# Artificial Intelligence as a Lever for Entrepreneurship and Economic Activity

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## 1. Introduction

Artificial Intelligence: An Effective Tool in Enhancing Entrepreneurship and Stimulating Economic Activity. AI constitutes an enabling technology with the potential to reinvigorate macroeconomic progress and entrepreneurship. The term relates to investments and the integration of technology-based solutions, tools, and services that contribute to a targeted objective in any form of business. Commercial entrepreneurship encompasses both self-employment without employees and enterprises owned by a natural person who engages in several activities through associations or partnerships. Market-information systems serve to reduce uncertainty. Entrepreneurial computing embodies knowledge representations, pattern recognition, statistical methods, and modelling to facilitate experimentation, simulation, and testing that can enhance the quality of enterprise formation and growth.

The effects of AI on entrepreneurship and on enterprises have not yet been fully explored. The general questions posed concern the contribution of AI and its integration into microeconomic systems and the influence of AI on macroeconomic activity, measures of economic activity, and the allocation of investments. Artificial Intelligence and Big Data in Entrepreneurship: A New Era has Begun presents a systematic examination of these interactions in terms of the current incorporation of AI into the formation and expansion of enterprises. Important facets governing the use of Artificial Intelligence and Big Data by entrepreneurs support the proposal that the analysis of business opportunities, the creation of products and services, and the management of operations can be accelerated and improved. Considered processes are outlined, along with observable products of AI. (Obschonka & B. Audretsch, 2019) Intelligent use of AI and Big Data has the potential to reinvigorate the role of entrepreneurship for entire economies and contributed an explanation of how AI enacts existing enterprises. Reality indicates Artificial Intelligence and Big Data influence sophisticated actions whose employment might benefit economic economy detected.

## 2. Conceptual Framework: Artificial Intelligence, Entrepreneurship, and Economic Activity

Artificial Intelligence (AI) is a set of large-scale computational models, algorithms, and systems whose performance meets or exceeds human capabilities in tasks such as speech and image recognition, game playing, signal processing, text generation, forecasting, and general reasoning. AI capabilities enable better detection of meaningful market trends, clearer articulation of customer desires, and more precise judgment about product attractiveness. AI therefore fuels the birth and expansion of enterprises, stimulating an economy that is less cyclical, more resilient, increasingly digital and more productive overall. AI systematically shapes the entrepreneurial process and modifies the structure of economic activities at both microeconomic and macroeconomic levels (Obschonka & B. Audretsch, 2019).

Three research questions guide the study of how AI affects the emergence and growth of firms. Firstly, what kinds of new entrepreneurial opportunities arise thanks to AI, and how do firms initiate-based business ventures around these opportunities? Secondly, once a startup is formed, how does AI enable the firm to operate more efficiently and effectively? Thirdly, how does AI influence the structure of economic activity across colocated industries, related markets, different sectors of the economy, and regions of the world?

Theoretical foundations of the link between AI and Entrepreneurial Activity are multiple. Entrepreneurship draws attention to how AI systematically shapes the emergence of new ventures through market opportunity identification and offer-generation. Theory describes the cycle of opportunity recognition, resource securing, and offer-creation that characterizes entrepreneurship; AI can help discover hitherto unseen or previously ignored unforeseeable markets and thereby prompt new entrepreneurial act at the founding stage. AI-augmented firms may announce fresh product-and-service offerings and actively enter new markets—signs associated with the growth stage of a venture. By contrast, few firms issue patents after founding, reflecting that innovation of this type is less relevant to the recognition or expansion entrepreneurial phases. Countries, regions, sectors, and firms employ aggregated data to measure comprehensively the influence of AI on wider economic structures. (Giuggioli and Pellegrini2023)

## 3. AI-Driven Business Creation: Mechanisms and Pathways

Artificial intelligence (AI) facilitates the identification of new business opportunities, allows for their rapid testing, and improves the efficiency of the resulting ventures. The diffusion of AI capabilities influences many aspects of macroeconomic activity (Obschonka & B. Audretsch, 2019). AI alters the types and forms of new products and services that are created, as well as their underlying algorithms, data sources, and value propositions. It also enhances the efficiency of startup operations through the automation of repetitive tasks, the provision of decision-support systems, improved resource allocation, and the design of performance-monitoring metrics. The implementation of AI in entrepreneurial practices increases productivity through more structured workflows, the identification and elimination of bottlenecks, the integration of assistance for inexperienced workers, and the scaling up of operations.

