compliance, outsourcing, and AI, remains as important as ever. [cc]

Digital existence is enhancing human potential while upending long-standing human activity. More than half of the world's population now uses code-driven systems, which present both extraordinary potential and challenges that have never been seen before.[cci]Will people be better off than they are now as algorithm-driven AI continues to spread? AI will have an impact on the entire agricultural and food value chain, from farm to fork, both now and in the future. Next-generation automotive technologies will be influenced by AI, and this will change how cars, trucks, and powertrains are designed and produced.[ccii] AI will influence the tech developments of the global aviation and aerospace sectors. It will also influence space travel and communications, airport operations and management, air traffic control systems, and future trends in flight and aviation transport related industries. AI will influence the technology innovation transforming all parts of the construction and civil engineering sectors leading to improvements in cost, safety, efficiency and quality of construction.[cciii]AI will have an impact on

smart phones, tablets, and wearable tech gadgets, as well as how people live, work, and consume services, prompting businesses to establish their own methods for dealing with such use at the back end and capitalizing on it at the front end.[cciv]

Figure 8: AI and future of life[ccv] and working relationship between human and robots[ccvi]

The experts predicted networked AI will amplify human effectiveness but also threaten human autonomy, agency and capabilities.[ccvii]Computers might be as smart as or smarter than humans when it comes to things like making complicated decisions, learning, reasoning, pattern recognition, visual acuity, speech recognition, and language translation. Smart systems in neighborhoods, cars, buildings, utilities, farms, and business processes will save time, money, and lives and give people the chance to enjoy a more personalized future.[ccviii]The use of AI in healthcare is hopeful, with applications such as diagnosing and treating patients and assisting senior citizens in living fuller and better lives. They were particularly enthused about AI's involvement in broad public-health program based on vast amounts of data that may be collected in the future years on everything from personal genomes to nutrition.[ccix] AI would abet long-anticipated changes in formal and informal education systems.

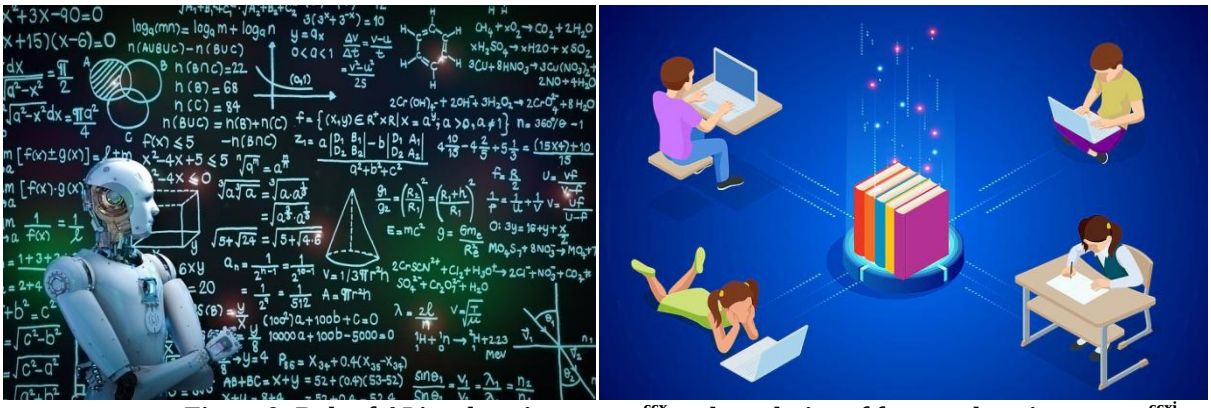

Figure 9: Role of AI in education system[ccx] and revolution of future education system[ccxi]

Looking around now, we can see that our society is changing as a result of the use of AI and IoT in daily operations. If we go to a healthcare facility, an AI-powered machine will check our pulse, and if we go to an internet store, we will see a recommended list customized by an AI tool. Actually, these are only a few examples of the benefits of AI in our daily lives. AI will provide a lot more in the future. With time, more industries, service sectors, and organizations will embrace this transformative technology to improve every human activity working process.[ccxii]AI can help simplify and speed up processes in the community, society, country, and world by making the workplace more efficient, helping us make better decisions, or giving us direct help. AI can help by finding and fixing problems that people might not be able to see or fix on their own. But some people don't see the benefits of AI because they think it will cause people to lose their jobs and become less smart. In fact, speed, precision, efficiency, and scalability are the most important benefits of AI.

Challenges and Risk of AI

The prime challenge of AI systems is that, it is usually so complicated that it is hard to figure out or understand why they do, what they do and how they do? Today, the way AI works, is built on a very successful method called ML. Interestingly, we can't lift the lid and see how it works. So, we have to believe it. So, the task is to come up with new ways to keep an eye on or check up on the many places, where AI is now so important and no way to avoid it. Jonathan Zittrain, a professor of internet law at Harvard Law School and has said, ‘There is a risk that the increasing complexity of computer systems could keep them from getting the scrutiny they need.’ I'm worried about the loss of human freedom as our systems become more complicated

and interconnected with the help of technology. He also said, ‘If we set it and forget it, we may regret how a system changes and that there is no clear place for an ethical dimension to be considered.’ Missy Cummings, who was one of the first female fighter pilots in the US Navy and is now an expert on drones, is the head of the Human and Autonomy Lab at Duke University in North Carolina. She has said, ‘How will we be able to certify these systems as safe?’ AI will need to be watched over, but how that should be done is not clear yet. At the moment, there are no methods that everyone agrees on. Cummings also said, ‘Without an industry standard for testing these kinds of systems, it's hard for these technologies to be widely used.’

In a fast-paced world, regulatory organizations frequently find themselves playing catch-up. Companies are already investigating the effectiveness of utilizing AI to make parole decisions or detect sickness in several critical areas, like the criminal justice system and healthcare. But, by delegating decision-making to computers, we risk losing control; we are to say that the system is making the correct judgment in each of these cases? Principal researcher at Microsoft Research Danah Boyd said that 'there are fundamental problems about the values that are being programmed into such systems and who is ultimately responsible for them' Regulators, civil society, and social theorists all want new technologies to be fair and ethical, but these conceptions are hazy at best.' The workplace is one arena filled with ethical quandaries. AI will let robots, do more complicated jobs and displace more human workers in future. For example, China’s Foxconn Technology Group[ccxiii], which supplies Apple and Samsung, has announced that, it aims to replace 60,000 factory workers with robots. Ford’s factory in Cologne, Germany[ccxiv] puts robots right on the floor alongside humans.

The details about who sits on Google’s ethics board and what it actually does remain insufficient but in September, 2022; Facebook, Google, and Amazon launched a consortium that aims to develop solutions to the jungle of pitfalls related to safety and privacy AI poses.[ccxv] Again OpenAI is an organization dedicated to developing and promoting open-source AI for the benefit of all. 'It's crucial that machine learning be researched freely and distributed via open publications and open-source code, so we can all share in the rewards,' said Google's Norvig. In reality, OpenAI is a non-profit AI research organization. Their purpose is to enhance digital intelligence in the most likely method to serve humanity as a whole, without regard for financial gain. Because their study is free of financial constraints, they may concentrate on making a beneficial human impact.[ccxvi]Creating a brain trust of ethicists, technologists, and corporate leaders is essential if we are to develop industry and ethical standards and gain a comprehensive comprehension of what is at stake. It is a matter of utilizing AI to improve what humans are already good at. Zittrain also stated, ‘Our work is less concerned with a science fiction robot takeover and more concerned with how technology can be used to aid human reflection and decision-making, as opposed to completely replacing it.’

A super-intelligence or also known as hyper-intelligence is a hypothetical agent that may also refer to the type or level of intelligence possessed by such an agent.[ccxvii] If research into AGI produced sufficiently intelligent software, it might be able to reprogram and improve itself and that leading to recursive self-improvement.[ccxviii] Science fiction writer VernorVinge named this scenario the ‘singularity’.[ccxix] It is difficult or impossible to know the capabilities of super-intelligent machines and that known as the technological singularity[ccxx] and is an occurrence beyond which events are unpredictable or even unfathomable.[ccxxi] ML AI is also able to design tens of thousands of toxic molecules in a matter of hours.[ccxxii] ML AI is also able to design and build such robot, which can take over the control of nuclear weapons of the military of any nations.[ccxxiii] And that will be the great danger of entire civilization.[ccxxiv]Robot designer Hans Moravec,[ccxxv] cyberneticist Kevin Warwick, and inventor Ray Kurzweil have predicted that humans and machines will merge in the future into cyborgs and that will be more capable and powerful than either. This idea, called trans-humanism,[ccxxvi] Edward Fredkin[ccxxvii] argues that ‘AI is the next stage in evolution.’ A survey of economists showed disagreement about whether the increasing use of robots and AI will cause a substantial increase in long-term unemployment,[ccxxviii] but they generally agree that, it could be a net benefit if productivity gains are redistributed.[ccxxix]

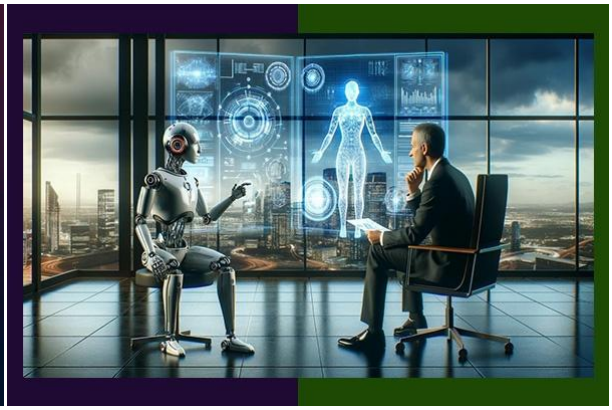

Figure 10: Risk of AI as creating unemployment[ccxxx] and machines take over management[ccxxxi]

Michael Osborne and Carl Benedikt Frey estimate 47% of U.S. jobs are at 'high risk' of potential automation,[ccxxxii] while an OECD report classifies only 9% of U.S. jobs are 'high risk.[ccxxxiii] However, many middle-class and white-colour jobs may be eliminated by AI.[ccxxxiv] On the contrast, job demand is likely to increase for service and care-related professions. Whatever the case; AI, IoT, ML, and automation will definitely shrink the labour force/market.[ccxxxv]Advanced AI can make centralized decision making and more competitive with liberal and decentralized systems like, markets.[ccxxxvi]Terrorists, criminals and rascal states may use other forms of weaponized AI like, advanced digital warfare and lethal autonomous weapons.[ccxxxvii] Battlefield robots are coming soon.[ccxxxviii]Health equity issues may also be worsen when many-to-many mapping are done without taking steps to ensure equity for populations at risk for bias.[ccxxxix] However, until AI and robotics systems are demonstrated to be free of bias mistakes, they are unsafe.[ccxl] Criticism has been raised about whether and to what extent the works created with the assistance of AI are under the protection of copyright laws.[ccxli] The regulatory and policy landscape for AI is an emerging issue in jurisdictions globally.[ccxlii] In 2023, OpenAI leaders published recommendations for the governance of superintelligence, which most of the countries has believed that, it may happen in less than 10 years.[ccxliii]

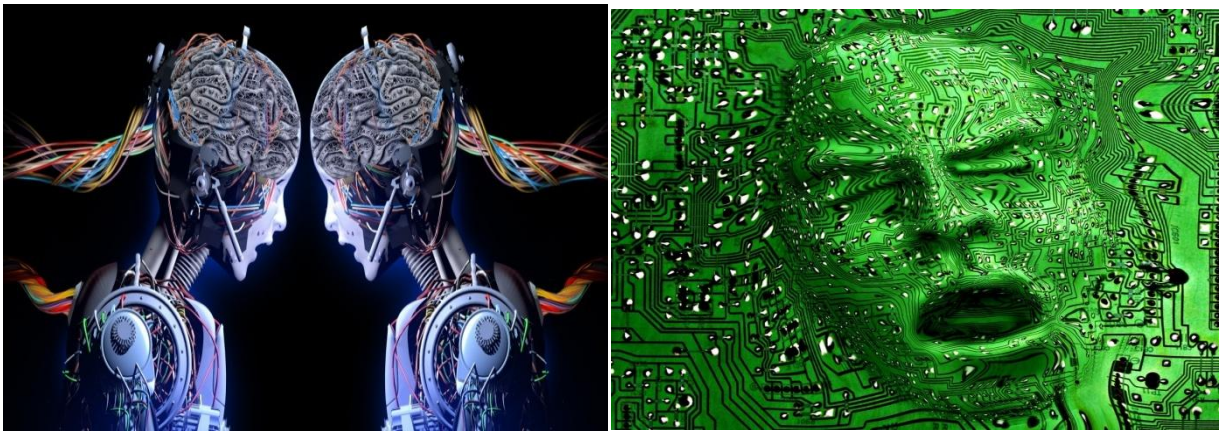

Figure 11: AI and the Singularity[ccxliv] and that may collapse the earth[ccxlv]

Computer scientists and philosophers have suggested that AI may become an unpredictable risk to humanity, if its rational capacities are not steered towards benefit to the humankind.[ccxlvi] Economists have highlighted the risks of redundancies from AI, and speculated about unemployment if there is no adequate social policy for mass/general employment.[ccxlvii] The term AI has also been criticized in the eyes of lawyer/legal community.[ccxlviii]Two sources of concern are the problems of AI control and alignment: that controlling a superintelligent machine, or instilling it with human compatible values, may be a harder problem than honestly supposed.[ccxlix] Many researchers believe that, superintelligence would resist attempts to shut it off or change its goals; as such an incident would prevent it from accomplishing its present goals and that it will be extremely difficult to align super-intelligence[ccl] In contrast, skeptics argue that superintelligent machines will have no desire for self-preservation. And it is not the reality.[ccli]Again sudden 'intelligence explosion' might take an unprepared human race by surprise.[cclii] However, in future jumping from subhuman performance in many areas to superhuman performance in virtually in many domains is possible like, AlphaZero in the domain of Go show that AI systems can sometimes progress from narrow human-level ability to narrow superhuman ability extremely and rapidly.[ccliii]We can do math without having to picture the universe of numbers, and we can figure out how gravity works in a different galaxy without having to step on it and to say that we have felt and measured it.[ccliv]

As technological advances continue, some skills are becoming obsolete while demand for other new technology related skills are rising. Such paradigm shifts are creating new and different jobs. At the same time automation, IoT, ML and AI are also removing the need for human input from some lower-skilled roles. As a result, many people are at risk of being left behind, mostly low-skilled workers, who usually perform administrative, routine and repeated tasks that will be automated totally in near future. This picture is alarming for poor, LDC and developing countries. Even develop countries under OECD are around 14% of jobs fall into this category, with another 32% at high risk of being at least partially automated. So, around 1 in 2 people is likely to be affected in anyway. Robot suits and other automated machinery and equipment were introduced in many industries and worker needs to learn how to work with them/those. Again, about 40% of new such technology related jobs created between 2005 and 2016. But 6 out of 10 workers in OECD countries lack basic computer skills were in digitally intensive sectors and that is around 40%. At the same time, Manufacturing and service sectors are using new technologies to do their jobs more efficiently, quickly and finding work through online platforms, and collaborating in new ways with age groups across different countries around the globe. According to the OECD Digital Economy Outlook (OECD 2015) the ICT sector is a key driver of economic growth in OCED countries. Between 15 and 52% of all investments in OECD countries were

related to the ICT sector between 2008 and 2013. Moreover, after a slack in the sector's contribution to employment growth during the economic crises, the share of jobs created by the ICT sector in OECD countries amounts to 22% in 2013.[cclv]

According to a recent World Economic Forum survey, 40% of SMEs halted operations during the pandemic, resulting in layoffs and other cost-cutting measures.[cclvi] In today's unpredictable world, leaders must make challenging decisions that have a significant influence on their workforce and employee well-being. With the massive volume of data collected on the internet, new hazards have evolved, such as increasingly frequent and costly cyber-attacks.[cclvii]Business leaders are already using new computational and AI tools to aid strategic decision-making. This software will become increasingly powerful during the next decade and will be used in new and diverse scenarios. AI technologies, which are based on game theory mathematics, leverage the computing advancements that power chess engines. The physical office has been significantly supplanted by digital infrastructure, allowing CEOs to develop a more efficient, balanced workforce with asynchronous work schedules. In the world of venture capital, technology has leveled the playing field by removing bias that might otherwise have worked against founders and funders. The next challenge will be to continue to establish shared purpose while leveraging technology to enhance human insight and skill.[cclviii]

Relation among Entrepreneurship, Entrepreneurship Economic Development and Economic Growth

Economic Development

Entrepreneurship promotes economic development by generating innovation, creating jobs, and encouraging competition. Entrepreneurs create innovative goods, services, and business models, which can boost productivity, drive economic growth, and raise living standards. They also contribute to a more diverse and resilient economy, which is less susceptible to shocks. Entrepreneurs are often at the forefront of developing new technologies, products, and business processes, which can lead to increased efficiency and productivity throughout the economy. Entrepreneurs' new enterprises are a significant source of job creation, helping to reduce unemployment and raise income levels. The emergence of new enterprises and innovative ideas can prompt established organizations to become more competitive, leading to reduced costs, higher quality, and greater efficiency. Entrepreneurship promotes a broader economic base, reducing reliance on a particular industry or sector and increasing the economy's resilience to economic downturns. Entrepreneurs frequently play an important role in rejuvenating towns by developing dynamic local places, sponsoring events, and supporting local organizations.[cclix] Entrepreneurs raise the general standard of living for people and communities by creating new products and services and enhancing those that already exist. Through job opportunities and the ability to create wealth, entrepreneurship can raise people's income levels and help reduce poverty.

Entrepreneurship is a major force behind economic growth, as it helps start new firms, generate wealth, and strengthen communities. Entrepreneurship and economic development are closely related, as they share many of the same objectives and work together to promote community prosperity. A successful business can contribute to various aspects of an economic development strategy. This relationship further highlights the importance of government support for entrepreneurs through effective policies and programs. When entrepreneurs succeed, economic development groups can better support the creation of a thriving ecosystem that benefits everyone in society.[cclx] The process through which a community or country enhances its economic, social, and cultural well-being is referred to as economic development. Through policies and initiatives that support innovation, entrepreneurship, employment, and investment, economic development aims to enhance productivity, create jobs, and reduce poverty.[cclxi] To get and keep businesses, you need a trained and certified workforce. Programs for developing the workforce help ensure that the local workforce receives the skills and training they need to meet the needs of businesses.[cclxii] This includes offering job placement services in addition to educational and training possibilities. Not only does a robust labor force draw in new companies, but companies also seek out skilled workers in every country.[cclxiii]

Bringing new firms to the area is also a key part of economic growth. The goal of regional corporate attraction programs is to identify businesses that would be a good fit for the area and offer them incentives to relocate there. When deciding where to set up shop in a region, companies look at more than just the community's need for goods or services. They also assess the strength and efficiency of the community's infrastructure. Businesses require good roads, bridges, airports, seaports, mass transit alternatives, schools, universities, institutions, training centers, and other components of a region's infrastructure to function effectively and for communities to thrive. Investing in infrastructure can also bring new businesses, industries, and workers to the area. Policies set by the government can have a big effect on how the economy grows. Policies that support businesses and stimulate investment can improve the business climate. This includes ensuring that discipline, the implementation of roles and justice, the operation of the system, political and government stability, excellent health, EODB (Ease of Doing Business), and other key factors are all in place. This also contains rules, fees, and incentives.[cclxiv] Communities may build a robust and thriving economy that benefits all by implementing economic development policies that prioritize these criteria. Communities can attract and retain businesses, provide employment, and offer their citizens opportunities by identifying, developing, and investing in these sectors.

Relationship between Entrepreneurship and Economic Development

Entrepreneurship frequently attracts skilled workers by offering competitive benefits and a positive work environment. This includes benefits such as competitive pay, opportunities for career progression, and a strong business culture. They also need to build a strong employer brand, simplify the hiring process, and leverage social media and employee networks to their advantage. Entrepreneurship is a key component and a primary driver of economic growth. Economic development initiatives provide entrepreneurs with the tools and resources they need to grow their businesses. Entrepreneurship leads to the creation of new firms, which in turn generate jobs, increase income, enhance productivity, and drive economic growth. Entrepreneurship also leads to new ideas, which in turn result in new products and services that can improve people's lives. Entrepreneurship is a crucial component of a plan for economic growth.[cclxv] Simply put, if economic development organizations want to revitalize a community, they should place a greater focus on enabling new business startups in the area.

A business-friendly atmosphere is characterized by lively, exciting communities with promising entrepreneurial ecosystems, which attract talent and investment to the local economy. The components of the economic development strategy work together to form a cycle that begins with entrepreneurship. Entrepreneurs might assess communities for unmet market wants or requirements and launch a new business to meet those needs.[cclxvi] In addition to drawing in new customers, entrepreneurs' creative goods and services enhance the quality of life for all local residents. The cycle is started at this point. Reinvestment in the community is made possible by the economic boost that new enterprises provide. Areas with well-developed infrastructure, such walkable communities, transit alternatives, or top-notch schools, will inevitably draw both tourists and businesses. Infrastructure increases community numbers by attracting more corporations and talent for the workforce. To improve the economic health and standard of living of people, communities, and countries, we need a more thriving tourism sector, more enterprises, more international attention, and more income. It may be gratifying and meaningful to be part of a blossoming community, providing people with a sense of purpose and connection that can improve both their personal and professional lives.[cclxvii]

The objectives of both economic growth and entrepreneurship are centered on the community or society. The community's involvement and support are essential to the success of any business venture or economic development project. To start and expand their enterprises, entrepreneurs require community support, which in turn helps the community flourish. Initiatives for economic growth that prioritize the community's needs and goals, however, have a higher chance of being successful and lasting.[cclxviii] It is a significant undertaking to ascertain the requirements of a community, address those needs, and strategically plan for the next steps. That is why it is crucial to establish policies that encourage entrepreneurship. The economy can and should be developed by governments assisting localities in creating an environment that promotes the development of new enterprises and innovative ideas. Governments have the capacity to establish a thriving entrepreneurial ecosystem by providing the necessary infrastructure, resources, and policies to support their citizens.

Governments can support the cycle of economic development by providing entrepreneurs with the necessary resources to start and grow, including investing in education and training, fostering innovation and research, creating a supportive regulatory environment, and facilitating access to funding and resources.[cclxix] This ensures a strong entrepreneurial presence in the community by aligning their activity with that of organizations that foster entrepreneurship. To accomplish their respective objectives, economic development and entrepreneurship are intertwined and mutually necessary. A robust business ecosystem and sustainable economic growth that benefits all depend on strong and resilient communities. By fostering a positive atmosphere and collaborating with communities, entrepreneurs, and organizations that encourage entrepreneurship, governments can play a significant role in promoting ecosystem building. A thriving ecosystem that fosters innovation, generates employment, and enhances the overall well-being of community members can be created through the cycle of economic development and entrepreneurship, advancing the goal of a more prosperous society.[cclxx]

Entrepreneurship Enhances Economic Development and Economic Growth

In practice, various aspects of economic development work together harmoniously. It is linked to advancements in human potential, the quality of life of a country's citizens, the robustness and stability of its institutions, and the general well-being of its populace. In his article "Nigeria: Development and Entrepreneurial Challenges," Tunde Lemo, Deputy Governor (Operations) of the Central Bank of Nigeria, Nigeria's top bank, laments that "for a nation to attain development, its social, economic & political institutions must be in tandem with the Millennium Development Goals (MDGs)…." Additionally, according to the International Science Index, Management and Industrial Engineering, Vol. 11, No. 9, 2017 (waset.org/Publication/10007833), "Nigeria is rated as one of the developing countries with slow progress in education, gender equality, income equality, employment generation, wealth creation, and poverty."[cclxxi]GDP is the most common way to quantify economic growth. It shows that a country is making more goods and services. Economic growth, on the other hand, encompasses advancements in society as a whole, including improved living standards, education, healthcare, and infrastructure. Growth can help development, but it doesn't always lead to it.

We have discussed entrepreneurship before, but now we will examine its significance in terms of economic growth. Vinlander says that entrepreneurship is more than just starting a firm. It is also the "process through which individuals identify opportunities, allocate resources, and create value" for making money, which in turn grows an economy.[cclxxii] Ultimately, the prevalent elements of the definitions are encapsulated under this singular term. In a prior definition, Schumpeter characterized the entrepreneur as an individual who identifies new markets, possibilities, and ideas, then introduces them into the market through acquisition, imitation, or relocation. Furthermore, economists, authors, and practitioners regard entrepreneurship and entrepreneurs as the "drivers of society," the "primary agents" of economic, technological, and social advancement; "heroes," with entrepreneurship characterized as "an idea whose time has come," a notion substantiated by the experiences of developed economies such as the United States, United Kingdom, Japan, China, and Singapore. Kyro perceives the entrepreneur as a "holistic, exceptional individual who, by integrating resources innovatively, applying novel knowledge, undertaking risks, and making consequential decisions, generates something unprecedented."[cclxxiii]

In many respects, entrepreneurs have received praise for their significant contributions to economic growth and development, neighborhood revitalization, employment, nation-building, and innovation. In this context, economic growth and development refer to the rise in the value of the products and services that an economy produces. Generally speaking, it refers to the expansion of potential output, or production at full employment capacity, which is brought about by an increase in aggregate demand. Yeong-NG contends that the praise bestowed upon entrepreneurs and their entrepreneurial achievements is an inaccurate reflection of their true contribution to economic growth and nation-building. His premise is that, in order to survive, many entrepreneurs just replicate the actions of others rather than becoming innovators who develop new goods or services or contribute to society. He offered the examples of those who launch their enterprises and sell on street corners, as well as people who have tiny shops and kiosks but lack the motivation to grow.

Does this imply that these endeavors have a significant impact on a country's perceived development? Even if studies show a favorable relationship between entrepreneurship and economic development, as exemplified by Schmitz's contention that a country's economy improves the more entrepreneurial activity it has,[cclxxiv] Yeong-NG believes that entrepreneurs and their activities are overrated. A Global Entrepreneurship Monitor (GEM) report on Singapore showed that only 4.9% of people were entrepreneurs in 2010. Most Singaporeans would rather work for a multi-national corporation or the government. The paper says that many other wealthy economies have similar numbers to Singapore. Yeong-NG contends that entrepreneurial activities are few in these nations, and their economies are consistently developing and well-developed; therefore, the report and findings by Schmitz and numerous other researchers must be inaccurate. Innovation is what Yeong-NG thinks drives growth and progress. However, what he fails to take cognizance of is that innovation happens through individuals, either within an organization (corporate entrepreneurship) or independently. He also doesn't understand that companies like Apple Computers, Microsoft, Standard Oil, Google, Facebook, Morrison's, Sainsbury, JP Morgan, Forte Oil, Ibeto Group, Dangote Group, Glo Mobile, Jumia, Dell Computers, Konga, Alibaba Group, Innoson Motors, Kel Technology, Asda, and Walmart, among others, are all considered multinational corporations today, but they were all started by entrepreneurs and were once small businesses.

Yeong-NG, Wong, Ho, and Autio used GEM's entrepreneurship report on 37 countries to back up their claims. They discovered that while innovation is linked to GDP growth, higher rates of entrepreneurial activity are not linked to economic growth. This suggests that, even while innovation leads to economic growth in 37 nations, there isn't much evidence that a high level of entrepreneurial activity leads to economic growth and development.[cclxxv] When applying this reasoning to Nigeria, it is easy to assume that it is true because, despite the country's large number of companies and entrepreneurs, its economic growth and development are far from ideal. Nevertheless, according to Schumpeter, "the quality of performance of the entrepreneur determines whether capital would grow rapidly or slowly and whether the growth involves innovation where new products and production techniques are developed." He also believes that entrepreneurs play a crucial role in driving economic output and capital growth.[cclxxvi] Furthermore, he asserts that the variation in the rate of economic growth in any nation is immensely dependent on the quality of entrepreneurs in such countries.

For example, it has been noted that entrepreneurs in the Philippines struggle to establish global brands or sustain their commercial endeavors over an extended period due to a lack of specific fundamental skills and competencies necessary for successful entrepreneurship. According to Batalla,[cclxxvii] the poor quantity and quality of entrepreneurs' performance in the Philippines can be attributed to the lack of quality EE as well as certain cultural limitations and political instability. Since the entrepreneur directs the factors of production, they would otherwise remain inactive in the absence of entrepreneurial activity. On the other hand, it appears that development economists are not particularly interested in the relationship between entrepreneurship and economic development. Leff claims that "entrepreneurship is no longer a problem" or a "relevant constraint on the pace of development" in developing nations in light of the findings of his survey on the relationship between entrepreneurship and economic development.[cclxxviii]

However, contemporary textbooks on economic development, such as "Leading Issues in Development Economics" and "Handbook of Development Economics," fail to adequately address the role of entrepreneurship and entrepreneurs as

contributors to economic growth. Naude further concluded that while entrepreneurship may be essential for growth and economic development, it does not serve as a binding constraint to development in developing economies. Instead, institutions play a crucial role in the economic development of any economy. The term "binding constraints" in this paper refers to all conditions or elements that, as long as they persist, would hinder economic growth and development. The components of entrepreneurship, including new business start-ups, risk bearing, resource management, innovation, self-employment, and value addition, do not inherently demonstrate a connection between entrepreneurship and development, he contends. Entrepreneurs create the essential environment for innovation and competition that drives economic growth. Given the significance of these roles, it is accurate to state that their contributions to economic development are both valued and indispensable. This viewpoint on entrepreneurship can be characterized as an instrumental perspective, serving primarily as a means to achieve a specific outcome. Moreover, it is uncommon for experts in development economics to connect entrepreneurship, or the absence thereof, to issues of poverty and inequality, or to consider it as a measure of well-being. Additionally, its significance in economic transformation is infrequently acknowledged. Development economists do not overlook entrepreneurial activities in economic development; however, they recognize that while there is a significant number of entrepreneurs in developing countries, many operate within the informal sectors and are labeled as "business people/traders." This distinction arises because their primary focus is on survival rather than innovation or value addition.

While there is consensus on the role of entrepreneurs in fostering economic development, it is essential to recognize that the presence of supportive institutions is crucial for enabling these individuals to engage in their activities and achieve success effectively. In this context, institutions encompass elements such as the rule of law, contract enforcement, personal freedom, property rights, banks and other financial entities, government agencies, the educational system, and the transportation system, among others. It may also be described as "societal beliefs and attitudes." In articulating the significance of entrepreneurs in driving economic growth and development, Schumpeter characterizes the entrepreneur "as a conduit for innovation." The assertion is made that the entrepreneur functions as a catalyst for ongoing volatility within the economy through mechanisms such as "creative destruction" or "radical innovation." This process subsequently leads to increased competition, a more efficient allocation of production factors, and an enhancement in overall productivity. Despite the differing perspectives of entrepreneurship scholars and development economists, the significance of entrepreneurs in advancing any economy is undeniable. Fasna firmly believes that entrepreneurship plays a crucial role in a nation's economic advancement. It was noted that "the various issues of unemployment and low productivity stemming from the shortcomings of bureaucracies and public corporations over the past twenty years are slowly diminishing in Nigeria as a result of governmental support for Small and Medium Scale Enterprises."[cclxxix]

Analysis of Lessons Learn from Successful Entrepreneurships and Business Ventures

There are ups and downs, wins and losses, on the road to becoming an entrepreneur. It's about beginning from scratch and never giving up on their idea until they become a hero in their own right. Resilience, adaptability, and a desire to learn from both successes and setbacks are all essential components of a successful business. Some important lessons include regarding failure as a chance to learn, working with others to establish great teams, and always seeking fresh information and diverse points of view. Additionally, for long-term success, it's essential to understand the importance of vision, passion, risk tolerance, and customer relationships. Successful business owners see failures as chances to learn, not as reasons to give up. Entrepreneurs are always looking for fresh information and ways to adapt to the changing times in their company. They should be passionate enough about their firm and its objective to keep going and come up with new ideas. They should understand that taking calculated risks is essential for progress and be prepared to adjust their plan when necessary. Starting your own business might be hazardous, but it can also be advantageous. According to the online course Entrepreneurship Essentials, only 50% of new businesses last five years, and only 25% last 15 years. William Sahlman, a professor at Harvard Business School, states in his book "Entrepreneurship Essentials" that "for every Amazon.com or Uber, there are scores of companies few can remember." Sahlman also states, "A company is successful when it finds and takes the right steps along the way." It has learned how to make and keep customers happy. If they're considering starting their own business or are just getting started, it's crucial to learn from others' mistakes and identify which choices helped a company stay in business.[cclxxx]

According to economics, entrepreneurship, including capital, labor, land, and natural resources, can be profitable. An essential component of a country's ability to thrive in a dynamic and increasingly competitive global economy is its entrepreneurial vision, which is characterized by exploration and risk-taking. The launch of a new company is the best illustration of entrepreneurship. Entrepreneurs are frequently referred to as innovators or sources of new ideas since they replace outdated products with innovative ones and introduce them to the market. It can be divided into home-based or small businesses and large corporations.[cclxxxi] According to economics, an entrepreneur's profits are derived from a mix of labor, capital, land, and natural resources. In summary, anyone may become an entrepreneur if they have the drive and tenacity to launch a new business and manage all the associated risks. The process of improving entrepreneurs' knowledge and abilities through various classroom coaching, programs, and training is known as entrepreneurship development. Strengthening and expanding the number of entrepreneurs is the primary goal of the development process. One of the most critical traits of resilient and flexible entrepreneurs is their capacity to learn from both success and failure.

The process of cultivating and enhancing the skills, knowledge, and resources necessary for individuals to start and operate profitable businesses is known as entrepreneurial development. It entails a range of initiatives designed to encourage, educate, and support business owners, ultimately promoting economic growth and social progress. Programs for entrepreneurship development focus on equipping participants with real-world skills, including operations, marketing, financial management, and business planning.[cclxxxii] Training often covers regulatory requirements, market realities, and access to resources for efficient business management. The growth of entrepreneurship depends on the presence of strong support networks, such as banks, governmental bodies, and private groups, to offer direction and aid.[cclxxxiii] Cultivating an entrepreneurial mindset marked by creativity, risk-taking, resilience, and a proactive approach to problem-solving is another key aspect of entrepreneurship development. This entails providing entrepreneurs with access to capital, facilities, networking opportunities, and mentorship to help them start and grow their businesses. The process of entrepreneurial development is essential for promoting a flourishing business ecosystem, propelling economic growth, and enabling individuals to make meaningful contributions to society. Being an entrepreneur involves more than just launching one or two companies; it also requires having the right mindset and motivation to succeed in the business world.[cclxxxiv] Successful entrepreneurs share a similar mindset and possess certain personal traits that enable them to excel in business. Successful entrepreneurs, such as the ambitious Richard Branson, have an inner drive to succeed and build their businesses. They don't need a Harvard Business degree or technical knowledge in a particular area. Entrepreneurs can continually improve their methods and establish a stronger firm by viewing both success and failure as opportunities to learn.

An entrepreneur is typically a person who starts a new firm, taking on most of the risks and reaping most of the benefits. Entrepreneurship is the act of starting a business.[cclxxxv] "Enterprising individuals" and "entrepreneurial opportunities" are both components of entrepreneurship, according to Shane and Venkataraman. As such, researchers should examine the characteristics of those who spot opportunities when others do not, as well as the opportunities themselves and the relationship between individuals and opportunities.[cclxxxvi] However, Reynolds et al. contend that people are primarily motivated to pursue entrepreneurial endeavors by opportunity or necessity; in other words, people pursue entrepreneurship primarily because they see business opportunities that meet their need for achievement or because they need to survive.[cclxxxvii] An entrepreneur never succeeds by waiting for an opportunity to present itself. They always have a plan and follow through on it. Everybody plans things differently. However, successful people frequently have a strategy. An aspiring entrepreneur aspires to emulate the lifestyles of prosperous businesspeople.[cclxxxviii] A few successful entrepreneurs' lessons learned, as well as their tactics and decision-making abilities, should be covered. During their entrepreneurial journey, successful entrepreneurs discovered the most crucial lesson. Therefore, honesty, resilience, creativity, flexibility, vision, leadership, passion, tolerance, communication, and balance may be essential traits for entrepreneurs. Nonetheless, some novel discoveries are worth considering.

a. Entrepreneurs frequently balance a lot of obligations. Setting aside time for strategic planning enables a more comprehensive picture of the company and helps avoid being mired in daily responsibilities. Breaking away from the usual makes room for new concepts and creative fixes. Setting aside time for planning ensures that everyone is on the same page and working toward the same goals, which helps to improve business goals and strategies. Generally speaking, we dislike rising early, especially before dawn. However, the majority of prosperous businesspeople have a tendency to rise early. We have more time in the morning to be conscious and to make a daily schedule, take care of our health, or do anything else we need to do when we get up earlier. Remarkably, Tim Cook, the CEO of Apple, gets up around 3:45 a.m. Nevertheless, he goes to bed at 8:30 p.m. and gets about seven hours of sleep[cclxxxix] and this practice makes him more productive, and gets extra time to put into other projects. This enables entrepreneurs to design strategies with a fresh perspective, which is the first step they must take if they want to succeed. Therefore, setting aside specific time for strategic planning from a new angle is quite beneficial to entrepreneurs.[ccxc] Ultimately, this leads to more successful company strategies by enabling innovative thinking, proactive risk management, and focused decision-making. Instead of responding to crises as they occur, strategic planning enables entrepreneurs to anticipate potential obstacles and develop effective mitigation plans. Strategic planning maximizes impact and efficiency by helping to identify high-priority projects and allocating resources efficiently. Entrepreneurs can capitalize on new opportunities and adapt to shifting market conditions with the aid of strategic planning.

b. As a new business owner, they have a lot to gain and nothing to lose. Creativity is vital for small firms, and they are granted permission to try their hardest. However, in the startup sector, even failure serves as an additional advantage. They must keep an eye on their rivals but refrain from trying to imitate them. They must identify their incorrect approach and be creative, considerate, committed, and able to examine how others are implementing new ideas. Because consumer trends can shift quickly, market demand is unpredictable, which presents challenges for business owners. When starting a business, entrepreneurs must deal with a variety of risks and difficulties, and they should take precautions against the ones that could most likely impact them. There is no guarantee of success or a monthly income for entrepreneurs, and in the early stages of starting a business, it can be challenging to spend time with friends and family. The majority of entrepreneurs are risk-takers by nature, or at the very least, strategic visionaries with a well-defined strategy for introducing a new product or service to close a market gap. On a personal level, many entrepreneurs take significant risks by quitting secure employment to devote their time,

energy, and frequently their own funds to starting a firm. They must keep in mind that not everything can be managed by a solid company plan or appropriate insurance. Threats and risks that businesses, enterprises, and new entrepreneurs may encounter include earthquakes, tornadoes, hurricanes, wars, and recessions. A product may have a sizable market in an impoverished nation, but depending on the political situation at any given time, these nations may be unsafe and unstable, or logistics, taxation, or tariffs may make commerce challenging. A company's reputation is crucial, and this is especially true when a new venture is introduced, as clients often have preconceived notions. A new business may never take off if it fails to satisfy customers from the outset. These days, word-of-mouth advertising and company reputation are greatly influenced by social media. A single negative post or tweet from a disappointed customer might result in significant income losses.[ccxci] Additionally, they should be aware that certain business sectors have a history of high failure rates, and entrepreneurs in these industries may struggle to find investors. These industries include consultancy, retail, and food service. According to data from the U.S. Bureau of Labor Statistics, 79.1% of small firms founded in March 2021 reached their first anniversary in 2022, 67% reached their second anniversary in 2023, and 59.2% reached their third anniversary in 2024. Therefore, entrepreneurs should anticipate making some costly blunders. However, businesses have a better chance of success if they have the proper strategy, money, and flexibility.[ccxcii] By prioritizing strategic thinking, entrepreneurs can cultivate a more sustainable and successful business, even in the face of the challenges of running a startup.

c. In the beginning, entrepreneurs or founders shouldn't worry too much about loss or risk because you can't succeed without taking risks. Bill Campbell, an American businessman who is the chairman of the board of trustees of Columbia University and the board of Intuit, famously observed, "If companies don't keep coming up with new ideas, they're going to die."[ccxciii] Grace Hopper, a computer scientist, mathematician, and Rear Admiral in the US Navy, remarked, "A ship in port is safe, but that's not what ships are built for."[ccxciv] In addition to creating groundbreaking items, successful entrepreneurs also set trends by developing innovative techniques that enhance the functionality of existing products. Therefore, entrepreneurs need to be risk-tolerant. Risk is often linked to entrepreneurship. An entrepreneur must accept risks while starting a business, but they must also take precautions to reduce those dangers. When starting a new business, many things can go well, but many things can also go wrong. Entrepreneurs who actively manage the risk-reward connection put their businesses in a position to "benefit from the upside," according to Entrepreneurial Essentials.[ccxcv] Jack Ma says, “If you’ve never tried, how will you ever know if there’s any chance?” He also adds, “Once in your life, try something, and work hard at something. Try to change. Nothing bad can happen.”[ccxcvi] Successful entrepreneurs are comfortable with encountering some level of risk to reap the rewards of their efforts; however, their risk tolerance is tightly related to their efforts to mitigate it.

d. In the business world, anyone may be successful, whether they are an introvert or an extrovert. Introverts and extroverts think about things in different ways, which is why they both bring their strengths to the table as entrepreneurs. Because introverts often prefer to be alone, many people think they wouldn't do well in business. However, numerous successful entrepreneurs have demonstrated that this perception is biased and unfounded.[ccxcvii] Just because introverts prefer to be alone or with a small group doesn't mean they dislike people. In reality, introverts are typically really adept at figuring out what other people need and reading them. Most of the time, introverts observe others and how they behave. One drawback of this is that they can often see through the mask and experience someone else's anguish more easily.[ccxcviii] Nonetheless, a collaboration or partnership between various personality types in the workplace can yield the best possible final outcome. These individuals can succeed in the business sector by utilizing their inventiveness and ingenuity. Steve Jobs and Steve Wozniak, co-founders of Apple, are two distinct entrepreneurs.[ccxcix] Wozniak is a self-proclaimed introvert. But, through their partnership, they were able to coordinate their skill sets to produce an incredibly successful company.