The direct measurement of AI's impact on the economy is complicated by the conceptual definitions of AI and the limited availability of granular statistics. Many organizations and researchers recognize productivity improvements as important contributions to economic activity. When AI achieves better results in comparison to humans, its deployment enhances productivity. Several economic sectors, including finance, retail, manufacturing, telecommunications, and transportation, have successfully applied AI solutions in diverse scenarios. There remains uncertainty, however, whether finance constitutes a sector that benefits most from AI or merely one that continues to explore its full potential. (Al Naqbi et al., 2024)

### 3.1. Market Research and Opportunity Identification

Market research and opportunity identification are paramount to entrepreneurship, representing the first steps towards the initiation of an entrepreneurial venture. These activities encompass the search for markets and opportunities, the acknowledgement of opportunities that merit further attention, and the discovery of opportunities to pursue. Traditionally, the processes of market research, market opportunity identification, and market opportunity selection increasingly employ artificial intelligence. AI facilitates these steps by utilising vast datasets from various sources, extracting signals from data inputs, filtering and validating those signals, cross-referencing extracted and validated signals against stored market databases, and ultimately offering a reduced set of selected market opportunities for the founder's consideration (Obschonka & B. Audretsch, 2019).

### 3.2. Product and Service Innovation through AI

Artificial Intelligence (AI) is an effective tool that enhances entrepreneurship and stimulates economic activity (Obschonka & B. Audretsch, 2019). It permeates every aspect of an entrepreneurial project: people can rapidly identify, select and explore market opportunities; artificial intelligence becomes an essential ally that aids invention and creative tasks; enterprises benefit from intelligent instruments that accelerate the execution of essential business operations; and the planning and management of resourcing is greatly streamlined (Bai et al., 2022). AI technologies power inventions, introduce significant new functionality, and support establishment and growth. AI-based algorithms, combined with other forms of data, allow firms to deliver better products and services more efficiently on a planetary scale. To propose and validate new value propositions and market fit while ensuring consistency with existing activities, companies depend on sophisticated exploratory methodologies. Artificial Intelligence processes enormous volumes of up-to-the-minute digital footprints, assesses their novelty, taps into collective creativity, and proposes projects aligned with prevailing trends.

### 3.3. Startups' Operational Optimization with AI

Artificial Intelligence enhances startups' operational processes through faster automation of repetitive tasks, advanced analytics for enhanced decision-making, more accurate resource requirements estimation, and sophisticated performance monitoring.

Automation of repetitive functions boosts productivity significantly, enables overall cost reduction, and allows startup teams to concentrate on value-creation activities (Lu et al., 2022). A large portion of startups utilizing AI is deploying chatbots to automate customer-

service exchanges, thereby liberating personnel for more strategic engagements. Online services offering operational support, such as automated invoice processing or inventory restocking notifications, similarly free up employee time. "Decision As A Service" advisory services for customer acquisition, cash flow projection, pricing optimization, and demand forecasting assist founders in validating strategic choices with respect to market needs. AI further prompts purchases, smooths cash conversion cycles, and enhances activity planning, improving resource allocation and optimizing cash-flow requirements. Solutions for broader operational augmentation—including blog-content generation, social-media advertising, and competitor analysis—relieve marketers, sales personnel, and upper management of distractions and enhance process outcomes.

AI-based performance-management solutions gauge real-time activity and productivity across multiple interconnected databases, reducing the need to sift through separate software. Analytics of company-wide goals within a unified dashboard measurement system help startup leaders assess position versus targets. Conversational agents summarize extensive text files and documentation repositories of competing businesses without requiring study of the full contents, expediting project familiarization and technology dissections. Comprehensive document-understanding solutions automate and expedite content review and extraction from inbound customer layouts, application forms, and government tenders; promote automatic extraction of material-requisition listings, and enable swifter examination of extensive publicly available technical standards and specifications. Such diverse applications collectively facilitate faster scaling, smoother acceleration of sales and marketing programs, and stronger return-on-investment analyses before venture-capital financing rounds (Obschonka & B. Audretsch, 2019).

## 4. AI as a Growth Catalyst for Existing Firms

Artificial intelligence (AI) increasingly acts as a growth catalyst for existing firms. Businesses integrating AI capabilities into processes observe rising productivity and efficiency, extending outputs from individual inputs and enabling new products and services. Machine learning enables real-time credit scoring, investment decision support, and remote monitoring for collateral enforcement, expanding funding and mitigating risk. AI facilitates market entry through localizing offerings, segmenting audiences, and optimizing customer lifecycle touchpoints. Through these mechanisms, economic activity expands within established companies.

AI immerses companies in vast, digital activity streams from which it discerns patterns. The resulting signals are interpreted and validated against prevailing market behavior to identify opportunities for both goods and services (Obschonka & B. Audretsch, 2019). In parallel, existing firms pursue internal audit reviews and external capability assessments to spot supplementary uses of the technology. Such audits frequently expose underutilized assets and enhance productivity, asset utilization, and customer satisfaction. Through automated workflow enhancement, processing acceleration, error reduction, and enlarged scale, companies achieve both productivity and throughput uplift.

### 4.1. Enhancing Productivity and Efficiency

AI enhances productivity and efficiency throughout the startup life cycle. It raises throughput capacity across various workflows, thereby eliminating bottlenecks. Founders are better able to identify, refine, and select opportunities; solicit, analyze, and incorporate feedback; develop and adapt prototypes; and measure, track, and improve firm and product performance (Obschonka & B. Audretsch, 2019).

By relieving entrepreneurs of monotonous and error-prone tasks, AI enables them to focus on high-level objectives and strategies. AI capabilities aid planning decisions, forecasting, and human-resource allocation. Algorithms can even determine when executives have too many meetings.

Recent studies indicate that firms adopting advanced digital technologies are more likely to collaborate with third parties to expand the expertise of their workforce. A company needs only one employee capable of contracting with an external source to benefit, regardless of the firm's core technology. (Zhou et al., 2023)

### 4.2. Access to Capital and Risk Assessment with AI

The adoption of artificial intelligence (AI) tools is a radical change for entrepreneurs. AI facilitates data extraction from a growing number of internal and external sources, enabling the assessment of market opportunities in real time at a mark-space scale. By analyzing such signals, companies contrast their innovative ideas with the market trend. In tandem, AI helps identify potential sources of early-stage financing. Market signals indicate seasons, industries, and regions where more capital raises are occurring, improving information and matching efficiency for all financing participants. Automated pre- and post-investment due diligence by analyzing the adequacy of team competence, the achievability of business assumptions, and the quality of product-fit with the market trends further steers financing choices. Numerous companies also employ AI-based automated credit scoring and monitoring in business-to-business (B2B) credit sales, proactively reminding customers with overdue accounts and optimizing collection and credit limits.

AI and machine learning improve the accuracy of credit assessments and credit scores through big data analysis, facilitating credit access among low-income earners and the poor. Low-income groups, smallholders, and women continue to have poor access to credit for businesses despite high demand. Financial institutions are urged to invest in implementing AI and machine learning throughout the lending life cycle to reach these populations. Increased collaborations between governments and private sectors can expedite investment promotion. The use of AI to address information asymmetry in credit markets is reinforced by processes such as data analysis for credit scoring, signaling, and minimizing adverse selection and moral hazard. Automated credit risk analysis through extensive and diversified data collection, processing, and modeling capabilities replaces human-centered moral disclosures and enhances the efficiency and fairness of credit allocation (Mhlanga, 2021).