e. There are two sides to a coin: success and failure. Regrettably, many successful businesspeople fail in the early stages. Let's now consider Jack Ma, the founder of Alibaba. Alibaba first failed in 2003 because the majority of the business did not align with Jack Ma's vision. Additionally, he was in danger of bankruptcy within 18 months. But in just five years, he learned from his mistakes and emerged as eBay's main competitor. His success story demonstrates that every new business owner should either learn from their failures or, in the event of success, always consider how they can improve to be more productive. An entrepreneur is therefore sufficiently passionate. They are prepared to put in the extra work required to succeed because they are passionate about and deeply invested in their business idea. Instead of being mutually exclusive, success and failure are intertwined and necessary components of the entrepreneurial path. While success validates methods and spurs additional innovation, failure offers valuable lessons and opportunities for growth. The secret to long-term business success is to embrace both, learn from errors, and adjust. Failure can draw attention to weaknesses in current strategies and compel business owners to reevaluate their methods.[ccc] Entrepreneurs can refine their strategy and increase their chances of success in subsequent ventures by analyzing what went wrong. Entrepreneurs can take more measured and wiser risks in the future by learning from their past mistakes. Resilience and adaptability, essential traits for navigating the dynamic corporate environment, can be fostered through failure.[ccci] Success, on the other hand, gives confidence for upcoming undertakings and demonstrates the effectiveness of existing tactics. A positive feedback loop can be created by success, attracting talent, resources, and opportunities for further development. Entrepreneurs can be motivated to push the boundaries of their expertise and investigate

new possibilities by successful initiatives. Many successful businesspeople have experienced significant setbacks before achieving their objectives.[cccii]

f. Entrepreneurs ought to possess an unwavering work ethic. There are many highs and lows on the entrepreneurial path. Having a strong work ethic gives you the resilience you need to overcome setbacks and failures.[ccciii] Unless, like Musk, that's what fascinates us, an entrepreneur should put in 100 hours a week at work. To complete tasks on time, however, we simply need to be focused and determined. To put it briefly, it's about establishing clear priorities and putting ideas into action that will advance our business. Elon Musk, the CEO of SpaceX and Tesla, has an unachievable work ethic.[ccciv] He has been working nonstop for the last 15 years, putting in 100 hours a week. Musk uses the time-blocking method to schedule his day in five-minute increments, which he calls "time blocks." A specific task or activity is allocated to each time block. Musk may utilize the time-blocking strategy, for instance, when he answers overdue emails, eats meals, or sets aside time for business meetings. Musk says, "There are many easier places to work, but no one ever changed the world working 40 hours a week." Entrepreneurs need to have a strong work ethic that won't let them down. It's a basic skill you need to do well in the harsh world of business. To establish a business, you need a strong work ethic, which means being dedicated, resilient, and committed to doing your best. This will help you address the challenges and capitalize on the opportunities that come your way. A strong work ethic provides the drive and determination necessary to navigate challenging times and achieve your company's goals. It is what keeps entrepreneurs going, even when things go wrong. A strong work ethic encourages individuals to strive for continuous learning and improvement. People who think this way are continually seeking ways to enhance their business and develop their talents. Ultimately, a strong work ethic is one of the most crucial qualities for an entrepreneur to possess. It boosts productivity, fosters a good reputation, and encourages an attitude of continuous learning and improvement. However, it's also crucial to strike a good balance between work and life and to prioritize your well-being over your goals.[cccv]

g. An entrepreneur always welcomes learning. Learning, as we all know, is an ongoing process that gets better with time. Learning aids in improving ourselves, which is something we should strive for every day. No one should ever stop learning, according to even Bill Gates. It will be the end of his world if he stops. He added that he wants to keep learning new things.[cccvi] Knowledge and learning are something that never end; they continue with you in every phase of your life –the learning process improves your thoughts and personality.[cccvii] The way every mistake teaches you something is the same way learning improves your vision and mission in life. A startup business is like a game, where you have to be on top by being aware of your industry's latest happenings and trends. At the same time, you must constantly add new skills to your arsenal and use them to better your startup. His conventional wisdom for entrepreneurs to say "no" to opportunities can be counterproductive in the early stages. Embracing "yes" can lead to discovering your strengths, finding valuable collaborators, and identifying your business niche, ultimately earning you the privilege to say "no" later.[cccviii]Because it signifies that their request has been heard and will eventually be approved, people appreciate hearing "yes." However, for the same reason, some people are reluctant to give an affirmative response right away. By answering "yes," you are committing to keeping your end of the bargain. "Yes" can start to feel more like a hassle than a cash reward when you're already feeling overburdened trying to do everything that needs to be done in a day.[cccix]

When you're already working on a lot of projects and feel like you've done too much, saying "no" might be a tempting way to avoid further work. The way they think sets CEOs apart from one another. Most CEOs use "no" as a way to conserve their time, allowing them to focus on more important things. A savvy CEO utilizes "yes" as part of their business strategy to foster new opportunities for their startup to grow.[cccx]

h. The majority of prosperous businesspeople typically engage in odd pastimes because it helps them stay focused. Marissa Mayer, a businesswoman and former Yahoo CEO, claims that her hobbies improve her performance at work. They help me create fresh, original perspectives. Mayer's obsession with cake is the one thing that could worry us. The San Francisco Mag reports that Mayer "made a spreadsheet for the ingredients, tested the recipes before writing her own, and bought a variety of cookbooks to study the cupcake recipes in each."[cccxi]Being an extrovert is beneficial when you are an entrepreneur. Getting other people enthused about our ideas is a significant part of our work; therefore, it's assumed that extroverts will excel at that aspect of the job. Both extroverts and introverts can succeed in entrepreneurship, which often requires a range of tasks, from networking to intense product development. Building a team that complements your abilities and utilizing your talents are ultimately the keys to success.[cccxii] Some business owners, such as Sundar Pichai, the CEO of Google, prefer to spend their weekends with their families. Some business owners, on the other hand, like to read books in their free time. It's not just about relaxing in their leisure time; it's also about what they want to do or activities that will help them relax and quiet down. So, the bottom line is that hobbies will make people better at work, and they will also aid in strengthening their decision-making skills in no time. Business owners need to know what they're doing. This entails having a thorough understanding of their company, industry, and business. They need to value learning and improvement as entrepreneurs for the rest of their lives, and then they need to take action. They need to be sure of what they know and how they can use it in their market and specialty. They also

need to be confident. They need to be organized, which will help them feel better about themselves. This means they need to have a clear vision, plan, and goals for their firm and keep track of all the details.[cccxiii]

i. To start, expand, and ensure the survival of a business, entrepreneurs must practice good communication both inside their company and with outside partners and investors. An entrepreneur requires a communication system that connects their company's employees as well as the company to other businesses and customers. Perhaps the most crucial action of a transformative leader is sharing a vision with their followers.[cccxiv] Intense visions inspire dedication and give workers a feeling of direction. Both written and face-to-face communication are required to convey the vision, according to Kouzes and Posner, as well as Baum et al.[cccxv] Entrepreneurial leaders must speak and listen to articulate their vision to others.[cccxvi]Entrepreneurs need to be able to talk to people well. When explaining a project, giving an elevator pitch, delivering a presentation, conducting training, or interacting with individuals in person, effective communication skills are crucial. For every minute he spoke, Winston Churchill practiced for an hour. It's not enough to just put together the "perfect words" and memorize them like a robot. It's all about how well and confidently you get your point over in real time. You don't have to learn how to talk quickly to convey your point clearly and concisely. But you do need to understand how to get to the point swiftly. In fact, body language makes up 93% of all communication between people. The number that people often mention isn't a rule, and it's not even quoted correctly. Two studies indicate that 93% of communication is non-verbal, and that body language accounts for 55% of all communication.[cccxvii] Again, these are two different things.[cccxviii] Hearing is a passive ability. Listening shouldn't be passive. It should be active.

j. Since it allows leaders to persuade possible partners, investors, and employees of a venture's viability, communication is essential to the role of entrepreneurship. Effective communication with shareholders is essential for entrepreneurs. Information shared between two or more parties for an organization's purposes, functions, objectives, or business operations is referred to as business communication. Business communication is an organizational aspect and can take two forms: peer-to-peer and internal, or employee-to-superior. Business-to-business and business-to-consumer communication are examples of external communication that takes place outside of a company.[cccxix] According to the Communication Accommodation Theory, people tend to modify or adjust their speech patterns when communicating with others.[cccxx] The Face Negotiation Theory explains how individuals from diverse cultural backgrounds approach conflict resolution to maintain their dignity.[cccxxi] When creating a new product or service, entrepreneurs might employ Hugh Rank's "intensify and downplay" messaging technique. Rank contends that in order to convince others to support their business, entrepreneurs must be able to emphasize the benefits of their new product or service while downplaying its drawbacks.[cccxxii] Effective communication is essential for team performance. Several detrimental effects, such as project delays or failures, increased stress levels, and lost revenue, can result from poor communication. Anybody who wishes to be successful in the corporate world needs to be able to communicate effectively. Success can be greatly impacted by your ability to communicate effectively and convincingly, whether you are speaking with clients, consumers, or coworkers.[cccxxiii]

k. Typically, entrepreneurs build teams. By setting a good example and cultivating a great work atmosphere, they inspire and drive their staff. They should be able to delegate in order to build a productive team. Team members typically feel more engaged and appreciated when they are given important tasks and responsibilities. Including team members in the decision-making process might inspire creative solutions that they might not have thought of on their own.[cccxxiv] However, one of the top mistakes new and experienced managers make is focusing too much on minute details and micromanaging employees. Research shows that micromanagement is one of the main reasons employees resign, leading to increased dissatisfaction, including low morale, high turnover, and decreased productivity.[cccxxv] To avoid micromanaging, they usually allow themselves to let go of perfectionism and empower their employees. One of today's greatest businesswomen, Oprah Winfrey, views entrepreneurship as rooted in the conviction that success encompasses not only monetary gain but also personal fulfillment, helping others, and positively impacting the world.

l. Create a clear vision, make a plan, and modify your tactics as necessary. Entrepreneurs typically foster a culture of trust both inside and outside of their firms and possess an innate strategic vision. They are able to evaluate risks, spot opportunities, and create long-term plans for their company. They possess the capacity to think creatively, generate original concepts, and solve problems in innovative ways. As entrepreneurs, it's crucial to have self-confidence, as it enables us to make informed choices and confidently present new ideas. Their business can prosper and their entrepreneurial talents can develop if they are able to make quick and wise decisions. When making judgments, they should follow their gut instinct while also taking the necessary steps to assess and identify potential dangers. Coworkers may feel more empowered to succeed for both the firm and themselves when they trust one another and feel at ease in their workplace. To succeed as a manager, leader, or employee, one must learn how to establish trust in the workplace. Building trust is when someone makes another person feel at ease enough to rely on them. They are inspired to collaborate with them because they have faith in their skills and goals.[cccxxvi] Keeping their promises is a straightforward way to earn their trust. Be honest with your teammate if you can't accomplish anything because you don't have the time or the skills. This way, you won't promise too much and not deliver. Another strategy to earn trust is to

communicate with coworkers in person or via email in a clear and direct manner. Follow the rules of proper email etiquette to make sure their correspondence is professional, clear, and friendly.

m. According to research by American social psychologist Leon Festinger, a person's self-confidence may only increase or decrease if they are able to evaluate themselves against people who are similar to them in a competitive setting.[cccxxvii] Social psychologists have found that self-confidence is correlated with other psychological variables, including saving money, influencing others, and being a responsible student.[cccxxviii] Self-confidence affects interest, enthusiasm, and self-regulation. Self-confidence is crucial for achieving goals and enhancing performance.[cccxxix] Marketing researchers have found that the general self-confidence of a person is negatively correlated with their level of anxiety. Self-confidence enhances a person's overall well-being and motivation, which in turn often improves performance.[cccxxx] In 1943, American psychologist Abraham Maslow argued in his paper "A Theory of Human Motivation" that an individual is only motivated to acquire self-confidence where one component of "esteem" after achieving what they need for physiological survival, safety, and love and belonging.[cccxxxi] It also increases one's ability to deal with stress and mental health.[cccxxxii] The more self-confident an individual is, the less likely they are to conform to the judgments of others.[cccxxxiii] Dominic D. P. Johnson and James H. Fowler write that "overconfidence maximizes individual fitness and populations tend to become overconfident, as long as benefits from contested resources are sufficiently large compared with the cost of competition".[cccxxxiv] People prefer leaders or entrepreneurs with greater self-confidence over those with less self-confidence.[cccxxxv]

n. Entrepreneurs must to pay attention to their clients, comprehend their wants, and cultivate enduring bonds with them. Building solid relationships and paying attention to their clients' requirements should be the top priorities for entrepreneurs. This strategy is essential for company success because it increases client loyalty, provides insightful information for new product development, and ultimately drives company growth. Through active listening, business owners may fully comprehend the wants, needs, and problems of their clients. This information is crucial for customizing goods, services, and advertising strategies to better meet their needs.[cccxxxvi] Customers are more likely to form a favorable relationship with a firm when they feel heard and understood. Increased loyalty, recurring business, and favorable word-of-mouth recommendations can result from this. Entrepreneurs can enhance the customer experience by paying attention to consumer feedback and addressing their concerns. Increased client satisfaction, loyalty, and advocacy may result from this.[cccxxxvii] However, for entrepreneurs, cultivating solid client relationships is not merely a "nice-to-have"—it is essential to creating a profitable and long-lasting company. Customers' implied meanings are equally as important as their explicit statements. You can gain a deeper understanding of your customer interactions and the sentiments, effort, emotions, and intents that drive customer relations by utilizing strategies like natural language understanding (NLU). In-depth analysis of customer behavior can help you forecast future behavior more readily and understand not only what they're doing, but why.[cccxxxviii] Listening to customers is a mentality as much as a tactic. Entrepreneurs that adopt this mentality foster a listening culture in their companies. In a market that is ever-evolving, this culture ensures the company remains relevant, fosters innovation, and cultivates trust. Business leaders can realize the full potential of their companies by prioritizing their consumers' opinions.[cccxxxix] The benefits far outweigh the challenges, and the rewards, including loyal customers, a strong brand, and sustainable growth, are well worth the effort.[cccxl]Ultimately, prioritizing customer relationships and understanding can lead to increased sales, customer retention, and overall business growth.

p. Entrepreneurs should make well-informed decisions and keep a close eye on their company's finances. To make informed judgments and ensure the long-term viability of their endeavors, entrepreneurs must have a solid understanding of their company's finances. Effective planning, risk management, and strategic growth are made possible by having a solid understanding of budgeting, cash flow, and financial reporting.[cccxli] To obtain important insights and ensure regulatory compliance, entrepreneurs should not be afraid to consult financial professionals, such as accountants or financial consultants. Entrepreneurs can create a solid foundation for their companies and ensure they can withstand setbacks and adapt to shifting market conditions by practicing sound financial management. Entrepreneurs can track the performance of their businesses, pinpoint areas for development, and make data-driven decisions with the help of accurate financial reporting and analysis.[cccxlii] A solid financial base enables business owners to recognize and mitigate potential risks, such as market fluctuations, recessions, or unexpected expenses. Entrepreneurs can make informed decisions regarding investments, resource allocation, and business plans when they have a solid understanding of financial concepts.[cccxliii] Entrepreneurs can maximize resource utilization, plan their spending, and ensure they have sufficient funds to meet operational demands and capitalize on opportunities by being proficient in budgeting and cash flow management. Financially literate entrepreneurs are better equipped to make informed decisions. They are able to weigh the benefits and dangers and know when to alter their strategies. This ability enables them to reduce debt and improve business operations.[cccxliv] Entrepreneurs can make good decisions about investments, resource allocation, and business plans if they have a good grasp of financial fundamentals. Entrepreneurs can address the challenges of running a business, capitalize on opportunities, and establish a solid foundation for long-term success by prioritizing financial literacy and actively managing their firm's finances.

q. Entrepreneurs have a positive outlook and persevere through obstacles and failures. A positive outlook and perseverance are essential for overcoming the numerous difficulties and disappointments that entrepreneurs frequently encounter and achieving success. These attributes enable them to stay focused, adapt to change, and persevere in the face of adversity. The steadfast dedication to one's objectives in the face of difficulty is determination. It strengthens the will to overcome obstacles, endure hardships, and maintain focus on long-term goals. Determined businesspeople are more likely to take measured chances, grow from mistakes, and eventually realize their full potential. Positive thinking enables business owners to view difficulties as learning opportunities rather than insurmountable roadblocks. Even in the face of disappointments, it keeps people resilient, driven, and hopeful. Additionally, a positive outlook encourages innovation and problem-solving, which helps business owners generate novel ideas.[cccxlv] Entrepreneurs should also embrace continuous learning and adapt their strategies in response to market feedback and evolving circumstances.

This adaptability, combined with a positive attitude and determination, enables them to overcome challenges and achieve sustainable success. Building a strong support system of mentors, peers, and advisors is also crucial for entrepreneurs.[cccxlvi] These individuals can offer guidance, encouragement, and practical advice, helping entrepreneurs navigate challenges and stay on track.[cccxlvii] Entrepreneurs must cease obsessing over the opinions of others. They must put all of their attention on resolving the issue at hand. If they divert their attention from overcoming the obstacles that lie ahead, they will get preoccupied with what other people think. Every business owner encounters challenges. There aren't many efficient ways to get beyond them. Entrepreneurs must clearly specify the challenge they are facing. To create a focused remedy, they must understand the underlying cause. Big issues may be debilitating. To make them less intimidating, they must divide them into more manageable, smaller jobs. They ask for assistance without hesitation. Speak with classmates, mentors, or advisors who have faced similar challenges. Entrepreneurs must be ready to modify their strategies as needed. When things don't go as planned, their flexibility enables them to adjust their course and come up with innovative ideas. Obstacles may appear more significant than they actually are if necessary, tasks are put off or delayed. Entrepreneurs should start addressing the issue immediately.[cccxlviii]

r. The capacity to recover from setbacks and keep a positive attitude is resilience. Resilient entrepreneurs are able to adjust to shifting conditions, learn from their mistakes, and persevere when things become tough. Since resilience enables entrepreneurs to use these traits to overcome obstacles, it is intimately related to both optimism and tenacity.[cccxlix] Entrepreneurs are the source of their resiliency. People supporting them won't be the source of it because they are frequently unsupportive. They would be shocked at how many people turn out when they're doing well and how quiet they are when they're having trouble.[cccl] They may effectively manage the highs and lows of business by overcoming challenges, growing resilient, learning from mistakes, and maintaining motivation. It is essential to remember that every obstacle presents an opportunity for growth and development.[ccli] They must remain optimistic, keep moving forward, and never give up on their goals. Entrepreneurs must be adaptable, resilient, and optimistic in order to confront and manage difficulties and find solutions.

One effective strategy that can help them shift their attention from the negative to the positive is gratitude.[ccclii] Unexpected events often lead to challenges, and it's easy to become entangled in negative emotions like irritation, anger, or despair. However, people might expose themselves to new possibilities by deliberately choosing to view the circumstance from a different perspective.[ccliii] For instance, they can consider a failed project as a worthwhile learning opportunity that will guide future efforts rather than as a complete failure. Any path will inevitably include failure, particularly in the commercial realm, as Thomas Edison discovered.[ccliv]Several setbacks accompanied his entrepreneurial success. He famously declared, "I have not failed," indicating that he viewed these setbacks as learning opportunities. I just discovered 10,000 ineffective methods. He eventually produced ground-breaking inventions like the light bulb and the phonograph as a result of his perseverance in the face of adversity and his capacity to learn from mistakes.[ccclv] However, individuals have the option to accept failure as a necessary step on the path to success rather than allowing it to define them. Business challenges can frequently be emotionally and mentally taxing. Prioritizing self-care during these times is crucial for maintaining a positive outlook.[ccclvi] Stress levels can be lowered and mental and emotional energy can be restored by engaging in well-being-promoting activities such as exercise, meditation, nature walks, or hobbies.[ccclvii] People who have a good attitude are more likely to meet others who are eager to support them through tough circumstances.[ccclviii] They can learn a lot from mentors, coworkers, or even online communities by building positive relationships and asking for help. This can help them see things in a new way and find possible answers.[ccclix]

Development of Successful Entrepreneurs in Modern Age

Enterprisers are individuals who take on a business or enterprise with the potential for profit or the risk of loss. Entrepreneurs are those who utilize venture capital to launch and establish new ventures. They also bear the financial responsibilities and risks associated with owning, operating, and managing a business.[ccclx] Entrepreneurs exist in various forms and often generate employment opportunities while driving innovative breakthroughs. This is why they are regarded as essential for the strength and stability of a nation's economy. Although entrepreneurs are frequently seen as dreamers, charismatic leaders, and

visionaries, not all of them necessarily possess these characteristics.[cccl xi] Many entrepreneurs are individuals who follow their own paths. They possess the determination, persistence, and drive necessary to transform opportunities and ideas into reality. Generally, entrepreneurs have a clear and communicable vision, a genuine passion for their chosen field, strong motivation to bring their vision to market, and the unwavering perseverance to continue despite setbacks and obstacles. Undoubtedly, entrepreneurs are a unique breed. They are mavericks with the resolve and foresight to build a business that brings their vision to life.[cccl xii]Their motivation stems from the dream of creating their own business ventures, while their drive comes from identifying and capitalizing on high-potential opportunities. They are often deeply absorbed in every aspect of their chosen field of expertise. Entrepreneurs are catalysts for ideas, which often arise from sudden flashes of inspiration and are frequently overlooked by others. They possess the ability to pivot instantly as conditions change, tolerate uncertainty, navigate transitions, and maintain a balance between continuity and change. Above all, entrepreneurs are remarkably tenacious.[cccl xiii] This quality truly defines the core nature of an entrepreneur. They are capable of carrying projects through from inception to completion and rarely give up, even when faced with the most difficult challenges.