### 4.3. Market Expansion and Personalization at Scale

Entrepreneurs require effective signaling systems to explore previously unidentified products, services, customers, and markets and to build successful business models (Obschonka & B. Audretsch, 2019). Among the numerous areas where entrepreneurs need assistance, market

discovery has emerged as a significant area of focus. AI is positioned to provide such support by enhancing traditional market-discovery systems and methods and by augmenting the capabilities of entrepreneurs throughout their market-discovery journeys.

AI systems can assist in identifying new markets and corresponding products and services by collecting and analyzing a wide array of data. Such data can be derived from diverse sources, including, among others, the Internet, the dark web, blogs, chat rooms, social networks, news articles, patent registries, job postings, motivating and aiding entrepreneurs in determining how to extend product lines, broaden service portfolios, and penetrate new customer segments or regions. The opportunity signals are then filtered through a variety of market signals—such as the emergence of new companies, the filing of patents and trademarks, and investment activities—to identify precisely which of them represent the highest potential.

E-commerce companies, banking, financial services, and insurance (BFSI) companies, media, and online service providers are employing AI-driven tools to offer personalized user experiences, enhancing user satisfaction, engagement, and retention. Such companies leverage AI to personalize and localize content, creating business systems that transcend national boundaries and facilitate personalization at a massive scale. Competitive differentiation is achieved through a combination of technological solutions, data sources, user value propositions, and competitive analogues. (Rane et al.2024)

## 5. Enabling Ecosystems: AI, Education, and Policy

Entrepreneurship creates opportunities for value generation and economic development. Aligning with contemporary challenges and concerns, entrepreneurs now play a broader role in redistributing wealth, generating employment, tackling climate change, and driving innovation. Recent trends indicate the speed of venture creation can be expected to increase dramatically, especially with the rise in digitalization and Artificial Intelligence (AI) options. AI has become a powerful partner for launching ventures, transforming existing processes and enabling new value propositions. All of these elements indicate that entrepreneurship should be viewed as an integral part of any serious discussion focused on encouraging sustained macroeconomic development and growth. The high cost of failure in entrepreneurship requires the best possible tools be employed to ensure the greatest chance of success. (Al-Mamary, 2025)

AI has been applied to market discovery through the use of publicly available signals from social media and other sources to identify opportunities. AI can then be used to automate various sections of the venture creation and operation processes. This differentiation holds the promise of lower effort, reduced engagement, and lower resource cost for starting and operating new ventures. Economies experiencing extensive digitalization are expected to exhibit greater overall economic activity. AI-generated ventures will contribute to these more widespread changes, but the economic activity will extend beyond market discovery at the start-up stage, including effects such as resource and operational efficiency gained during venture scaling. Development of entire pipelines—ranging from opportunity identification to funding attainment for AI-generated ventures—will enhance economic activity significantly. AI can assist in searching for an opportunity, designing a relevant product or service that

meets the market's requirements, optimizing operations of the solution for greater quality and affordability, including by deploying options within a venture or supply chain that ensure sustained quality, securing funding, and accessing additional markets to help scale the venture.

Education, training, and curriculum around AI, data science, machine learning, programming, freedom of information, big data, cloud computing, and similar topics will therefore be critical to enhance the digital economy and stimulate entrepreneurial activity. Policy within the domain needs to begin with the understanding that AI will gradually become a commodity. Basic education and training around digital interaction must begin early on, wherever possible during the pre-school stage. As education becomes applicable, content must focus on characteristics related to deployment of cloud computing, data ownership, and regulation of AI deployed as a service. (Abdelmagid et al., 2025)

The digital economy will shape entirely distinctive approaches to entrepreneurship education and training. Secondary education systems and similar structures will need to prepare adequate personnel from the first stages of venture formation, thus contributing to further activity and engagement. A two-part strategy of preparing broad capacity and, concurrently, building access to startup capital would stimulate firm activity even in regimes bears limited hazard. Access to cloud solutions, access to information, and parallel engagement in the usage process to develop guidance for others will drive further expansion of such ventures and preparatory structures for entrepreneurship with consequently even emerging focus on large scale development.

Policies will need to focus on distinctive features in controlling the novel economy. Identification of significant elements driving and sustaining new fragmentation of enterprise and enterprise formation will accordingly support delivery of desirable outcomes.

Specific constraints such as GDPR policies, fears of large group polarisation through social media exposure and collection of AI-generated data for dangerous public surveillance will necessitate policies for collection and usage of datasets required for advanced deployment and scaling up using framework designed exclusively for information system architectures, thereby generating distinctive arrangements needed to maintain such composition of the AI themselves. (Obschonka & B. Audretsch, 2019)

## 5.1. Skills Development and Talent Pipelines

The challenge of establishing a skilled workforce capable of instituting Artificial Intelligence (AI)-enabled entrepreneurial activity, thereby subsequently contributing to economic activity, is daunting and foremost on the agenda for those involved in policy setting, education, business support, financial incentives and private sector outreach. In many countries, including Advanced Economies and Emerging Market and Developing Economies, large proportions of the working population lack a sufficient level of technical, entrepreneurial and managerial skills to contribute to the present business environment and socio-economically productive activity. AI requires all industry sectors to re-evaluate how prospects for entrepreneurship, new venture creation and growth might be augmented through AI adoption, thereby delivering the dual benefit of enhanced competitiveness and heightened economic activity around societal needs in the current business cycle.

An inclusive labour strategy, aimed at re-skilling individuals who operate in AI-relevant enterprise activity but lack a formal qualification or lack exposure hereto, is essential. Equally, engagement with BBBE (Black Basiness and Broad-Base Empowerment) entrepreneurs is necessary to facilitate re-skilling with a focus on digital enterprise and how AI tools can specifically support their marketplace activity and opportunities, primarily in low-income communities. Value proposition, Paperwork and access to finance remain major barriers to black entrepreneurship. A recently documented AI offering, that enables companies to draft and sign complex legal documents in minutes, is of direct application in this regard and contributes to Government's aims of promoting employment and entrepreneurship in black communities (Mishra et al., 2021).

## 5.2. Policy Frameworks, Regulation, and Ethical Considerations

The substantial interest in the integration of artificial intelligence (AI) with entrepreneurship and economic activity has provoked growing concerns about regulatory, ethical, and policy frameworks. Such concerns relate to the socio-economic impact of AI technology on entrepreneurship and its wider economic effects on productivity, innovation, or employment. Consequentially, the European Union has published directives on trustworthy and ethical AI (Bringas Colmenarejo et al., 2022). Ethical and specifically fairness principles have been proposed (Giralt Hernández, 2024). Such reports outline expectations for AI technology design and deployment in both market scenarios and entrepreneurship settings. Through the views of these frameworks, the collective aim is to guide the design and use of AI technology in economic and entrepreneurial settings towards socially and economically desirable outcomes.

## 5.3. Public-Private Partnerships and Infrastructure

Collaboration between public and private partners can promote the data accessibility and interoperability needed to leverage AI for entrepreneurship and economic activity (Beraja et al., 2021). Ownership models can govern government and privately held datasets, facilitating joint exploration and deployment of AI solutions on emerging or underexploited datasets while adhering to data privacy and security requirements.

## 6. Challenges and Risks in AI for Entrepreneurship

Artificial Intelligence represents a frontier technology capable of transforming venture formation and broader economic activity; few strategic priorities eclipse that opportunity. As a meta-innovation, artificial intelligence both augments human ingenuity and automates elements of the innovation process. Although independent, entrepreneurial firms already represent a minority of employment and value creation, their influence on the macroeconomy is larger: understanding the interaction of AI and entrepreneurship reveals principles with wider relevance for technology-induced economic change.