Several factors typically influence an entrepreneur's success as they start, manage, and sustain their business, including the timing of their launch, the amount of capital available, the competitiveness of the market, the reliability of their supply chain, and the prevailing economic conditions.[cccl xiv] Additionally, successful entrepreneurs tend to share a number of common character traits. Currently, there are nearly 600 million entrepreneurs worldwide, representing roughly 13% of the global population.[cccl xv]That's an impressive number of individuals striving to realize their dreams. Highly successful entrepreneurs possess a distinct set of personality traits and characteristics that set them apart in achieving entrepreneurial success, and it isn't necessarily due to having a high IQ. In fact, 33% of entrepreneurs left high school with only a diploma or GED and never attended college, demonstrating that academic achievement alone does not equate to entrepreneurial ability.[cccl xvi]Nevertheless, entrepreneurial traits enable individuals to launch and manage businesses by innovating, taking decisive action, and navigating challenges. To enhance entrepreneurial motivation, set achievable goals, acknowledge milestones, maintain an optimistic outlook, and concentrate on accomplishments rather than setbacks. Creativity is a cornerstone of entrepreneurship, involving the pursuit of inventive solutions, cultivating habits that spark new ideas, and allocating time to explore emerging opportunities.[cccl xvii] These aspects will be explored in the following paragraphs.

Entrepreneurship embodies an individual's willingness to take risks, encompassing various costs—from time investment to the challenge of devising effective and efficient business strategies. Such strategies must navigate social, intuitive, and financial risks, offering personal fulfillment alongside potential financial rewards if the newly implemented approach proves successful.[cccl xviii] Both innovation and entrepreneurship do not merely involve having a brilliant idea in one's mind; they require dedicated effort to transform that idea into action. The idea must be thoroughly discussed and its feasibility carefully evaluated. In this process, teamwork plays a crucial role, as it helps assess the idea's validity more effectively and refine it into a practical form, minimizing potential financial losses.[cccl xix] During the discussion of an idea, various weaknesses in its structure often emerge, which must be addressed and eliminated to prevent potential losses.[cccl xx] Accomplishing this requires a specific mindset and behavior, which defines an individual as a risk-taker—someone with the courage to navigate and influence social and economic structures to create an environment where their ideas can be transformed into action.[cccl xxi] Additionally, he must be fully aware of all potential risks and possess the courage to confront them whenever they arise along his path.[cccl xxii]

Over time, the definition of an entrepreneur has evolved in response to the changing economic structures of the world. During the Middle Ages, the term primarily denoted an occupation, whereas the modern interpretation emphasizes creativity, risk-taking, and wealth creation.[cccl xxiii] This concept of entrepreneurship establishes a direct connection between the term and the individual. This definition aligns with the contemporary framework of business studies. Today, the term "entrepreneur" is no longer limited to men; it equally encompasses women as active participants in entrepreneurial ventures.[cccl xxiv] There was a period when women were largely restricted to their homes, expected only to perform household duties and fulfill roles as mothers and wives. They were rarely afforded the opportunity to voice their opinions or express dissent on various matters.[cccl xxv] However, in today's era, women have become more empowered and independent, enjoying the right to shape their lives and make decisions on their own terms.[cccl xxvi] They are also able to voice their opinions on a wide range of issues, whether political, social, educational, or economic. Nevertheless, debates often continue regarding the comparison between men and women as entrepreneurs.[cccl xxvii] In light of this comparison, many opinions about women in entrepreneurship have emerged, arguing that women are weaker entrepreneurs and may lack essential traits of a successful entrepreneur. Critics claim that women are less willing to take risks, struggle to face challenges, are more emotional, and find it difficult to make quick decisions in chaotic situations. Consequently, some argue that there is no certainty that a woman can excel as an entrepreneur.[cccl xxviii] Although the definitions mentioned above describe entrepreneurs in largely similar ways, they still carry certain limitations. Specifically, they imply that entrepreneurial presence is not universal and cannot be found across every field, such as education, medicine, law, engineering, social work, and others.[cccl xxix] These definitions highlight several common and essential traits of an entrepreneur, including organizational skills, creativity, risk-taking, and the ability to generate wealth.[cccl xxx]

The skills, capabilities, and qualities mentioned above are essential prerequisites for anyone aiming to succeed as an entrepreneur. Accounts of successful entrepreneurs consistently reflect these attributes. To thrive, an entrepreneur must be bold, strategic, energetic, and passionate. Creativity and managerial acumen are also critical to entrepreneurial success.[ccclxxxi] Modern entrepreneurs must be versatile, multi-skilled individuals, making the role inherently complex. Contrary to common belief, however, these entrepreneurial skills and qualities are not solely innate—they can be learned, honed, and developed through practice and experience.[ccclxxxii] However, it is crucial to make a deliberate choice to cultivate these skills and qualities. By consciously working to strengthen areas where he is less proficient, he positions himself for significant achievements as an entrepreneur in the business world.[ccclxxxiii] A temporary lack of mastery in one area does not determine his lifelong ability; every skill can be learned. Do not let this list overwhelm or discourage him. With consistent practice on his weaker areas, these skills will gradually become second nature, eventually integrating seamlessly into his entrepreneurial DNA.

Entrepreneurs are inherently optimistic, forward-looking, and highly enthusiastic. Successful entrepreneurs exhibit remarkable energy levels, driven by the belief in their potential for success and the willingness to risk their resources to achieve profits or make a meaningful impact. They are often impatient, constantly thinking about ways to grow their business and expand market share. To succeed, one must ask: is he motivated enough to sustain this effort? Motivation is a core trait of successful entrepreneurs, but passion is equally essential.[ccclxxxiv] Passion consistently emerges in discussions of entrepreneurial DNA, traits, or anatomy—it is a defining force. The level of motivation and passion he demonstrates will largely determine his success in entrepreneurial ventures. From developing and refining prototypes to presenting ideas to investors, achievement is ultimately fuelled by the synergy of determination and passion.[ccclxxxv]Persuasiveness and creativity are crucial yet often overlooked traits of successful entrepreneurs. A prime example is Walt Disney, whose extraordinary creativity allowed him to outshine competitors and build an empire from the ground up.[ccclxxxvi]

The absence of the right business mindset is often the critical factor that can determine the success or failure of an aspiring startup. Many entrepreneurs launch ventures simply because they are unemployed; they may have ideas but lack the drive to sustain them. To succeed, an entrepreneur must possess self-motivation and the ability to think innovatively, courageously, and strategically, transforming a simple idea or hobby into a thriving business. The right mindset is deeply embedded in the anatomy of an entrepreneur. Whether building a business for the long term or planning an eventual exit, having this mindset is essential.[ccclxxxvii] Entrepreneurs must adhere to their vision, devise strategies for generating income, and use their resources to grow and enhance their ventures. Documenting milestones, processes, and future goals provides a roadmap to guide decisions and innovations along the journey. For first-time entrepreneurs, the path can be daunting, fraught with seemingly insurmountable challenges. While some individuals naturally possess the instincts and capabilities for entrepreneurial success, others may struggle, facing repeated setbacks until discouragement sets in.[ccclxxxviii] This is precisely why the concept of entrepreneurial DNA is so often discussed.

The business environment is inherently volatile, filled with uncertainties, and demands courage along with a suite of exceptional skills to navigate effectively. Many argue that successful entrepreneurs and business leaders are born with innate capabilities that set them apart. While there may be some truth to this, entrepreneurial skills, like any other ability, can be learned, refined, and applied to achieve success. Thriving in the business world requires formidable personal skills and competencies. Strong social skills, for instance, are among the most significant factors contributing to entrepreneurial success. In fact, personal skills often take precedence when launching a venture. These skills—proficiencies deeply embedded in one's character—are essential for business achievement. Even if some individuals do not naturally possess them, they can be consciously developed and nurtured over time to enhance entrepreneurial effectiveness.[ccclxxxix] Personal skills often shape the type of business an individual is likely to excel in. For instance, someone with a talent for cooking and a deep appreciation for flavors is more likely to succeed in the catering or restaurant industry. Alongside this, essential skills such as effective communication, respect for customers, suppliers, distributors, and employees are critical. Integrity and honesty also rank among the most valuable personal skills, forming the foundation of a profitable and sustainable business.

Equally important is the ability to create a distinctive image, which is crucial for entrepreneurial success. In today's highly competitive market with cut-throat practices, standing out from the clutter is essential. Building a strong brand identity requires consistently presenting his target audience with company information, trademarks, logos, and other brand elements. Whether establishing a startup's brand or cultivating a personal brand, image-building skills are indispensable. When an entrepreneur successfully registers a unique brand identity in the minds of their target customers and establishes an unassailable image, the path to success becomes attainable. In addition, every successful entrepreneur is an organized individual, capable of managing multiple responsibilities effectively.[cccxc] This organization is essentially the foundation for accomplishing tasks efficiently. Even with limited resources, proper organization ensures they are utilized to their maximum potential. A weak organizational setup not only slows business growth but also makes scaling the venture difficult. A well-structured environment can work wonders in attracting customers. It's important to understand that top entrepreneurs remain organized. The failure rate for entrepreneurial ventures is extremely high. Sometimes, it's better to exit a venture and pursue something new rather than continue investing in a failing project. Many famous entrepreneurs were not successful on their first attempts. However, they had the foresight and composure to know when to cut losses, pivot, or start fresh. If he is considering a business exit, careful

planning is necessary to avoid serious mistakes. Entrepreneurs must lead from the front, as entrepreneurship is fundamentally about problem-solving.[cccxci] Most successful products focus on addressing one or more specific problems (at the very least, one—if he doesn't solve a problem, success is unlikely!). For this reason, having a problem-solving mindset is an essential quality for any entrepreneur. Once he stops relying on others to fix the challenges he faces and begins tackling them himself, he takes the first step toward becoming a true problem-solver. Over time, he will also be able to develop solutions for the issues he notices when launching his product or service.[cccxcii]

Having strong business and financial skills is one of the key reasons entrepreneurs succeed. While many people assume that starting a business requires a large amount of capital, that's not always the case. Today, it's possible to launch a business for under $1,000 or around 0.1 million Taka. Entrepreneurs have the ability to set up the internal systems, processes, and procedures needed to run a business effectively. They consistently focus on sales, cash flow, and revenue. Successful entrepreneurs rely on their business expertise, networks, and practical know-how. Evaluate his current skills and professional connections—will his experience, contacts, and abilities easily support the business ideas he wants to pursue? By developing strong business skills, he can help his startup avoid failure and stay on the path to success. Right from the beginning of his entrepreneurial journey, he will start negotiating.[cccxciii] Negotiation skills are important at every stage of a business, whether he is dealing with clients, customers, employees, investors, or other stakeholders. The ability to negotiate can make the difference between success and failure, profit and loss, or even solvency and bankruptcy. As an entrepreneur, he needs to be able to negotiate favorable terms and conditions. Therefore, developing strong negotiation skills is essential and should be carefully cultivated.[cccxciv] In today's age of innovation, starting and growing a business has become more accessible than ever. From affordable tools that aid decision-making to cost-effective marketing strategies, he has the resources to make this year a breakthrough period for his business. Be sure to leverage all the most effective tools available so he can transform his entrepreneurial ambitions into reality.

Having a clear strategy is essential for every aspect of a business, particularly for staying ahead of the competition, reaching new customers, and retaining existing ones. A business plan outlines a company's approach, and an entrepreneur must excel at creating effective plans.[cccxcv] For example, if he runs a detergent manufacturing company and aims to increase sales, developing a plan based on market research and analysis provides valuable insights into customer demand that can guide his decisions. If his target market is mainly low-income earners and students, it would make sense to produce small-sized detergent packs rather than family-sized ones. Strong business skills are certainly one of the defining traits of successful entrepreneurs. A comprehensive plan should also include a marketing strategy designed to reach his target audience most effectively.[cccxcvi] A plan gives his business direction and provides a structured approach to achieving specific goals. Creating a business plan is a skill he develops over time; it's not something he is born with. True entrepreneurs don't have a plan B—they take risks and commit fully to achieving their objectives. Success requires sacrifice, and for entrepreneurs, this means dedicating time, effort, and determination to their dreams. A genuine entrepreneur relentlessly pursues their vision because it aligns with their passion and beliefs. Without passion, it's impossible to give him all, and success becomes unlikely. Determination and an unyielding will to win are traits of the most successful entrepreneurs, and anyone who masters these qualities becomes a formidable force. Being able to identify the strengths and weaknesses of their business is a critical skill for every entrepreneur.

No business is perfect in every area. Some may excel in marketing and service delivery but struggle with employee relations. When an entrepreneur understands their business's strengths, they can leverage them for competitive advantage and growth. Similarly, recognizing weaknesses allows for adjustments that compensate for gaps or shortcomings. An aspiring entrepreneur must develop the ability to assess their business honestly, as this is the most reliable way to remain competitive and profitable.[cccxcvii] Entrepreneurs must stay motivated and maintain a strong work ethic. Being his own boss means taking full responsibility for managing his workload. When working for an employer, duties are usually outlined in a job description, making it easy to understand his tasks and manage time effectively. As an entrepreneur, however, he must be able to define his own responsibilities and ensure they are completed. It can be tempting to procrastinate or postpone challenging tasks until he feels more energized, but that's not an option when running his own business. The most successful entrepreneurs push themselves to work and stay productive even on days when they don't feel like it.[cccxcviii] When he launches his own business, he gets to set his own working hours, but that also means he must stay disciplined—if he doesn't show up, nothing gets done and his business won't progress. Around 26% of entrepreneurs chose to start their businesses because they wanted to be their own boss, but being the boss requires acting like one and getting up to work even on days when he'd rather stay in bed.[cccxcix]There are significant benefits to pushing himself to stay motivated. It not only improves his mindset but also reduces stress, gives him more time, opens new opportunities, and helps him achieve his goals more quickly.

One of the greatest challenges most businesses face is the lack of a clear purpose. Every entrepreneur must have a definite and unwavering vision of where the business is headed. Clarity of purpose is a vital business skill that every aspiring entrepreneur needs to develop. It's essential to define the business's goals, vision, and objectives.[cd] For some companies, the goal may center on building a strong corporate image, while for others it might focus on boosting sales. Although business purposes often share similarities, each one has unique differences that set it apart.[cdi] Every entrepreneur needs a well-defined purpose and must communicate it effectively to the right audience in order to succeed.[cdii] Entrepreneurship is certainly not an easy path, as it

requires taking on numerous roles and responsibilities. The ability to multitask becomes essential because entrepreneurs are involved in nearly every aspect of business operations. They must understand and influence activities in production, distribution, customer relations, negotiations, marketing decisions, and more. Staying relevant in all areas of the business demands strong multitasking skills, making it a compulsory trait for anyone aspiring to be an entrepreneur.[cdiii] A successful entrepreneur must be familiar with every aspect of business operations, as this enables them to monitor, guide, and drive the company toward success.

Entrepreneurs must also possess an unshakable passion for their line of business, as this is what sustains them even in difficult times. Having genuine enthusiasm for the nature of the business is a prerequisite for involvement because it fosters persistence. With passion, entrepreneurs stay motivated and are more willing to make sacrifices for growth. Stress often weighs heavier on those who lack interest in their work, but when he truly enjoys his business, he can inject creativity and develop a unique style that helps the company stand out.[cdiv] Passion is a vital ingredient for entrepreneurial success and should never be underestimated. When an entrepreneur is passionate about the business, it reflects in management style, business practices, employee attitudes, and customer responses. Such entrepreneurs remain deeply engaged in every process and inspire their teams to consistently give their best.[cdv] Indecisiveness can be extremely costly in business, leading to many negative consequences. The ability to make timely and sound decisions is crucial for staying ahead and seizing opportunities, since such opportunities are not always available. Decisions can make or break a business, so this skill must be carefully developed, as both survival and growth depend on it. While decisions are often based on available data, having the sharpness to act quickly and wisely can significantly boost success. Decision-making is a quality that entrepreneurs can strengthen through practice, even in activities like poker that sharpen judgment under pressure. There is also a close link between business success and how reliable he is perceived to be. Clients and customers expect trustworthiness and will evaluate him by how consistently he delivers on his promises. Building a reputation for reliability is therefore essential for every entrepreneur.[cdvi] The business landscape is constantly shifting with new trends and developments emerging across industries. An entrepreneur must be skilled at tracking these changes and capable of making the necessary adjustments to adopt and apply them effectively. Every sector undergoes periodic shifts, whether driven by customer preferences or by new ways of carrying out business processes.[cdvii] Whatever form these trends take, an entrepreneur should be able to identify, leverage, and harness them for the advancement of the business.

Building a successful venture demands dedication and high levels of energy. It involves immense effort, and there will be moments of discouragement. In such times, staying faithful, persistent, and focused on his vision is essential. Without full commitment, failure is inevitable. This is why resilience is often regarded as the strongest predictor of startup success.[cdviii] If he wants to stay productive and effective throughout his entrepreneurial journey, there are several habits he need to adopt. An entrepreneur must possess a strong sense of efficiency, as it is essential for boosting output and profitability. This skill is vital and often inspires employees to demonstrate the same standard. Efficiency requires being hardworking and staying updated on the latest tools that can improve operations. Entrepreneurs must constantly seek innovative ways to increase productivity while integrating relevant tools that streamline processes and functions within the business. In today's business world, automation and outsourcing are among the most effective methods for enhancing efficiency and driving higher productivity.[cdix] An entrepreneur must know how to manage employees effectively, as this is a crucial and sensitive skill every business owner should possess. The ability to earn the trust and loyalty of workers is essential, alongside promoting their welfare and engaging them for peak performance. Employees are vital to the success of any business, and effective management is necessary for continuity and operational efficiency. Creating a supportive work environment, maintaining regular communication, offering fair remuneration, and providing rewards are all key aspects of proper employee management.[cdx] Effective employee management also involves the entrepreneur fostering open communication with staff, allowing them to share their thoughts and suggestions for improving the company. Ensuring employees feel valued and part of the organization is a key aspect of managing them successfully.

Possessing an unyielding drive is essential for business owners, as they often face obstacles that can discourage or derail them, especially if their motivation is weak. An unwavering drive is arguably the most crucial factor for achieving success. No matter the level of skill or talent, consistent determination is what ultimately leads to accomplishment in business. Drive fuels resilience and persistence. It keeps an entrepreneur focused on their objectives, regardless of challenges or adverse conditions. Drive is the force that propels progress and ensures the achievement of goals.[cdxi] Drive motivates the entrepreneur to work harder than employees, as they see the complete vision of the business and are fully committed to bringing it to reality. Possessing this drive is essential, as it remains the ultimate requirement for success in the business world. Businesses face numerous challenges, many of which can arise unexpectedly, and a successful entrepreneur must anticipate these situations and take proactive steps to address them before they impact the business.[cdxii]Creating inclusive and diverse ecosystems that support entrepreneurs from all backgrounds is essential for unlocking the full potential of entrepreneurship.

An entrepreneur must also learn how to handle the challenges and pressures that come with running a business. Although often overlooked, failing to manage stress effectively can lead to serious consequences. Entrepreneurs need to recognize when and how to relieve stress, turning it into productive and restorative activities. While stress is an inevitable part of business,

mastering it is a skill that develops over time and becomes part of an entrepreneur's core abilities. Successful entrepreneurs understand that problems will arise, but they anticipate these challenges in advance and devise solutions before they occur.[cdxiii] Reacting to issues only as they happen can quickly become overwhelming. A key trait of successful ventures is strong and effective management. Many businesses fail due to poor management, whether it concerns workforce allocation or financial resources. Effective management is critical to turning any venture into a success. Additionally, creativity and inventiveness are essential for maintaining productivity and efficiency in business.[cdxiv] This is another reason why an entrepreneur must strive to develop this skill. Entrepreneurship requires keeping up with technological advancements and finding innovative ways to apply these technologies to improve business processes and activities. Inventiveness simplifies operations, enhances efficiency, and boosts output. An entrepreneur must be aware of new and creative approaches to enhance business performance and customer satisfaction. When an entrepreneur embraces inventiveness, the business continues to grow while remaining cost-effective.[cdxv] Most businesses operate with limited resources, including time, information, and money. Successful entrepreneurs know how to maximize these resources and are skilled at stretching finances and creating additional resources to meet business needs.

While it may not be the most glamorous trait of successful entrepreneurs, excellent time management is crucial for balancing multiple roles or ventures simultaneously. Following productivity practices from top CEOs can help entrepreneurs manage their time effectively. The future depends on the present, and a successful entrepreneur is always focused on the future, working hard and setting achievable goals. Strong vision and purpose pave the way to success.[cdxvi] Without the ability to compartmentalize, switch focus smoothly, and transition between responsibilities efficiently, managing and growing different ventures—or even multiple aspects of the same business—becomes difficult. Staying focused on priorities instead of distractions, such as social media, reflects effective time management. Similarly, scheduling meetings without overlap or compromise is another sign of strong time management skills.[cdxvii] To be a successful entrepreneur, it is essential to know how to use his time wisely, as this can make a significant difference. There are many time-management strategies to adopt, and creating a schedule is highly recommended. For example, he might handle emails in the morning, hold meetings in the afternoon, and manage social media in the evening.

Figure 9: Importance of sustainability and entrepreneurs.[cdxviii]

Lord Alan Sugar states, "There is no such thing as entrepreneurial juice that he can buy from Boots. He is either born with entrepreneurial gifts or not." Similarly, Gary Vaynerchuk believes that "hustle and drive to succeed are innate qualities; they cannot be taught." In contrast, thinkers like Robert Greene, Tom Bilyeu, Duncan Bannatyne, and Peter Drucker argue that successful entrepreneurs can be made through learning and experience. However, a few highly successful entrepreneurs seem to fall somewhere in between these perspectives.[cdxix] When asked whether entrepreneurs are born or made, Richard Branson stated that everyone is born with entrepreneurial potential, but only a few takes action to realize it. Theo Paphitis, from the BBC business program *Dragons' Den*, describes different "levels of entrepreneurs," suggesting that one's level depends on how far they aim to go. He implies that some entrepreneurs are born while others are made. Patrick Bet-David adds another perspective, noting that anyone can be a "meh" entrepreneur—neither exceptional nor terrible, just average. However, he argues that to become truly outstanding, an entrepreneur must have been born with that innate drive.[cdxx]By understanding entrepreneurship and the key characteristics of successful entrepreneurs, aspiring entrepreneurs can develop the skills and mindset needed to improve their chances of success. While some argue that entrepreneurial talent is innate, research indicates that many essential traits can be learned and refined.[cdxxi] By grasping the core components of entrepreneurial success, individuals can pursue personal growth and development, cultivating the qualities and characteristics necessary to become a successful entrepreneur.

Thinking negatively can be detrimental for an entrepreneur—not because problems should be ignored, but because the focus should be on finding solutions rather than fixating on obstacles. It is easy to look at someone like Richard Branson and assume success came effortlessly. In reality, even the most accomplished entrepreneurs face setbacks and failures. Regardless of the company he starts or the profits he earns, there will be moments when things appear bleak. Optimism is the key to overcoming these challenges. Successful entrepreneurs are recognized for their unwavering optimism, which guides them through both lows and highs.[cdxxii] This does not mean they are happy all the time, but they refuse to let circumstances dictate their long-term goals. Great leaders also understand that mental exhaustion and overwork are a recipe for disaster. No matter how skilled he is, without proper wellness, he cannot execute effectively on his capabilities. Allocating time for self-care yields significant returns, and the same principle applies to employees. Encouraging his team to rest when needed ensures sustained performance and a healthier work environment.[cdxxiii]They will reward him with a positive mindset and a stronger work ethic. Risk-takers often excel as business leaders, but it is essential to have a clear approach and a backup plan in case things go wrong. By strategizing carefully and setting measurable goals, he can make quick adjustments and find effective solutions. Test his product or service with a trusted group, review market research to ensure sufficient demand, and stay informed on industry trends.[cdxxiv] These steps help him take calculated risks while pursuing new opportunities.

Conclusion:-

Successful entrepreneurs rely on honesty, capability, judgment, and skill. Aspiring entrepreneurs should focus on improving communication, teamwork, leadership, delegation, perseverance, tenacity, and work ethic. Networking with other entrepreneurs provides mentoring, learning, and collaboration opportunities. Cultivating an entrepreneurial mindset requires proactivity, problem-solving, and learning from mistakes. Creativity, personal branding, and market differentiation are essential strategies for success. Practical experience through projects, ventures, or collaborative initiatives provides valuable lessons. One of the first challenges entrepreneurs face is securing funding, as realizing an idea requires courage, vision, and resourcefulness. Entrepreneurs transform low-value resources into profitable opportunities and must understand the various financing options available. Entrepreneurship is one of the most critical drivers of a country's economic development. According to Harbison, entrepreneurs are the primary catalysts of innovation. While entrepreneurship carries significant risks like startup failures, funding shortages, poor sales decisions, or insufficient market demand and that remains a key mechanism for progress and growth. This inherent risk places entrepreneurship beyond the comfort zone, requiring resilience and strategic thinking. Economic growth, measured as a sustained increase in real income, is greatly supported by entrepreneurial communities, which identify and establish profitable ventures that raise per capita income and improve the overall quality of life. By creating enterprises, entrepreneurs generate employment opportunities and contributing to poverty alleviation as income levels rise. China is a good example of entrepreneurship driving national development. Despite initial challenges in meeting international standards, Chinese firms have increasingly aligned with global norms, enhancing their credibility and access to international markets. The government has supported this growth through policies, infrastructure development, and financial incentives, fostering an environment conducive to innovation and expansion.

Entrepreneurship is one of the most critical drivers of a country's economic development. According to Harbison, entrepreneurs are the primary catalysts of innovation. While entrepreneurship carries significant risks—such as startup failures, funding shortages, poor sales decisions, or insufficient market demand—it remains a key mechanism for progress and growth. This inherent risk places entrepreneurship beyond the comfort zone, requiring resilience and strategic thinking. Economic growth, measured as a sustained increase in real income, is greatly supported by entrepreneurial communities, which identify and establish profitable ventures that raise per capita income and improve the overall quality of life. By creating enterprises, entrepreneurs generate employment opportunities both directly and indirectly, contributing to poverty alleviation as income levels rise. A clear example of entrepreneurship driving national development can be seen in China. Despite initial challenges in meeting international standards, Chinese firms have increasingly aligned with global norms, enhancing their credibility and access to international markets. The government has supported this growth through policies, infrastructure development, and financial incentives, fostering an environment conducive to innovation and expansion. The combination of entrepreneurial leadership, strategic market expansion, technological innovation, and government support has propelled Chinese firms to become major global players. This model of entrepreneurial development offers a valuable blueprint for other developing countries, such as Bangladesh, Pakistan, and India, to stimulate economic growth and create sustainable business ecosystems.

Extensive study and personal investigation have been undertaken, examining the perspectives of highly successful global entrepreneurs on the nature versus nurture controversy. Furthermore, this debate has been examined and substantiated through pragmatic research, delving into the principal attributes that define prosperous entrepreneurs in the era of 4IR. Deeper exploration into this subject revealed compelling studies investigating the innate or cultivated origins of entrepreneurial achievement. One finding indicates that such individuals are, in fact, born. A more intriguing revelation, however, is that successful entrepreneurs are also made. A particularly concerning truth is that the conventional education system frequently operates in opposition to entrepreneurial values. From a young age, instruction emphasizes high performance and the acquisition of accolades. Risk-taking, perseverance, bravery, and nonconformity are fundamental to entrepreneurship, as achievement is unattainable without venture and daring. Nonetheless, youth raised in entrepreneurial environments exhibit a

significantly higher propensity to become entrepreneurs themselves, primarily because they are not conditioned to avoid risk. Consequently, those born into such circumstances are typically successful. They benefit from quality guidance, instruction, and a supportive environment, and their inherent comprehension of business operations leads to their predictable success and economic development.

Successful entrepreneurs consistently uphold high ethical standards in all business dealings and workplace interactions. They possess the confidence to make difficult decisions and follow through, exercising sound judgment even under pressure. Typically, successful entrepreneurs combine intrinsic traits with developed skills, including passion, creativity, adaptability, resilience, and strong leadership. They demonstrate a willingness to take calculated risks, persist in the face of challenges, and maintain a strong work ethic. Effective communication, networking abilities, and a customer-focused mindset are essential, as entrepreneurs understand and prioritize the needs of their customers. They manage finances efficiently, interpret financial statements clearly, and build professional relationships to create opportunities and support growth. By taking calculated risks and tackling challenges, entrepreneurs show strong commitment to their goals. Innovation is another hallmark of success, with creative ideas and solutions allowing them to stand out in competitive markets. In addition to risk management and strategic decision-making, entrepreneurship requires comfort with failure, the ability to prioritize tasks, and efficient time management. In conclusion, the majority of research indicates that accomplished entrepreneurs are developed. The pinnacle of entrepreneurial success is most often reached by those who experience failure and persist. These individuals actively pursue mentors, acquire training, learn from their environment, and possess the resolve to persevere, engaging directly with challenges and risks. As global development in the era of technological advancement, so successful entrepreneurs are the assets for nation and globe.

References:-

[i] https://link.springer.com/article/10.1007/s11301-020-00193-7, accessed on 12 Sep 2025

[ii] https://www.amazon.com/Howards-Gift-Uncommon-Wisdom-Inspire/dp/1250004241/, accessed on 12 Sep 2025

[iii] https://www.amazon.com/Howards-Gift-Uncommon-Wisdom-Inspire/dp/1250004241/, accessed on 25 Sep 2025

[iv] https://hbr.org/2013/01/what-is-entrepreneurship, accessed on 12 Jul 2025

[v] https://online.stanford.edu/what-is-entrepreneurship, accessed on 12 Jul 2025

[vi]Shionoya, Yuichi (2007). Schumpeter and the Idea of Social Science: A Metatheoretical Study. Cambridge University Press. p. 14. ISBN 978-0521037969, accessed on 12 Jul 2025

[vii]Reisman, David A. (2004). Schumpeter's Market: Enterprise and Evolution. Cheltenham: Edward Elgar Publishing. p. 4. ISBN 978-1845420857, accessed on 12 Jul 2025

[viii]https://ageconsearch.umn.edu/record/49270/?ln=en#:~:text=Economic%20growth%20may%20have%20a,a%20larger%20number%20of%20people, accessed on 12 Jul 2025

[ix]"Entrepreneurship: A Survey of the Literature," David Audretsch, European Commission, 2003, accessed on 12 Jul 2025

[x] Albulescu CT, Draghici A (2016) Entrepreneurial activity and national innovative capacity in selected European countries. Int J Entrep Innov 17:155–172, available at: https://doi.org/10.1177/1465750316655902, accessed on 25 Sep 2025

[xi] Acs ZJ, Audretsch DB, Lehmann EE (2013) The knowledge spillover theory of entrepreneurship. Small Bus Econ 41:757–774, available at: https://doi.org/10.1007/s11187-013-9505-9, accessed on 25 Sep 2025

[xii] https://www.investopedia.com/articles/personal-finance/101414/why-entrepreneurs-are-important-economy.asp#citation-28, accessed on 12 Sep 2025

[xiii] https://hbr.org/2013/01/what-is-entrepreneurship, accessed on 25 Sep 2025

[xiv] Spengler, J. J. (1959), 'Adam Smith's theory of economic growth Part II'. Southern Economic Journal 26, 1–12.

[xv] Hughes, J. (1986), The Vital Few: The Entrepreneur and American Economic Progress. Oxford: Oxford University Press

[xvi] Katz, J. A. (2003), 'A chronology and intellectual trajectory of American entrepreneurship education: 1876–1999'. Journal of Business Venturing 18, 283–300, accessed on 12 Jul 2025

[xvii] https://www.igi-global.com/dictionary/gender-and-entrepreneurship-in-developing-economies/72294, accessed on 12 Jul 2025

[xviii] https://ceoentrepreneur.com/are-successful-entrepreneurs-born-or-made/, accessed on 14 Jul 2025

[xix]Ruangkrit, S. and Thechatakerng, P. (2015). Characteristics of Community Entrepreneurs in Chiangmai. Thailand. World Journal of Management. 6(1): 58 – 74, accessed on 23 Aug 2025

[xx] https://quasa.io/media/34-characteristics-of-successful-entrepreneurs, accessed on 23 Aug 2025

[xxi] Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. Journal of Applied Psychology, 90(6), 1265–1272, accessed on 23 Aug 2025

[xxii] https://www.businesspartners.co.za/the-four-most-common-traits-of-successful-entrepreneurs-with-examples/, accessed on 23 Aug 2025

[xxiii] https://startupsusa.org/what-is-entrepreneurship/, accessed on 25 Sep 2025

[xxiv] Atems B, Shand G (2018) An empirical analysis of the relationship between entrepreneurship and income inequality. Small Bus Econ 51:905–922. https://doi.org/10.1007/s11187-017-9984-1, accessed on 25 Sep 2025

[xxv] https://www.nber.org/books-and-chapters/role-innovation-and-entrepreneurship-economic-growth, accessed on 12 Sep 2025

[xxvi] Alvarez SA, Barney JB (2014) Entrepreneurial opportunities and poverty alleviation. Entrep Theory Pract 38:159–184, available at: https://doi.org/10.1111/etap.12078, accessed on 25 Sep 2025

[xxvii] Andersson M, Noseleit F (2011) Start-ups and employment dynamics within and across sectors. Small Bus Econ 36:461–483. https://doi.org/10.1007/s11187-009-9252-0, accessed on 25 Sep 2025

[xxviii] Acs ZJ, Varga A (2005) Entrepreneurship, agglomeration and technological change. Small Bus Econ 24:323–334, available at: https://doi.org/10.1007/s11187-005-1998-4, accessed on 25 Sep 2025
[xxix] Acs ZJ, Armington C (2004) Employment growth and entrepreneurial activity in cities. Reg Stud 38:911–927, available at: https://doi.org/10.1080/0034340042000280938, accessed on 25 Sep 2025
[xxx]Thomke, S. H. (2020). Experimentation works: The surprising power of business experiments. Harvard Business Press
[xxxi] https://www.nu.edu/blog/skills-needed-to-be-an-entrepreneur/, accessed on 23 Aug 2025
[xxxii]Zuzul, T., & Edmondson, A. C. (2017). The advocacy trap: When legitimacy building inhibits organizational learning. Academy of Management Discoveries, 3(3), 302–321, accessed on 23 Aug 2025
[xxxiii] Zott, C., & Huy, Q. N. (2007). How entrepreneurs use symbolic management to acquire resources. Administrative Science Quarterly, 52(1), 70–105, accessed on 23 Aug 2025
[xxxiv] Carrie, M., Van Stel, A., Thurik, R., & Wennekers, S. (2002). Economic development and business ownership: an analysis using data of 23 OEDC countries in the period 1976-1996. Small Business Economics. 19(3): 271-290, accessed on 23 Aug 2025
[xxxv] https://www.quora.com/What-are-some-qualities-of-a-great-business-owner-manager-What-makes-them-successful-and-what-can-we-learn-from-them-to-be-more-successful-ourselves, accessed on 23 Aug 2025
[xxxvi] https://eimrglobal.org/traditional-entrepreneurship-vs-modern-entrepreneurship/, accessed on 25 Sep 2025
[xxxvii] https://www.bls.gov/bdm/us_age_naics_00_table7.txt, accessed on 25 Sep 2025
[xxxviii] https://startupnation.com/start-your-business/lessons-business-school-entrepreneur/, accessed on 13 Sep 2025
[xxxix]Watson, John B. (1913). "Psychology as the Behaviorist Views It". Psychological Review. 20 (2): 158–177. doi:10.1037/h0074428. hdl:21.11116/0000-0001-9182-7. S2CID 145372026, accessed on 08 Aug 2025
[xl]Skinner, B. F. (1972). Beyond Freedom and Dignity. Vintage Books. ISBN 978-0-553-14372-0. OCLC 34263003, accessed on 13 Sep 2025
[xli]Bandura, A. (2006). "Toward a Psychology of Human Agency". Perspectives on Psychological Science. 1 (2): 164–80. doi:10.1111/j.1745-6916.2006. 00011.x. PMID 26151469, accessed on 08 Aug 2025
[xlii]Nicholls-Nixon, C., & L., Cooper, A. C., & Woo, C. Y. (2000). Strategic experimentation: Understanding change and performance in new ventures. Journal of Business Venturing,15(5), 493–521. https:// doi. org/ 10. 1016/S0883- 9026(98) 00018-4, accessed on 08 Aug 2025
[xliii] https://ideas.repec.org/top/top.country.downloads.html, accessed on 08 Aug 2025
[xliv]Shane, S., & Venkataraman, S. (2010). The promise of entrepreneurship as a field of research. The Academy of Management Review, 25(1), 217–226, accessed on 08 Aug 2025
[xlv]Boyd and Solarino, 2016 B.K. Boyd, A.M. Solarino Ownership of corporations: A review, synthesis, and research agenda Journal of Management, 42 (2016), pp. 1282-1314, 10.1177/0149206316633746, accessed on 27 Sep 2025
[xlvi]Carlborg et al., 2014 P. Carlborg, D. Kindström, C. Kowalkowski The evolution of service innovation research: A critical review and synthesis The Service Industries Journal, 34 (5) (2014), pp. 373-398, 10.1080/02642069.2013.780044, accessed on 27 Sep 2025
[xlvii]Covington, 2000 M.V. Covington Goal theory, motivation, and school achievement: An integrative review Annual Review of Psychology, 51 (2000), pp. 171-200, 10.1146/annurev.psych.51.1.171, accessed on 27 Sep 2025
[xlviii] Shane, S., & Nicolaou, N. (2021). Entrepreneurial behavior: Genetic or learned? Journal of Business Psychology, 36(3), 1–17, accessed on 27 Sep 2025
[xlix]Obschonka, M., & Stuetzer, M. (2020). Integrating psychological and genetic perspectives on entrepreneurship. Small Business Economics, 55(4), 921–940. https://doi.org/10.1007/s11187-019-00146-8, accessed on 27 Sep 2025
[l] Zhang, T., & Acs, Z. J. (2022). Personality traits and entrepreneurship: A cross-national study. Entrepreneurship Theory and Practice, 46(1), 97–125. https://doi.org/10.1177/10422587211029245, accessed on 27 Sep 2025
[li] Hoffmann, F. (2022). Our New World. Murmann Verlag, accessed on 27 Sep 2025
[lii] Nofal, A. M., Nicolaou, N., & Shane, S. (2021). The biology of entrepreneurship. In M. M. Gielnik, M. S. Cardon, & M. Frese (Eds.), The Psychology of Entrepreneurship: New Perspectives (pp. 61–79). Routledge, accessed on 27 Sep 2025
[liii] Shefsky, L. (1994). Entrepreneurs Are Made, Not Born. McGraw-Hill, accessed on 27 Sep 2025
[liv]Watson, John B. (1913). "Psychology as the Behaviorist Views It". Psychological Review. 20 (2): 158 177. doi:10.1037/h0074428. hdl:21.11116/0000-0001-9182-7. S2CID 145372026, accessed on 08 Aug 2025
[lv] Skinner, B. F. (1945). The operational analysis of psychological terms. Psychological Review, 52, 270–277, accessed on 27 Sep 2025
[lvi] Bandura, A. (1997). Self-Efficacy: The Exercise of Control. Freeman, accessed on 27 Sep 2025
[lvii] Wilkinson, A. (2015). The Creator's Code: The Six Essential Skills of Extraordinary Entrepreneurs. Simon & Schuster, accessed on 27 Sep 2025
[lviii] Leone, C., & Burns, J. (2000). The measurement of locus of control: Assessing more than meets the eye? The Journal of Psychology, 134(1), 63–76. https://doi.org/10.1080/00223980009600849, accessed on 27 Sep 2025
[lix] Schumpeter, J (1934): “The Theory of Economic Development”, Harvard University Press: Born, accessed on 27 Sep 2025
[lx] Leone, C., & Burns, J. (2000). The measurement of locus of control: Assessing more than meets the eye? The Journal of Psychology, 134(1), 63–76. https://doi.org/10.1080/00223980009600849, accessed on 27 Sep 2025
[lxi] Shane, S., & Nicolaou, N. (2021). Entrepreneurial behavior: Genetic or learned? Journal of Business Psychology, 36(3), 1–17, accessed on 27 Sep 2025
[lxii]Obschonka, M., & Stuetzer, M. (2020). The biological and genetic roots of entrepreneurship. Journal of Business Venturing, accessed on 27 Sep 202535(2), 105–122, accessed on 12 Sep 2025
[lxiii] Nofal, A. M., Nicolaou, N., & Shane, S. (2021). The biology of entrepreneurship. In M. M. Gielnik, M. S. Cardon, & M. Frese (Eds.), The Psychology of Entrepreneurship: New Perspectives (pp. 61–79). Routledge, accessed on 27 Sep 2025
[lxiv] Drucker, P. F. (1985). Innovation and Entrepreneurship. Harper & Row, accessed on 27 Sep 2025
[lxv] Gladwell, M. (2008). Outliers: The Story of Success. Little, Brown and Company, accessed on 27 Sep 2025