Earlier work established how capabilities within technologies such as algorithms and interfaces affect business model innovation; these insights help frame the formulation of artificial-intelligence-enabled ventures. More recent evidence highlights how superior performance by incumbent firms inhibits further opportunities in business model innovation; this concern is amplified in the face of artificial intelligence, which amplifies both returns to,

and risks of, concentration in entrepreneurial activity. Hurdles to the adoption of artificial intelligence also exist. A systematic review identified an extensive range of challenges in firms' introduction of artificial intelligence pertaining to, among others, strategy, culture, digital readiness, data, innovation, and funding; business-to-business organizations face different challenges than consumer-oriented firms. Concepts of opportunity discovery and evaluation map directly to the benefits expected from artificial intelligence; new models of both opportunity discovery and construct formalize these expectations further. (Obschonka & B. Audretsch, 2019)

## 6.1. Data, Privacy, and Governance

In order to provide accurate responses and engage in meaningful dialogue, Artificial Intelligence (AI) relies on data. This data may contain personal information, organizational information, or information about a service or product's usage. Such information poses privacy, governance, and security risks to organizations and individuals (Obschonka & B. Audretsch, 2019). Data ownership and accountability challenges further complicate the issue. Organizations must ensure that AI solutions do not compromise data security during training, maintenance, or updating phases. As organizations increasingly emphasize data stewardship for ethical and governance purposes, the source and handling of data considered for AI-based solutions should be carefully evaluated.

Organizations establishing and maintaining AI solutions often encounter governance challenges concerning bias, fairness, and transparency. In any data-driven model, data biases can influence model outcomes. Various techniques exist to detect, estimate, and mitigate bias through model adjustments before and after training, solution inspection, and fairness checks. Governance frameworks have emerged to bolster AI accountability and transparency. Various tools exist for training model accountability, tracking model changes, and monitoring and alerting data drift. (Mensah)

## 6.2. Innovation Hurdles and Market Concentration

Entrepreneurship, characterized by the identification and pursuit of economic opportunities (Obschonka & B. Audretsch, 2019) , faces persistent hurdles that detract from innovation and economic growth. Barriers encompass limited knowledge of market conditions, regulatory environments, and customer preferences; hefty investment requirements; and lack of credible human and social capital. These constraints have prompted calls to extend regulatory lightness and support mechanisms beyond early-stage financing to foster greater entrepreneurship. Such limited entrepreneurship capability manifests in persistently high unemployment rates, sluggish economic growth, and faltering innovation.

Amid initiatives to widen capital and service access for realistic ventures, market environment and tech knowledge gaps continue to impede economic activity and innovation. AI capabilities promise to address these Innovation Hurdles, of which a Rapidalyze function (sales prediction model) exemplifies a working design, directly targeting fifty SME sets in South Africa. Alongside these Innovation Hurdles, market concentration effects discourage wider narrative participation and inspire attention on anti-competitive behavior within Big Tech. (Truong & Papagiannidis, 2022)

## 6.3. Labor Market Impacts and Transition Pathways

A widely expressed apprehension regarding technology is the potential for mass unemployment and economic dislocation. The concern is especially acute regarding AI, which is often perceived as the ultimate general-purpose technology — addressing broad problem classes, reconfiguring processes, and design and redesigning systems to solve conceptual challenges (Bessen et al., 2018). In assembling this report, a consortium of stakeholders closely monitored labor market implications to inform governments and other partners about what is being done, what more could be undertaken, and how to maximize utility in navigating sources of disruption.

Systematic examination both the state of the art regarding the social dimension of AI (R. Frank et al., 2019) and detailed cross-country data on the macroeconomic impact of AI (Georgieff & Hyee, 2022) indicated that the principal effect of AI deployment on work is that it modifies existing jobs instead of replacing them. Digital technologies such as the Internet of Things (IoT) and mobile communications may take on greater roles during the next decade and a half. Speculation about simultaneous displacement of labor to ensure sufficient services and capital captures crucial trends, yet the prevailing influence is likely to favour the augmentation and enhancement of existing processes and service delivery.