[lxvi]Sarasvathy, S. D. (2001). Effectuation: Toward a theory of entrepreneurial expertise. The Academy of Management Review, 26(2), 243–263, accessed on 27 Sep 2025
[lxvii] Wilkinson, A. (2015). The Creator's Code: The Six Essential Skills of Extraordinary Entrepreneurs. Simon & Schuster, accessed on 27 Sep 2025
[lxviii] Kotler, S. (2021). The Art of Impossible: A Peak Performance Primer. Harper Wave, accessed on 27 Sep 2025
[lxix] https://www.rethinkingentrepreneurship.com/entrepreneurship-annotated-bibliogr/three-waves-of-research-on-historical-entrepreneurship, accessed on 10 June 2025
[lxx] https://www.researchgate.net/publication/39731185_A_Conceptual_History_of_Entrepreneurial_Thought#,
[lxxi] https://www.sbs.strath.ac.uk/newsletter/2022-11/09.asp#, accessed on 12 Sep 2025
[lxxii] Cole, A. H. (1946), 'An approach to the study of entrepreneurship: A tribute to Edwin F. Gay'. Journal of Economic History 6, 1–15, accessed on 10 June 2025
[lxxiii] Gay, E. F. (1923–1924), 'The rhythm of history'. Harvard Graduates' Magazine 32, 1–16, accessed on 10 June 2025
[lxxiv] Shackle, G. L. S. (1966), The Nature of Economic Thought. Cambridge: Cambridge University Press
[lxxv] Ibid
[lxxvi] Ibid
[lxxvii] Schultz, T. W. (1980), 'Investment in entrepreneurial ability'. Scandinavian Journal of Economics 82, 437–448, accessed on 10 June 2025
[lxxviii] Schultz, T. W. (1975), 'The value of the ability to deal with disequilibria'. Journal of Economic Literature 13, 827–846, accessed on 10 June 2025
[lxxix] Ibid
[lxxx] Hughes, J. (1986), The Vital Few: The Entrepreneur and American Economic Progress. Oxford: Oxford University Press
[lxxxi] von Mises, L. (1949), Human Action: A Treatise on Economics. New Haven, CT: Yale University Press
[lxxxii] Kirzner, I. M. (1979b), Perception, Opportunity, and Profit: Studies in the Theory of Entrepreneurship. Chicago: University of Chicago Press
[lxxxiii] Schultz, T. W. (1980), 'Investment in entrepreneurial ability'. Scandinavian Journal of Economics 82, 437–448, accessed on 10 June 2025
[lxxxiv] Kirzner, I. M. (1973), Competition & Entrepreneurship. Chicago: University of Chicago Press
[lxxxv] Kirzner, I. M. (1985), Discovery and the Capitalist Process. Chicago: University of Chicago Press
[lxxxvi] Leibenstein, H. (1979b), 'The general X-efficiency paradigm and the role of the entrepreneur'. In Time, Uncertainty and Disequilibrium, Rizzo, M. (ed.). Lexington, MA: D. C. Heath, accessed on 10 June 2025
[lxxxvii] Kirzner, I. M. (1979a), 'Comment: X-inefficiency, error, and the scope for entrepreneurship'. In Time, Uncertainty and Disequilibrium, Rizzo, M. (ed.). Lexington, MA: D. C. Heath, accessed on 10 June 2025
[lxxxviii] Coase, R. H. (1937), 'The nature of the firm'. Economica N.S. 4, 386 405, accessed on 10 June 2025
[lxxxix] Arrow, K. J. (1974), The Limits of Organization. New York: W. W. Norton
[xc] Williamson, O. E. (1975), Markets and Hierarchies. New York: The Free Press
[xci] Williamson, O. E. (1985), The Economic Institutions of Capitalism. New York: The Free Press
[xcii] Malmgren, H. B. (1961), 'Information, expectations and the theory of the firm'. Quarterly Journal of Economics 75, 399–421, accessed on 10 June 2025
[xciii] Knight, F. H. (1921), Risk, Uncertainty and Profit. New York: Houghton Mifflin, accessed on 10 June 2025
[xciv] Ibid
[xcv] Ibid
[xcvi] Stauss, J. H. (1944), 'The entrepreneur: The firm'. Journal of Political Economy 52, 112–127, accessed on 10 June 2025
[xcvii]Beatty, Jack (1998). The World According to Peter Drucker. The Free Press. ISBN 978-0-684-83801-4, accessed on 14 Jul 2025
[xcviii] Murphy, Glenn (2023). Delivering on Drucker's Call to Action. Strategic Finance, Volume 104, Issue 7, Jan. 2023, accessed on 10 June 2025
[xcix] Drucker, Peter (2013). The Discipline of Innovation Chapter in On Innovation, Harvard Business Review, 2013,
[c] Ibid
[ci] https://www.salesforce.com/eu/blog/create-entrepreneurial-mindset/, accessed on 27 Sep 2025
[cii] https://ideas.repec.org/a/ajn/abrjou/v10y2025i3p45-49id315.html, accessed on 12 Aug 2025
[ciii]Aparicio, S., Urbano, D. and Audretsch, D., 2016. 'Institutional factors, opportunity entrepreneurship and economic growth: panel data evidence', Technological Forecasting and Social Change, 102: 45–61 https://doi.org/10.1016/j.techfore.2015.04.006, accessed on 29 Sep 2025
[civ] https://www.emerald.com/ijebr/article-abstract/16/2/92/119106/Entrepreneurial-competencies-a-literature-review?redirectedFrom=fulltext, accessed on 12 Aug 2025
[cv]Atems, B. and Shand, G., 2018. 'An empirical analysis of the relationship between entrepreneurship and income inequality', Small Business Economics, 51: 905–922 https://doi.org/10.1007/s11187-017-9984-1, accessed on 29 Sep 2025
[cvi]Collins, J. and Moore, D. (1970) The Organization Makers, Appleton-Century-Crofts, New York, 1970
[cvii]Opcit Peter Drucker, (1970)
[cviii]Gold, Steven K (2005) "Entrepreneur's Notebook" Learning Ventures Press, 2005
[cix]Hebert, R.F. and Link, A.N. (1988) The Entrepreneur: Mainstream Views and Radical Critiques. New York: Praeger, 2nd edition
[cx]Israel Kirzner, (1997) 'Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach', Journal of Economic Literature 35: 60-85, accessed on 29 Sep 2025
[cxi]Shane, S and Venkataraman, S (2000), 'The Promise of Entrepreneurship as a Field of Research', Academy of Management Review 25(1): 217-226, accessed on 29 Sep 2025

[cxii]Deakins, D.; Freel, M. S. (2009). "Entrepreneurial activity, the economy and the importance of small firms". Entrepreneurship and small firms. McGraw-Hill Education. ISBN 978-0-07-712162-4, accessed on 29 Sep 2025
[cxiii]Almeida, Felipe; De Paula, Nilson; Pessali, Huascar (2014). "Institutional entrepreneurship in building the Brazilian market of functional yogurts". British Food Journal. 116: 2–15. doi:10.1108/BFJ-02-2012-0028, accessed on 29 Sep 2025
[cxiv]Landstrom, H. (2007). Pioneers in Entrepreneurship and Small Business Research. Springer. ISBN 978-0-387-23633-9, accessed on 29 Sep 2025
[cxv]Lumpkin, GT and Dess, GG (1996) 'Clarifying the Entrepreneurial Orientation Construct and Linking it to Performance', Academy of Management Review 21(1): 135-172, accessed on 29 Sep 2025
[cxvi]Pinchot, G. (1985) Intrapreneuring, Harper and Row, New York, 1985
[cxvii]Joseph Schumpeter, (1950) Capitalism, Socialism, and Democracy, 3rd edition, Harper and Row, New York, 1950
[cxviii]Shane S., (2003) A general theory of entrepreneurship: the individual-opportunity nexus in New Horizons in Entrepreneurship series, Edward Elgar Publishing, accessed on 29 Sep 2025
[cxix]Stevenson, HH and Jarillo, JC (1990) 'A Paradigm of Entrepreneurship: Entrepreneurial Management', Strategic Management Journal 11: 17-27, accessed on 29 Sep 2025
[cxx]Scott A. Shane (2008). "7". The Illusions of Entrepreneurship: The Costly Myths That Entrepreneurs, Investors, and Policy Makers Live By. Yale University Press. ISBN 978-0-300-15006-3, accessed on 29 Sep 2025
[cxxi]Perry-Rivers, P. (October 2014). "Stratification, Economic Adversity, and Entrepreneurial Launch: The Converse Effect of Resource Position on Entrepreneurial Strategy". Entrepreneurship Theory & Practice. 40 (3): 685–712. doi:10.1111/etap.12137, accessed on 29 Sep 2025
[cxxii]Rauch, Jonathan (November 2018). "Generation next, Millennials will outnumber baby-boomers in 2019". The Economist. Archived from the original on 13 March 2019, accessed on 29 Sep 2025
[cxxiii]Henderson, James; Ferguson, Alastair (2014). International Partnership in Russia: Conclusions from the Oil and Gas Industry (reprint ed.). Springer Palgrave Macmillan. p. 86. ISBN 978-1137352279, accessed on 29 Sep 2025
[cxxiv] https://www.investopedia.com/terms/e/entrepreneur.asp, accessed on 20 Jul 2025
[cxxv]Carlen, Joe (2016). A Brief History of Entrepreneurship: The Pioneers, Profiteers, and Racketeers Who Shaped Our World. New York: Columbia University Press. p. 1, ISBN 978-0231542814, accessed on 20 Jul 2025
[cxxvi] Etuk, E. J. and Mbat, D. O., (2010). Entrepreneurship development for students and practitioners. Abuja: Century Frontiers Investment Limited, accessed on 20 Jul 2025
[cxxvii] European Commission, (2008). Final Report of the Expert Group Entrepreneurship in Higher Education, especially within non-business studies. Brussels: European Commission, March 2008, accessed on 20 Jul 2025
[cxxviii]Fems, K. M., Abara, O. & Poazi, F. W. D., (2016). Entrepreneurship: Cure for Economic Under-Development. A Theoretical Perspective. International Journal of Social, Behavioural, Educational, Economic, Business and Industrial Engineering, 10(9), pp. 3075-3080, accessed on 20 Jul 2025
[cxxix] Ogundele, O. J. K., Idris, A. A. and Ahmed-Ogundipe, K. A. (2009). Entrepreneurial Succession Problems in Nigeria's Family Businesses: A Threat to Sustainability. European Scientific Journal, 8(7), pp. 208-227, accessed on 20 Jul 2025
[cxxx]Izedonmi, P. F. & Okafor, C., (2010). The effect of entrepreneurship education on students' entrepreneurial intentions. Global Journal of Management and Business Research, 10(6), pp. 49-60, accessed on 20 Jul 2025
[cxxxi] Watkins-Mathys, L. (2009). Developing Student-led Entrepreneurship Learning: the South-East England Collaborative Model. Buckinghamshire: Buckinghamshire New University, accessed on 20 Jul 2025
[cxxxii] Kuratko, D. F., (2005). The Emergence of Entrepreneurship Education: Development, Trends, and Challenges. Journal of Entrepreneurship Theory and Practice, accessed on 20 Jul 2025
[cxxxiii] https://mlari.ciam.edu/peter-drucker-on-innovation-and-results, accessed on 20 Jul 2025
[cxxxiv]J. R. Lowerson, 'Slazenger, Ralph (1845–1910)', Oxford Dictionary of National Biography, Oxford University Press, 2004, accessed on 20 Jul 2025
[cxxxv]Casson, M. (2003) The Entrepreneur: An Economic Theory, second edition", Edward Elgar Publishing 2003, accessed on 20 Jul 2025
[cxxxvi]Peter Drucker, (1970) "Entrepreneurship in Business Enterprise", Journal of Business Policy, vol 1, 1970
[cxxxvii]https://books.google.com.bd/books/about/Innovation_and_Entrepreneurship.html?id=y8VjugEACAAJ&redir_esc=y, accessed on 10 Aug 2025
[cxxxviii] Hossain K A, (2023c), Evaluation of Prospect and Challenges of Artificial Intelligence (Al) and Preparation for Future, American Journal of Computer Science and Technology 6 (4), 148-169, accessed on 10 Aug 2025
[cxxxix]Stevenson H, Roberts M and Bhide A. 1999. □ e entrepreneurial venture, Sahlman W (Ed.). Harvard Business School, US, accessed on 10 Aug 2025
[cxl]Bernier L and Hafsi T. 2003, changing nature of public entrepreneurship. USA, Midwest Political Science Association Conference, accessed on 10 Aug 2025
[cxli] https://www.researchgate.net/publication/380262803_Entrepreneurship_-_Concepts_Characters_and_Theories,
[cxlii]Mishra A H, El-Osta H and Shaik S. 2010. Succession decisions in U. S. Family farm business. Journal of Agricultural and Resource Economics. 35:133-2, accessed on 10 Aug 2025
[cxliii] https://www.linkedin.com/pulse/why-world-needs-more-entrepreneurs-now-than-ever-megan-pauli-ovzif, accessed on 12 Jul 2025
[cxliv]Uplaonkar S S and Biradar. 2015. Development of agriculture in India through arbitrageurs, International Journal of Applied Research. 1(9):1063-66, accessed on 10 Sep 2025
[cxlv] Shailesh K, Gyanendra S and Yadav V K. 2013. Factors influencing entrepreneurial behaviour of vegetable growers. Indian Research Journal of Extension Education. 13(1):16- 19. 22, accessed on 10 Aug 2025
[cxlvi] https://www.researchgate.net/publication/5967914_Entrepreneurship_Research_and_Practice, accessed on 10 Sep 2025

[cxlvii] https://www.entrepreneur.com/en-in/women-entrepreneur/tracing-the-rise-of-women-entrepreneurs/329874, accessed on 10 Sep 2025
[cxlviii] LIMS, (2023), Nobody always sees the whole pictures, our AI do; available at: www.lmis.de/im-wandel-der-zeit-von-industrie-1-0-bis-4-0,accessed on 15 Aug 2025
[cxlix]Hossain, K. A., (2023), An overview of merchant ships, International Journal of Novel Research and Development (IJNRD), Vol 8, Issue 6, June 2023, ISSN 2456-4184, accessed on 13 Aug 2025
[cl]Hossain, K. A., (2023), An Overview of Naval Ships, Scientific Research Journal (SCIRJ) 11 (6), ISSN: 2201-2796, June 2023, accessed on 15 Aug 2025
[cli]Stiemerling, (2015), 'KünstlicheIntelligenz' – AutomatisierunggeistigerArbeit, Big Data und das Internet der Dinge', Computer und Recht 762 ff,accessed on 15 Aug 2025
[clii]Forschungsunion and acatech, (2013), 'DeutschlandsZukunftalsProduktionsstandortsichern: Umsetzungsempfehlungfür das ZukunftsprojektIndustrie 4.0', PromotorengruppeKommunikation der ForschungsunionWirtschaft – Wissenschaft,accessed on 15 Aug 2025
[cliii]Arbeitsmarkt und Wirtschaft, (2015), Industrie 4.0 und die Folgenfür IAB Forschungsbericht 8/2015, Institute for Employment Research, 12,accessed on 15 Aug 2025
[cliv]Hossain K A, (2023), Analysis of Present and Future Use of Artificial Intelligence (AI) in Line of 4th industrial Revolution (4IR), Scientific Research Journal 11 (8), ISSN: 2201-2796, Aug 2023, accessed on 14 Aug 2025
[clv]SandroPanagl,(2015), 'Digitalisierung der Wirtschaft - BedeutungChancen und Herausforderungen', Austrian Economic Chambers 5,accessed on 15 Aug 2025
[clvi]Hossain, K. A., (2023), Technological advancement and future of warship building, International Journal of Research and Development (IJNRD), Vol 8, Issue 5, May 2023, ISSN 2456-4184,accessed on 25 Sep 2025
[clvii]Bloomberg, (2016), available at: www.bloomberg.com/news/videos/2016-05-20/forward-thinking-march-of-the-machines, accessed on 25 Sep 2025
[clviii]Hossain, K. A., (2023), Evaluation of Influence of Internet of Things (IOT) Technologies and Devices in 21 Century, Scientific Research Journal 11 (7), ISSN: 2201-2796, Jul 2023, accessed on 25 Sep 2025
[clix]Apthorpe, N., et al, (2019), Keeping the smart home private with smart(er) IoT traffic shaping, Proceedings on Privacy Enhancing Technologies, 2019 (3): 128–148, accessed on 25 Sep 2025
[clx]Hossain, K. A., (2023),The Potential and Challenges of Quantum Technology in Modern Era, Scientific Research Journal 11 (6), Jun 2023, accessed on 25 Sep 2025
[clxi]https://www.mdpi.com/journal/IoT, accessed on 25 Sep 2025
[clxii]Desai, B.C.,(2017), IoT: imminent ownership threat. In Proceedings of the 21st International Database Engineering & Applications Symposium, 82–89, accessed on 25 Sep 2025
[clxiii] What is IoT: The Internet of Things explained | McKinsey.https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-the-internet-of-things, accessed on 25 Sep 2025
[clxiv]http://it-in-industry.org/index.php/itii/article/view/702, accessed on 25 Sep 2025
[clxv] https://nntc.digital/blog/4ir-how-to-exploit-the-fourth-industrial-revolution/, accessed on 29 Sep 2025
[clxvi]Kurzweil Ray, (2005), The Singularity is Near: When Humans Transcend Biology. New York: Viking. ISBN 978-0-670-03384-3, accessed on 29 Sep 2025
[clxvii]Harris Karen, et al, (2018), "Labor 2030: The Collision of Demographics, Automation and Inequality," Bain and Company Reports, accessed on 29 Sep 2025
[clxviii] https://www.wired.co.uk/article/robots-in-the-workplace, accessed on 29 Sep 2025
[clxix] https://www.chinadaily.com.cn/opinion/2017-10/31/content_33921693.htm, accessed on 29 Sep 2025
[clxx]Hossain, K. A., (2023), Evaluation of Influence of Internet of Things (IOT) Technologies and Devices in 21 Century, Scientific Research Journal 11 (7), ISSN: 2201-2796, Jul 2023, accessed on 14 Aug 2025
[clxxi]Apthorpe, N., et al, (2019), Keeping the smart home private with smart(er) IoT traffic shaping, Proceedings on Privacy Enhancing Technologies, 2019 (3): 128–148, accessed on 14 Aug 2025
[clxxii]Hossain, K. A., (2023), The Potential and Challenges of Quantum Technology in Modern Era, Scientific Research Journal 11 (6), Jun 2023, accessed on 16 Aug 2025
[clxxiii]https://www.mdpi.com/journal/IoT, accessed on 31 May 2025
[clxxiv]Desai, B.C., (2017), IoT: imminent ownership threat. In Proceedings of the 21st International Database Engineering & Applications Symposium, 82–89, accessed on 27Aug 2025
[clxxv] What is IoT: The Internet of Things explained | McKinsey.https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-the-internet-of-things, accessed on 31 May 2025
[clxxvi]http://it-in-industry.org/index.php/itii/article/view/702,accessed on 31 May 2025
[clxxvii] https://www.linkedin.com/pulse/entrepreneur-21st-century-douglas-muir, accessed on 13 Sep 2025
[clxxviii] Housman M., (2018), Why 'Augmented Intelligence' Is a Better Way to Describe AI, AINews, 2018, accessed on 23 Jul 2025
[clxxix]Jordan M.I., (2015), Mitchell, T.M. Machine learning: Trends, perspectives, and prospects. Science 2015, 349, 255–260, accessed on 29 June 2025
[clxxx] Nebula AI, (2018), (NBAI)—Decentralized ai Blockchain Whitepaper, Montreal, QC, Canada: Nebula AI Team, 2018, accessed on 29 Sep 2025
[clxxxi] ITU, (Jan 2019), Unified architecture for machine learning in 5G and future networks. Technical Specification TU-T FG-ML5G-ARC5G, January 2019, accessed on 29 Sep 2025
[clxxxii]Pewresearch, (10 Dec 2018), available at https://www.pewresearch.org/internet/2018/12/10/artificial-intelligence-and-the-future-of-humans/, accessed on 29 Sep 2025

[clxxxiii]Serge Lopez, et al., (12 May 2020), Influence of artificial intelligence (AI) on firm performance: the business value of AI-based transformation projects, Business Process Management Journal, Issue(s) available: 157 – From Volume: 3 Issue: 1, to Volume: 29 Issue: 8, accessed on 29 Sep 2025
[clxxxiv]Siying Yang, et al., (Jul 2023), Intelligent transformation and sustainable innovation capability: Evidence from China, ScienceDirect, Elsevier, vol-55, part-B, accessed on 29 Sep 2025
[clxxxv] Dr. Navleen Kaur, et al., (4 Sep 2020), Banking 4.0: 'The Influence of Artificial Intelligence on the Banking Industry & How AI Is Changing the Face of Modern-Day Banks', International Journal of Management, 11 (6), 2020, pp. 577-585, accessed on 23 June 2025
[clxxxvi]J Anderson, et al., (10 Dec 2018), AI and the Future of Human, available at http://tony-silva.com/eslefl/miscstudent/downloadpagearticles/AIhumanfuture-pew.pdf, accessed on 29 Sep 2025
[clxxxvii]Anastasia Panori, (Dec 2021), Smart System of Innovation for Smart Place: Challenges in.., available at https://www.sciencedirect.com/science/article/abs/pii/S0264837719317302, accessed on 23 June 2025
[clxxxviii]D Jungwirth, et al., (03 Mar 2023), Artificial Intelligence and Public Health: An Exploratory Study, available at, Int. J. Environ. Res. Public Health 2023, 20(5), 4541; available at https://doi.org/10.3390/ijerph20054541, accessed on 23 June 2025
[clxxxix] Diana Hope, (31 Aug 2021), available at https://www.smartdatacollective.com/7-changes-artificial-intelligence-brings-to-the-education-sector/, accessed on 29 Sep 2025
[cxc]Learnpanda, (27 Sep 2021), available at https://learnpanda.school/blog/use-of-robots-in-different-industries/, accessed on 29 June 2025
[cxci] The Daily Star, (13 Feb 2022), available at https://www.thedailystar.net/recovering-covid-reinventing-our-future/blueprint-brighter-tomorrow/news/the-economic-impacts-the-4ir-bangladesh-2960641, accessed on 25 June 2025
[cxcii] NNTC, (12 Feb 2021), available at https://nntc.digital/blog/4ir-how-to-exploit-the-fourth-industrial-revolution/,accessed on 24 June 2025
[cxciii]Kurzweil Ray, (2005), The Singularity is Near: When Humans Transcend Biology. New York: Viking. ISBN 978-0-670-03384-3, accessed on 29 Sep 2025
[cxciv] Harris Karen, et al., (2018), "Labor 2030: The Collision of Demographics, Automation and Inequality," Bain and Company Reports, accessed on 29 Sep 2025
[cxcv] IBM Global AI Adoption Index, (May 2022), available at https://www.ibm.com/downloads/cas/GVAGA3JP, accessed on 11 Aug 2025
[cxcvi]PRNewswire, (12 Jan 2021), Available at https://www.prnewswire.com/, accessed on 11 Aug 2025
[cxcvii]Housman, M., (2018), Why 'Augmented Intelligence' Is a Better Way to Describe AI, AINews, 2018, accessed on 27Aug 2023
[cxcviii]Jordan, M.I.; Mitchell, T.M. Machine learning: Trends, perspectives, and prospects. Science 2015, 349, 255–260
[cxcix]Nebula Ai (NBAI)—Decentralized AI Blockchain Whitepaper, Montreal, QC, Canada: Nebula AI Team, 2018, accessed on 29 Sep 2025
[cc]Unified architecture for machine learning in 5G and future networks, Technical Specification TU-T FG-ML5G-ARC5G, January 2019, accessed on 27Aug 2025
[cci] https://www.pewresearch.org/internet/2018/12/10/artificial-intelligence-and-the-future-of-humans/, accessed on 29 Sep 2025
[ccii] https://www.emerald.com/insight/content/doi/10.1108/BPMJ-10-2019-0411/full/html, accessed on 23 June 2025
[cciii] https://www.sciencedirect.com/science/article/abs/pii/S1544612323003355, accessed on 23 June 2025
[cciv] https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3661469, accessed on 23 June 2025
[ccv] https://stock.adobe.com/tw/search?k=%22future+world%22, accessed on 27Aug 2025
[ccvi] https://robinmarkphillips.com/marriage-humans-robots-part-2/, accessed on 21 Aug 2025
[ccvii] http://tony-silva.com/eslefl/miscstudent/downloadpagearticles/AIhumanfuture-pew.pdf, accessed on 23 June 2025
[ccviii] https://www.sciencedirect.com/science/article/abs/pii/S0264837719317302, accessed on 23 June 2025
[ccix] https://www.mdpi.com/1660-4601/20/5/4541, accessed on 23 June 2025
[ccx] https://discover.bot/bot-talk/role-of-artificial-intelligence-in-education/, accessed on 23 June 2025
[ccxi] https://itchronicles.com/artificial-intelligence/ai-in-education/, accessed on 23 June 2023
[ccxii]https://www.thedailystar.net/recovering-covid-reinventing-our-future/blueprint-brighter-tomorrow/news/the-economic-impacts-the-4ir-bangladesh-2960641, accessed on 29 Sep 2025
[ccxiii] Foxconn, (28 Jul 2023), available at https://www.foxconn.com/en-us/,accessed on 25 Sep 2025
[ccxiv]Wilkins Mira, et al., (27 June 2011), American Business Abroad: Ford on Six Continents. Cambridge University Press, ISBN 9781107007970,accessed on 25 Sep 2025
[ccxv] The Guardian, (28 Sep 2016), available at https://www.theguardian.com/technology/2016/sep/28/google-facebook-amazon-ibm-microsoft-partnership-on-ai-tech-firms, accessed on 25 Sep 2025
[ccxvi]Openai, (28 Jun 2023), available at https://openai.com/blog/introducing-openai,accessed on 25 Sep 2025
[ccxvii] Roberts Jacob, (2016), "Thinking Machines: The Search for Artificial Intelligence". Distillations.Vol. 2, no. 2.
[ccxviii]Omohundro Steve, (2008), The Nature of Self-Improving Artificial Intelligence. presented and distributed at the 2007 Singularity Summit, San Francisco, CA,accessed on 25 Sep 2025
[ccxix]Vinge Vernor, (1993), "The Coming Technological Singularity: How to Survive in the Post-Human Era". Vision 21: Interdisciplinary Science and Engineering in the Era of Cyberspace: 11. Bibcode:1993vise.nasa...11V
[ccxx]Reedy Christianna, (2017), "Kurzweil Claims That the Singularity Will Happen by 2045". Futurism, accessed on 10 June 2025
[ccxxi]Kurzweil, Ray (2005). The Singularity is Near. Penguin Books, ISBN 978-0-670-03384-3, accessed on 26 Jul 2023
[ccxxii]Urbina Fabio, et al., (7 March 2022), "Dual use of artificial-intelligence-powered drug discovery", Nature Machine Intelligence, 4 (3): 189–191. doi:10.1038/s42256-022-00465-9,accessed on 25 Sep 2025
[ccxxiii]Chalmers David J., (2016), "The Singularity", Science Fiction and Philosophy, John Wiley & Sons, Inc, doi:10.1002/9781118922590.ch16. ISBN 9781118922590,accessed on 25 Sep 2025

[ccxxiv]Ray Kurzweil, (1999), The Age of Spiritual Machines, Viking; 1999, ISBN 978-0-14-028202-3. pp. 30, 32 Archived 2021-02-15 at the Wayback Machine,accessed on 25 Sep 2025
[ccxxv] Moravec Hans, (1999), Robot: Mere Machine to Transcendent Mind. Oxford U. Press, ISBN 978-0-19-513630-2,accessed on 25 Sep 2025
[ccxxvi]Moravec Hans, (1988), Mind Children. Harvard University Press. ISBN 978-0-674-57616-2, accessed on 28 June 2025
[ccxxvii]Dyson George, (1998), Darwin among the Machines. Allan Lane Science. ISBN 978-0-7382-0030-9, accessed on 28 June 2025
[ccxxviii] Acemoglu D.,et al., (2012). Why nations fail: the origins of power, prosperity, and poverty. Random House Digital, Inc, accessed on 28 June 2025
[ccxxix] IGM Chicago (30 June 2017). "Robots and Artificial Intelligence", www.igmchicago.org, accessed on 15 June 2023
[ccxxx] https://www.forbes.com/sites/bernardmarr/2023/06/02/the-15-biggest-risks-of-artificial-intelligence/, accessed on 25 June 2025
[ccxxxi] https://medium.com/neuranest/the-contribution-of-ai-in-management-level-of-an-organization-35fa0fe68bbd, accessed on 25 June 2025
[ccxxxii] Neha Soni, (18 Jun 2018), available at https://www.researchgate.net/profile/Neha-Soni-13/publication/325644986_Impact_of_Artificial_Intelligence_on_Business/, accessed on 25 June 2025
[ccxxxiii]Lohr Steve, (2017), "Robots Will Take Jobs, but Not as Fast as Some Fear, New Report Says". The New York Times, accessed on 25 Sep 2025
[ccxxxiv]Morgenstern Michael, (9 May 2015), "Automation and anxiety", The Economist, accessed on 25 Sep 2025
[ccxxxv]Autor D., and Dorn, D., (2013), The growth of low skill service jobs and the polarization of the us labor market. American Economic Review, vol. forthcoming,accessed on 25 Sep 2025
[ccxxxvi]Harari Yuval Noah, (October 2018), "Why Technology Favors Tyranny", The Atlantic,accessed on 25 Sep 2025
[ccxxxvii]National Research Council, (1999), "Developments in Artificial Intelligence", Funding a Revolution: Government Support for Computing Research.National Academy Press. ISBN 978-0-309-06278-7,accessed on 25 Sep 2025
[ccxxxviii]Robitzski Dan, (5 September 2018), "Five experts share what scares them the most about AI", accessed on 23 Jul 2025
[ccxxxix]Berdahl Carl Thomas, et al., (7 February 2023). "Strategies to Improve the Impact of Artificial Intelligence on Health Equity: Scoping Review". JMIR AI. 2: e42936. doi:10.2196/42936, accessed on 25 Jul 2025
[ccxl]Dockrill Peter, (27 June 2027), Robots With Flawed AI Make Sexist And Racist Decisions, Experiment Shows Archived 27 June 2022 at the Wayback Machine, Science Alert, accessed on 23 Jul 2025
[ccxli]Hugenholtz P., et al., (October 2021). "Copyright and Artificial Creation: Does EU Copyright Law Protect AI-Assisted Output?", IIC - International Review of Intellectual Property and Competition Law, 52 (9): 1190–1216. doi:10.1007/s40319-021-01115-0, accessed on 25 Jul 2025
[ccxlii]Law Library of Congress U.S., (2019), Global Legal Research Directorate, issuing body, Regulation of artificial intelligence in selected jurisdictions, accessed on 23 Jul 2023
[ccxliii]Openai, (022 May 2023), "Governance of superintelligence", openai.com, accessed on 25 Sep 2025
[ccxliv] https://venturebeat.com/ai/generative-ai-may-only-be-a-foreshock-to-ai-singularity/, accessed on 23 June 2025
[ccxlv] https://www.popularmechanics.com/technology/robots/a42612745/singularity-when-will-it-happen/, accessed on 23 June 2025
[ccxlvi]Giles Martin, (13 September 2018), "Artificial intelligence is often overhyped—and here's why that's dangerous", MIT Technology, Archived from the original on 11 March 2023, accessed on 28 June 2025
[ccxlvii]McGaughey E, (2022), Will Robots Automate Your Job Away? Full Employment, Basic Income, and Economic Democracy, p. 51(3) Industrial Law Journal 511–559, SSRN 3044448,accessed on 25 Sep 2025
[ccxlviii]E McGaughey, (2022), 'Will Robots Automate Your Job Away? Full Employment, Basic Income, and Economic Democracy' 51(3) Industrial Law Journal 511–559, accessed on 25 Sep 2025
[ccxlix] The AI Dilemma, (24 Mar 2023), available at www.humanetech.com, Accessed on 10 June 2023
[ccl]Yudkowsky Eliezer, (2008). "Artificial Intelligence as a Positive and Negative Factor in Global Risk" (PDF). Global Catastrophic Risks: 308–345,accessed on 25 Sep 2025
[ccli]Dowd, Maureen (April 2017). "Elon Musk's Billion-Dollar Crusade to Stop the A.I. Apocalypse". The Hive. Archived from the original on 26 July 2018, accessed on 30 Sep 2025
[cclii]Turing A M, (1996). "Intelligent Machinery, A Heretical Theory". 1951, Reprinted PhilosophiaMathematica. 4 (3): 256–260. doi:10.1093/philmat/4.3.256,accessed on 30 Sep 2025
[ccliii]Graves Matthew, (8 November 2017). "Why We Should Be Concerned About Artificial Superintelligence". Skeptic (US magazine),Vol- 22, no- 2, Archived from the original on 13 November 2017, accessed on 10 June 2023
[ccliv] Quora, (2022), available at https://www.quora.com/Is-it-possible-that-Alpha-Zero-will-eventually-solve-chess,accessed on 30 Sep 2025
[cclv]M Arntz, (2013), https://wecglobal.org/uploads/2019/07/2016_OECD_Risk-Automation-Jobs.pdf, accessed on 01 Aug 2025
[cclvi]Weforum,(01Jan2022),availableathttps://www3.weforum.org/docs/WEF_Future_Readiness_of_SMEs_and_Mid_Sized_Companies_A_Year_On_2022.pdf, accessed on 01 Aug 2025
[cclvii]Weforum, (23 May 2022), www3.weforum.org/docs/WEF_Global_Cybersecurity_Outlook_2022.pdf, accessed on 01 Aug 2025
[cclviii] Questrom, (17 Oct 2017), https://www.bu.edu/questrom/2017/10/17/three-ways-your-digital-strategy-can-amplify-employee-talent/, accessed on 01 Aug 2025
[cclix] Sorin-George Tomaa, Ana-Maria Grigorea, Paul Marinescua. Faculty of Administration and Business, University of Bucharest, 4-12 Regina Elisabeta, Bucharest, Romania, accessed on 17 Jul 2025

[cclx] Brunt, Liam (2005). “Rediscovering Risk: Country Banks as Venture Capital Firms in the First Industrial Revolution.” Journal of Economic History, 66/1: 74- 102. Carnevali, Francesca. Europe’s Advantage: Banks and Small firms in Britain, France, Germany and Italy since 1918. Oxford: Oxford University Press
[cclxi] https://journals.aom.org/doi/abs/10.5465/AMPROC.2024.19042abstract, accessed on 17 Jul 2025
[cclxii] Wim Naudé, United Nation University, Blog. https://unu.edu/publications/articles/are-entrepreneurialsocieties-also-happier.html, accessed on 17 Jul 2025
[cclxiii] https://certified-sustainable.co.uk/sustainable-businesses-attract-talented-workers/, accessed on 17 Jul 2025
[cclxiv] https://www.economicimpactcatalyst.com/podcast, accessed on 17 Jul 2025
[cclxv] DK Sinha, Your Article Library, the Next generation library Article. (1) http://www.yourarticlelibrary.com/essay/role-ofentrepreneurship-in-economic-development/40658, accessed on 17 Jul 2025
[cclxvi] Carree, M., and R. Thurik. “The lag structure of the impact of business ownership on economic performance in OECD countries.” Small Business Economics, accessed on 17 Jul 2025
[cclxvii] Carree, M., and R. Thurik. “The lag structure of the impact of business ownership on economic performance in OECD countries.” Small Business Economics, accessed on 17 Jul 2025
[cclxviii]https://academic.oup.com/book/4766/chapter-abstract/147024610? accessed on 17 Jul 2025
[cclxix] Cooper, “Entrepreneurship: The Past, The Present, The Future.” In Handbook of Entrepreneurship Research, 21-36, accessed on 17 Jul 2025
[cclxx] https://www.economicimpactcatalyst.com/blog/entrepreneur-economic-development, accessed on 17 Jul 2025
[cclxxi]Lemo. T., 2013. Nigeria: Development and the Entrepreneurial Challenge. This Day Newspaper http://allafrica.com/stories/201301110382.html?viewall=1 (Access August 14, 2013), accessed on 17 Jul 2025
[cclxxii]Vinlander, D. (2012). Problems of entrepreneurship and Nigeria economic development. Journal of Management Sciences, 7(3), pp. 53 65, accessed on 30 Sep 2025
[cclxxiii] Kyro, K., (2001). To grow or not to grow? Entrepreneurship and sustainable development. International Journal of Sustainable Development, World Edition, 8, pp. 15-28, accessed on 30 Sep 2025
[cclxxiv] Schmitz, J. A., (1989). Imitation, Entrepreneurship, and Long-run Growth. Journal of Political Economy, 97(3), pp. 721–739, accessed on 17 Jul 2025
[cclxxv] Wong, P. K., Ho, Y. P. & Autio, E., (2005). Entrepreneurship, innovation and economic growth: evidence from GEM data. Journal of Small Business Economics, 24(3), pp. 335-350, accessed on 17 Jul 2025
[cclxxvi] Thaddeus, E. (2012). Perspectives: Entrepreneurship development & growth of enterprises in Nigeria. Entrepreneurial Practice Review, 2(2), pp. 31-35, accessed on 17 Jul 2025
[cclxxvii] Batalla, E. V., (2010). Entrepreneurship and Philippine Development. Canadian Journal of Development Studies, 31(1–2), pp. 341–365, accessed on 17 Jul 2025
[cclxxviii] Naude, W. (2010). Entrepreneurship is not a binding constraint on growth and development poorest countries. World Development, 39(1), pp: 33-34, 2011, accessed on 17 Jul 2025
[cclxxix]Fasna, K. O., (2006). Entrepreneurship Theory: Strategy and Practice. Abuja: Bee Printing and Publishing Company, accessed on 17 Jul 2025
[cclxxx] https://online.hbs.edu/blog/post/successful-entrepreneur-stories, accessed on 12 Sep 2025
[cclxxxi] https://www.youtube.com/watch?v=74dBvveSQQM, accessed on 12 Sep 2025
[cclxxxii] https://aits-tpt.edu.in/wp-content/uploads/2023/08/Entreprenurship-Development-min.pdf, accessed on 12 Sep 2025
[cclxxxiii] https://www.bajajfinserv.in/entrepreneurship-development, accessed on 12 Sep 2025
[cclxxxiv] https://www.youtube.com/watch?v=nfOPUN_0xm8, accessed on 12 Sep 2025
[cclxxxv] https://www.investopedia.com/terms/e/entrepreneur.asp#, accessed on 17 Jul 2025
[cclxxxvi]Shane, S. (2000). "The Promise of Entrepreneurship as a Field of Research". Academy of Management Review. 25 (1): 217–226. doi:10.5465/AMR.2000.2791611, accessed on 13 Jul 2025
[cclxxxvii]Reynolds PD, Hay M, Bygrave WD et al. (2002) Global Entrepreneurship Monitor: 2002 Global Executive Report. Kansas City, MO: Kauffman Foundation, accessed on 13 Jul 2025
[cclxxxviii]Charles W. L. Hill; Gareth R. Jones (2008). Essentials of Strategic Management. South-Western College Pub. ISBN 978-0-547-19432-5, accessed on 17 Jul 2025
[cclxxxix] https://www.businessinsider.in/strategy/apple-ceo-tim-cook-wakes-up-every-day-at-345-a-m-i-tried-doing-it-for-a-week-and-it-made-me-shockingly-productive-/articleshow/70881139.cms, accessed on 13 Jul 2025
[ccxc] https://www.quora.com/How-do-you-stay-organized-and-manage-time-effectively-as-an-entrepreneur-1, accessed on 17 Jul 2025
[ccxci] https://blog.fresent.com/taking-risks-entrepreneurs-successful/, accessed on 17 Jul 2025
[ccxcii] https://www.investopedia.com/ask/answers/040615/what-risks-does-entrepreneur-face.asp, accessed on 17 Jul 2025
[ccxciii] https://en.wikipedia.org/wiki/Bill_Campbell_(business_executive), accessed on 17 Jul 2025
[ccxciv]Ann., Camp, Carole (2004). American women inventors. Berkeley Heights, NJ: Enslow Publishers. ISBN 978-0-7660-1538-8, accessed on 13 Jul 2025
[ccxcv] https://online.hbs.edu/courses/entrepreneurship-essentials/, accessed on 15 Jul 2025
[ccxcvi]https://www.inc.com/larry-kim/25-billionaire-quotes-about-success-in-business-amp-life.html, accessed on 15 Jul 2025
[ccxcvii] https://www.linkedin.com/pulse/introverts-can-successful-entrepreneurs-yvonne-a-jones-cps-ra8xe/, accessed on 13 Jul 2025
[ccxcviii] https://medium.com/swlh/you-can-be-an-introvert-a-successful-entrepreneur-if-you-know-certain-things-84e84b6a09c8,
[ccxcix] https://www.truity.com/blog/5-super-successful-introverts-and-what-they-did-right, accessed on 13 Jul 2025
[ccc] https://www.rrstar.com/story/opinion/columns/guest/2016/02/27/my-view-failure-success-two/32466898007/, accessed on 12 Sep 2025
[ccci] https://primeinsights.in/why-failure-is-the-pathway-to-success/#, accessed on 12 Sep 2025
[cccii] https://alignto day.com/blog/success-and-failing#, accessed on 12 Sep 2025