## 7. Case Studies: AI-Driven Ventures and Economic Outcomes

The emerging marketplace of Artificial Intelligence (AI) has permeated economic activities worldwide over increasingly shorter time periods (Obschonka & B. Audretsch, 2019). The technology not only widens the scope of possibilities for entrepreneurs, but also propels their ventures into widespread economic impact and scaling. Startups employing AI thus require thorough investigation of the wide-ranging systemic effects that their companies unlock. Such scrutiny is critical for discerning favorable entrepreneurship and economic policies suitable for an AI-enabled society.

To this end, a considerable number of ventures leveraging the technology that have garnered prominent economic results worldwide has been catalogued. Information on aggregate economic effects, along with explicit features of the technologies deployed, permits transfer of insights across countries, civilization states, industries, and venture types. The encounters illuminate the direction of new venture formulation and scaling through this novel technological enabling, thereby informing prospective entrepreneurs and policymakers alike. (Daraojimba et al.2023)

## 8. Methodological Considerations for Assessing Impact

Economic impact assessment involves a variety of approaches to better understand the effects of Artificial Intelligence (AI) on business creation, transformation, operation, and growth. At the macro level, the indicators of interest include the number of new ventures generated, improvements on productivity at the firm level, jobs created, or even growth of specific highly automated sectors. Such analysis can leverage existing datasets on entrepreneurial activity measures (Obschonka & B. Audretsch, 2019). In addition to firm openings and closings, or the number of new venture capital-backed deals per country and their capital

injected, the macroeconomic analysis of entrepreneurship—operating with a country, region or sector base level—encompasses the study of firm demographics, post-event transitions, or specific market conditions influencing start-ups across countries, as well as papers targeting the entire project pipeline over a specified country and time horizon.

The objective is not only to establish a direct causal relationship between AI exposure—such as the degree of pre-trained models available for each commercially oriented sector—and each indicator of interest such as growth, productivity, or investment, but more importantly to focus on a set of suitable proxies or preconditions for the AI-led development that can be examined at both the macro and enterprise levels. Consequently, it may be suggested that these pre-conditions, rather than pre-trained algorithms feeding the models, conduct the data governance and democratization prior to inception or series A round, positioning them among the requisite capabilities or minimum economic conditions for stable investments driving new founding towards value creation and market change. (Drago et al., 2025)

## 9. Conclusion

The role of Artificial Intelligence (AI) within entrepreneurship and its macroeconomic impact is both direct and indirect, with business-level activity forming a key conduit. AI features prominently in the countries' economic agenda because of its perceived potential to energise productivity, innovation, job creation, and business dynamism. However, the actual debate coincides with the emergence of AI systems (e.g. ChatGPT) that are claimed to facilitate the creation of new enterprises, products, and services, or allow existing companies to improve their operations.

Such a focus gives rise to two broad questions. First, to what extent can the birth of new enterprises, the introduction of new products and services, and enhancements to overall operations be attributed to AI? Second, what is the relationship between AI-driven business experimentation and aggregate economic behaviour at different phases of the cycle? The vast literature on entrepreneurship provides several frameworks within which to organise ideas about the potential of AI to stimulate such activities.

AI capabilities align closely with the stages of the entrepreneurial process, including opportunity recognition, evaluation, and exploitation (Obschonka & B. Audretsch, 2019). AI's ability to transform economic activity and enterprise development is further evident in the shift from a product-based to a data-driven economy. AI generates scalable competitive advantages that have prompted calls for research on AI and entrepreneurship. AI links with the decision-making activities and operational functions relevant to entrepreneurship as firms grow, thereby addressing the macroeconomic consequences of AI.

Through a detailed examination of how AI enables the discovery of market opportunities; facilitates product and service innovation; and improves operational processes, the analysis elucidates the ways in which AI affects startup formation and iterative experimentation with business models, products, and services and the improvements achieved through scaling.

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