[cccciii] https://www.linkedin.com/pulse/importance-strong-work-ethic-entrepreneurship-every-day-hussain-cz0te/,
[ccciv]Wattles, Jackie (December 8, 2020), "SpaceX gets almost $900 million in federal subsidies to deliver broadband to rural America". CNN, Archived from the original on December 18, 2020, accessed on 13 Jul 2025
[cccv] https://www.quora.com/What-is-the-perfect-work-ethic-for-an-entrepreneur,
[cccvi] https://believe.evancarmichael.com/homepage, accessed on 13 Jul 2025
[cccvii] https://www.marsdd.com/our-story/entrepreneurship-skill-can-taught-can-learned/, accessed on 12 Sep 2025
[cccviii] https://www.entrepreneur.com/living/the-6-questions-i-ask-before-i-say-yes-to-anything/309695, accessed on 12 Sep 2025
[cccix] https://startupnation.com/grow-your-business/attitude-smart-ceos-say-yes/, accessed on 12 Sep 2025
[cccx] https://lassonde.utah.edu/yes-entrepreneurship-can-be-learned-heres-how/, accessed on 12 Sep 2025
[cccxi] https://www.wired.com/2008/02/marissa-mayer-r/, accessed on 13 Jul 2025
[cccxii] https://www.quora.com/Do-I-need-to-be-an-extrovert-in-order-to-be-a-good-entrepreneur, accessed on 13 Jul 2025
[cccxiii] https://beatechelette.com/in-business-is-it-better-to-be-an-extrovert-or-introvert/, accessed on 12 Sep 2025
[cccxiv]Hackman, M.Z.; Johnson, C.E. (2009). Leadership: A communication perspective (5th ed.). Long Grove, IL: Waveland, accessed on 13 Jul 2025
[cccxv]Baum, Robert J.; Locke, Edwin A.; Kirkpatrick, Shelley A. (1998). "A longitudinal study of the relation of vision and vision communication to venture growth in entrepreneurial firms". Journal of Applied Psychology. 83 (1): 43–54. doi:10.1037/0021-9010.83.1.43, accessed on 13 Jul 2025
[cccxvi]Locke, E.A.; Kirkpatrick, S.; Wheeler, J.K; Schneider, J; Niles, K.; Goldstein, H; Welsh, K; Chah, D.O. (1991). The essence of leadership. New York: Lexington Books, accessed on 13 Jul 2025
[cccxvii] https://www.cavendish.ac/effective-communication-for-entrepreneurs/, accessed on 12 Sep 2025
[cccxviii] https://www.britishcouncil.org.bd/en/business-communication-skills, accessed on 12 Sep 2025
[cccxix] https://www.beekeeper.io/blog/internal-communication-trends/, accessed on 30 Sep 2025
[cccxx]Giles, Howard; Edwards, America L.; Walther, Joseph B. (September 2023). "Communication accommodation theory: Past accomplishments, current trends, and future prospects". Language Sciences. 99: 101571. doi:10.1016/j.langsci.2023.101571, accessed on 30 Sep 2025
[cccxxi]Littlejohn, S., Foss, K. (2011). Theories of Human Communication (10 ed.). Long Grove, IL: Waveland Press. p. 203. ISBN 978-1-57766-706-3, accessed on 13 Jul 2025
[cccxxii]Rank, H (1976). Teaching about public persuasion. National Council of Teachers of English, accessed on 13 Jul 2025
[cccxxiii] https://www.ucanwest.ca/blog/education-careers-tips/5-tips-for-improving-business-communication-skills,
[cccxxiv]https://online.hbs.edu/blog/post/team-decision-making, accessed on 13 Jul 2025
[cccxxv] https://pubmed.ncbi.nlm.nih.gov/12510608/, accessed on 13 Jul 2025
[cccxxvi] https://www.indeed.com/career-advice/career-development/building-trust, accessed on 13 Jul 2025
[cccxxvii]Festinger, L. (1954). "A theory of social comparison processes". Human Relations. 7 (2): 117–140. doi:10.1177/001872675400700202, accessed on 13 Jul 2025
[cccxxviii]Gough, Harrison G.; McClosky, Herbert; Meehl, Paul E. (1952). "A personality scale for social responsibility". The Journal of Abnormal and Social Psychology. 47 (1): 73–80. doi:10.1037/h0062924. ISSN 0096-851X, accessed on 13 Jul 2025
[cccxxix]Druckman, Daniel; Bjork, Robert A., eds. (1994). Learning, Remembering, Believing: Enhancing Human Performance. Washington, D.C.: National Academies Press. doi:10.17226/2303. ISBN 978-0-309-04993-1, accessed on 11 Jul 2025
[cccxxx]Compte, O.; Postlewaite, A. (2004). "Confidence-enhanced performance". The American Economic Review. 94 (5): 1536–1557, accessed on 11 Jul 2025
[cccxxxi]Maslow, A. H. (1 July 1943). "A theory of human motivation". Psychological Review. 50 (4): 370–396. CiteSeerX 10.1.1.334.7586. doi:10.1037/h0054346. ISSN 1939-1471, accessed on 11 Jul 2025
[cccxxxii]Hobfoll, Stevan E. (1988). The Ecology of Stress. Taylor & Francis. ISBN 9780891168454, accessed on 11 Jul 2025
[cccxxxiii]Deutsch, Morton; Gerard, Harold B. (1955). "A study of normative and informational social influences upon individual judgment". The Journal of Abnormal and Social Psychology. 51 (3): 629–636. doi:10.1037/h0046408, accessed on 11 Jul 2025
[cccxxxiv]Johnson, Dominic D.P.; Fowler, James H. (14 September 2011). "The evolution of overconfidence", Nature, 477 (7364): 317-320, Bibcode:2011Natur.477..317J. doi:10.1038/nature10384, accessed on 11 Jul 2025
[cccxxxv]Conger, Jay A.; Kanungo, Rabindra N. (1994). "Charismatic Leadership in Organizations: Perceived Behavioral Attributes and Their Measurement". Journal of Organizational Behavior. 15 (5): 439–452. doi:10.1002/job.4030150508, accessed on 20 Jul 2025
[cccxxxvi] https://www.linkedin.com/advice/0/heres-how-you-can-cultivate-sustain-robust-relationships-l6jrc, accessed on 20 Jul 2025
[cccxxxvii] https://execsintheknow.com/magazines/april-2024-issue/the-power-of-listening-leveraging-customer-feedback-to-drive-brand-success/#, accessed on 20 Jul 2025
[cccxxxviii] https://www.qualtrics.com/en-gb/experience-management/customer/customer-relationship-building/#, accessed on 20 Jul 2025
[cccxxxix] https://online.stmarys.ac.uk/blogs/why-financial-literacy-is-essential-for-entrepreneurs/, accessed on 20 Jul 2025
[cccxl] https://www.linkedin.com/pulse/why-business-owners-should-listen-customers-rishu-chaitanya-bktpf/, accessed on 20 Jul 2025
[cccxli] https://www.linkedin.com/pulse/financial-management-entrepreneurs-key-strategies-success-lone-mosito-o2qff/, accessed on 20 Jul 2025
[cccxlii] https://www.linkedin.com/pulse/financial-management-tips-entrepreneurs-business-owners-776af/, accessed on 20 Jul 2025
[cccxliii] https://online.york.ac.uk/resources/how-to-manage-personal-and-business-finances-as-an-entrepreneur/, accessed on 20 Jul 2025
[cccxliv] https://foundersmag.com/financial-management/#, accessed on 20 Jul 2025
[cccxlv] https://www.quora.com/How-do-you-move-forward-with-subjects-that-didn-t-meet-your-expectations-like-English-in-your-case, accessed on 20 Jul 2025

[cccxlvi] https://www.robinwaite.com/blog/building-resilience-as-an-entrepreneur-how-to-overcome-setbacks-and-stay-motivated, accessed on 20 Jul 2025
[cccxlvii] https://www.linkedin.com/advice/3/youre-facing-setbacks-your-entrepreneurial-journey-ag6lc, accessed on 20 Jul 2025
[cccxlviii] https://economicinsider.com/overcoming-challenges-and-setbacks-strategies-for-entrepreneurs/, accessed on 20 Jul 2025
[cccxlix] https://wadhwanifoundation.org/staying-motivated-during-tough-times-6-strategies-for-entrepreneurs/, accessed on 20 Jul 2025
[cccl] https://www.quora.com/How-can-I-overcome-challenges-and-setbacks-in-my-entrepreneurial-journey, accessed on 20 Jul 2025
[ccccli] https://fastercapital.com/topics/overcoming-challenges-with-a-positive-mindset.html, accessed on 01 Oct 2025
[ccclii] https://www.womenpreneur-digital.com/blog/building-a-resilient-mindset-nurturing-strength-in-entrepreneurs-86.html, accessed on 01 Oct 2025
[ccccliii] https://fastercapital.com/content/Rehabilitation-Center-Testimonial--Startups-and-Rehabilitation-Centers--Stories-of-Resilience-and-Recovery.html, accessed on 01 Oct 2025
[ccccliv] https://vizologi.com/right-attitude-for-entrepreneurial-success/, accessed on 01 Oct 2025
[ccclv] https://themeaningmovement.com/edisons-secret-to-success-and-how-you-can-overcome-the-fear-of-failure/, accessed on 20 Jul 2025
[ccclvi] https://fastercapital.com/topics/overcoming-challenges-with-a-positive-attitude.html/1, accessed on 20 Jul 2025
[ccclvii] https://wadhwanifoundation.org/staying-motivated-during-tough-times-6-strategies-for-entrepreneurs/, accessed on 20 Jul 2025
[ccclviii] https://link.springer.com/chapter/10.1007/978-3-031-71064-3_10, accessed on 20 Jul 2025
[ccclix] https://www.linkedin.com/pulse/resilience-determination-entrepreneurs-dr-pravin-dattatraya-badhe/, accessed on 20 Jul 2025
[ccclx]Zuzul, T., & Tripsas, M. (2020). Start-up inertia versus flexibility: The roleof founder identity in a nascent industry. Administrative ScienceQuarterly, 65(2), 395–433, accessed on 01 Oct 2025
[ccclxi] Westhead, P., & Wright, M. (Eds.). (2000). Advances in entrepreneurship (Vol. 2). Cheltenham: Edward Elgar,
[ccclxii] https://quasa.io/media/the-anatomy-of-an-entrepreneur, accessed on 19 Aug 2025
[ccclxiii] Yang, X., Lan, T., Qiu, H., & Zhang, C. (2025). Nonlinear Causal Discovery via Dynamic Latent Variables. IEEE Transactions on Automation Science and Engineering, accessed on 19 Aug 2025
[ccclxiv] Lam, C. F., Romney, A. C., Newton, D. W., & Wu, W. (2024). Challengingthe status quo in a non-challenging way: A dominance complementarityview of voice inquiry. Personnel Psychology, 77(3), 1235–1264, accessed on 19 Aug 2025
[ccclxv] https://www.smallbizgenius.net/by-the-numbers/entrepreneur-statistics/, accessed on 19 Aug 2025
[ccclxvi] https://writersblocklive.com/blog/entrepreneur-statistics/, accessed on 19 Aug 2025
[ccclxvii] https://www.indeed.com/career-advice/finding-a-job/entrepreneur-characteristics, accessed on 19 Aug 2025
[ccclxviii]Beatty, Jack (1998). The World According to Peter Drucker. The Free Press. ISBN 978-0-684-83801-4, accessed on 19 Aug 2025
[ccclxix]Kelly, P.; Kranzburg M. (1978). Technological Innovation: A Critical Review of Current Knowledge. San Francisco: San Francisco Press,accessed on 01 Oct 2025
[ccclxx]Abadzhiev, Andrey; Sukhov, Alexandre; Johnson, Mikael (2024-06-18). "Business model innovation for reducing uncertainty in sustainability transitions: A case study of the wood construction industry". Creativity and Innovation Management. 33 (4): 818–838. doi:10.1111/caim.12622. ISSN 0963-1690, accessed on 19 Aug 2025
[ccclxxi]Trott, Paul (2005). Innovation Management and New Product Development. Prentice Hall. ISBN 0273686437, accessed on 01 Oct 2025
[ccclxxii]Drucker, Peter (May 23, 1983). "Schumpeter And Keynes". Forbes. Retrieved March 12, 2012, accessed on 19 Aug 2025
[ccclxxiii]Boutellier, Roman; Gassmann, Oliver; von Zedtwitz, Maximilian (2000). Managing Global Innovation. Berlin: Springer. p. 30. ISBN 3-540-66832-2, accessed on 19 Aug 2025
[ccclxxiv]Colette Henry, et al, (2010), Chapter 2 Encouraging women's entrepreneurship in the sciences: Women in veterinary medicine 15-33, accessed on 19 Aug 2025
[ccclxxv] Chesbrough H.: (2003), Open Innovation: the New Imperative for Creating and Profiting from Technology, Harvard Business School Press, Boston
[ccclxxvi]Alison Morrison, (2006), A contextualization of entrepreneurship. International Journal of Entrepreneurial Behaviour & Research 12:4, 192-20, accessed on 01 Oct 2025
[ccclxxvii]https://www.ijfmr.com/?gad_source=5&gad_campaignid=17989020439&gclid=EAIaIQobChMImJP4u_H7jgMVR6PYBR3GnxH8EAEYASAAEgJwqvD_BwE, accessed on 19 Aug 2025
[ccclxxviii]Maggie O'Carroll, et al, (2010), Women's International Centre for Economic Development (WICED), International Journal of Gender and Entrepreneurship 2:2, 197-204,accessed on 01 Oct 2025
[ccclxxix]Edgar Voltmer, et al, (2011), Work-related behavior and experience patterns of entrepreneurs compared to teachers and physicians. International Archives of Occupational and Environmental Health 84, 479-490,
[ccclxxx] https://web.archive.org/web/20231002040349/https://innovationzen.com/blog/2006/07/29/innovation-management-theory-part-1/, accessed on 19 Aug 2025
[ccclxxxi] Liang, J., Farh, C. I., & Farh, J. L. (2012). Psychological antecedents ofpromotive and prohibitive voice: A two-wave examination. Academy ofManagement Journal, 55(1), 71–92, accessed on 01 Oct 2025
[ccclxxxii]Mbogu, H. M., & Nicholson, C. (2023). Data-Driven Root Cause Analysis Via Causal Discovery Using Time-To-Event Data. Available at SSRN 4414871, accessed on 19 Aug 2025
[ccclxxxiii] Liu, W., Tangirala, S., Lam, W., Chen, Z., Jia, R. T., & Huang, X. (2015), How and when peers' positive mood influences employees' voice. Journalof Applied Psychology, 100(3), 976–989, accessed on 19 Aug 2025
[ccclxxxiv] Logue, D., & Grimes, M. (2022). Living up to the hype: How new ventures manage the resource and liability of future-oriented visions within thenascent market of impact investing. Academy of Management Journal,65(3), 1055–1082, accessed on 19 Aug 2025
[ccclxxxv] Deng, Z., Prugsanapan, P., & Kong, Z. (2025). Anytime Communication: A Human-AI Collaboration Framework for Causal-Based Root Cause Analysis. In AIAA SCITECH 2025 Forum, accessed on 01 Oct 2025

[cccxxxvi] https://www.entrepreneur.com/starting-a-business/the-values-that-all-successful-entrepreneurs-should-have/468839, accessed on 19 Aug 2025
[cccxxxvii] McDonald, R., & Gao, C. (2019). Pivoting isn't enough? Managing strategic reorientation in new ventures. Organization Science, 30(6), 1289–1318, accessed on 19 Aug 2025
[cccxxxviii] Morrison, E. W. (2023). Employee voice and silence: Taking stock a decade later. Annual Review of Organizational Psychology and Organizational Behavior, 10(1), 79–107, accessed on 01 Oct 2025
[cccxxxix]Usawas, G 2010, Results indicate a family business risks collapse Thailand holds. 'Central - friendly' sustainable business model. [Online]. Available: http://www.gotomanager.com/news/details.aspx?id=88569, accessed on 19 Aug 2025
[cccxc]Thechatakerng, P, 2009, Determinants of Micro-entrepreneurs Innovation, Paper presented in EDP workshop, Barcelona, April 2-3, Spain, accessed on 19 Aug 2025
[cccxci] https://www.entrepreneur.com/en-in/growth-strategies/entrepreneurship-is-essentially-about-problem-solving/276286, accessed on 19 Aug 2025
[cccxcii] https://midassoe.com/characteristics-of-a-successful-entrepreneur/, accessed on 01 Oct 2025
[cccxciii] https://quasa.io/media/27-reasons-why-startups-fail-and-how-yours-can-succeed, accessed on 01 Oct 2025
[cccxciv]Sitthipongpanich, T, & Polsiri, P. (2015). 'Do CEO and board characteristics matter? A study of Thai family firms', Journal of Family Business Strategy. 6(2): 119–129.Thechatakerng, P, 2012, Thai Immigrant Entrepreneurs in New Zealand, Contemporary Research on E-business Technology and Strategy Communications in Computer and Information Science, 2012, pp.658-670, accessed on 01 Oct 2025
[cccxcv] Orne, M. T. (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. American Psychologist, 17(11), 776–783, accessed on 23 Aug 2025
[cccxcvi] https://www.tutor2u.net/business/blog/characteristics-of-successful-entrepreneurs, accessed on 23 Aug 2025
[cccxcvii] https://www.industryleadersmagazine.com/9-essential-traits-of-a-successful-entrepreneurial-mindset/, accessed on 23 Aug 2025
[cccxcviii] https://www.kimp.io/entrepreneurial-success/, accessed on 01 Oct 2025
[cccxcix] https://www.smallbizgenius.net/by-the-numbers/entrepreneur-statistics/#, accessed on 23 Aug 2025
[cd]Petriglieri, G., Ashford, S. J., & Wrzesniewski, A. (2019). Agony and ecstasy in the gig economy: Cultivating holding environments for precarious and personalized work identities. Administrative Science Quarterly, 64(1),124–170, accessed on 23 Sep2025
[cdi]Wennekers, S., van Stel, A., Carree, M., & Thurik, A. R. (2010). The relationship between entrepreneurship and economic development: Is it U-shaped? Foundations and Trends in Entrepreneurship, 6(3), 167–237, accessed on 23 Aug 2025
[cdii] https://link.springer.com/article/10.1007/s43039-023-00077-0, accessed on 01 Oct 2025
[cdiii] ttps://www.slideshare.net/slideshow/essentials-of-entrepreneurs-f/24606635, accessed on 23 Aug 2025
[cdiv] McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. Academy of Management Review, 31(1), 132–152, accessed on 01 Oct 2025
[cdv] https://timespro.com/blog/what-are-the-top-characteristics-of-an-entrepreneur, accessed on 23 Aug 2025
[cdvi] https://joelcomm.com/reasons-why-an-entrepreneur-should-establish-a-positive-reputation.html, accessed on 23 Aug 2025
[cdvii]Roulin, N., Bangerter, A., & Levashina, J. (2015). Honest and deceptive impression management in the employment interview: Can it be detected and how does it impact evaluations. Personnel Psychology, 68(2), 395–444, accessed on 23 Aug 2025
[cdviii] https://www.blueprintrf.com/important-characteristics-of-successful-entrepreneurs/, accessed on 01 Oct 2025
[cdix]) https://www.valuer.ai/blog/50- examples-of-corporations-that-failed-toinnovate-and-missed-their-chance, accessed on 23 Aug 2025
[cdx] https://www.liveplan.com/blog/starting/traits-of-entrepreneurs?srsltid=AfmBOoqRJXI0cIyBitU73SKYuWqkkuS3i9h4luvFk21miQ_Oi2HvG856, accessed on 01 Oct 2025
[cdxi]Wiriyakulkit, N, Sirivanasandha, R and Viriyarungsarit, P 2009, Family Business. Bangkok: Siam N & B Publishing, accessed on 23 Aug 2025
[cdxii] https://www.theeventplannerexpo.com/10-traits-of-successful-entrepreneurs-what-sets-them-apart/, accessed on 25 June 2025
[cdxiii] Toivonen, T., Idoko, O., Jha, H. K., & Harvey, S. (2023). Creative jolts: Exploring how entrepreneurs let go of ideas during creative revision. Academy of Management Journal, 66(3), 829–858, accessed on 01 Oct 2025
[cdxiv] https://www.bdc.ca/en/articles-tools/entrepreneurial-skills/be-effective-leader/stress-management-tips-entrepreneurs, accessed on 23 Aug 2025
[cdxv] Shepherd, D. A., Seyb, S. K., & George, G. (2023). Grounding business models: Cognition, boundary objects, and business model change. Academy of Management Review, 48(1), 100–122, accessed on 23 Aug 2025
[cdxvi] Snihur, Y., & Markman, G. (2023). Business Model Research: Past, Present, and Future. Journal of Management Studies, 60(8), e1–e14, accessed on 01 Oct 2025
[cdxvii] https://www.oneeducation.org.uk/characteristics-of-successful-entrepreneurs/, accessed on 01 Oct 2025
[cdxviii] https://www.linkedin.com/pulse/role-sustainability-entrepreneurship-atish-patil-1ijnc, accessed on 23 Sep 2025
[cdxix] https://ceoentrepreneur.com/are-successful-entrepreneurs-born-or-made/, accessed on 01 Oct 2025
[cdxx] https://timespro.com/blog/what-are-the-top-characteristics-of-an-entrepreneur, accessed on 01 Oct 2025
[cdxxi] Wheatley, T., Thornton, M. A., Stolk, A., & Chang, L. J. (2024). The emerging science of interacting minds. Perspectives on Psychological Science, 19(2), 355–373, accessed on 01 Oct 2025
[cdxxii] Swider, B. W., Harris, T. B., & Gong, Q. (2022). First impression effects in organizational psychology. Journal of Applied Psychology, 107(3), 346–369, accessed on 23 Aug 2025
[cdxxiii] https://brainly.com/question/49057165, accessed on 01 Oct 2025
[cdxxiv] Wayne, S. J., Sun, J., Kluemper, D. H., Cheung, G. W., & Ubaka, A. (2023). The cost of managing impressions for Black employees: An expectancy violation theory perspective. Journal of Applied Psychology, 108(2), 208–224, accessed on 01 Oct 2025