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The Impact of Emerging Technologies (e.g., AI, Blockchain, IoT) On Conceptualizing and Delivering new Business Offerings

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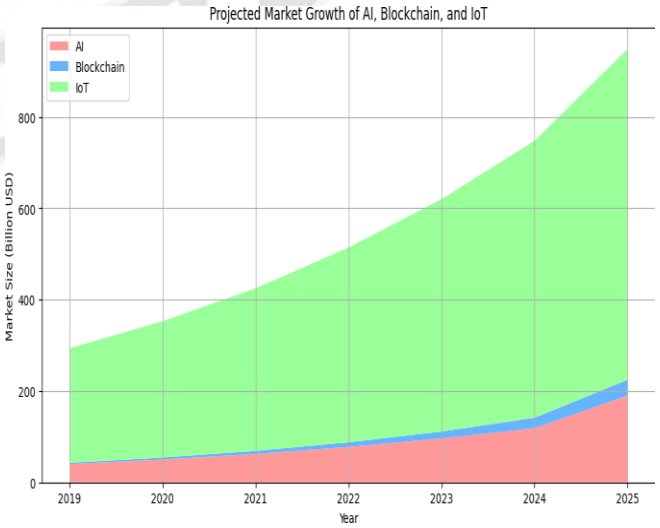
Abstract: This scholarly research paper discusses the transformative role of innovative technologies including Artificial Intelligence, Blockchain, and the Internet of Things in redefining the notion and execution of new business services. Based on the literature review of the current successful case and tendencies up to 2019, this paper reveals how these technologies transform business models and operations as well as improve customer experience across numerous industries. The paper affirms that each of the technologies has its strengths but the greatest value can be attained when used together, where synergies exist between the technologies. The analysis shows that the use of AI is changing customization and decision-making dynamics; most of the data analysed are learned using machine learning algorithms. It is observed that integration of Blockchain technology has facilitated and improved in the aspect of transparency and security especially in areas such as supply chain and financial sectors. While, IoT is helping organizations to gather and analyse data as they work on enhancing their services interactively, IoT is actually embedding physical things toward the Internet in an incredibly large scale. Based on the research, the paper provides the following suggestions for stratification by businesses and policymakers: The requirements of change adaptation should be noted when it comes to the technological trends, it is recommended that ethical issues pertaining to technology and work be addressed before becoming major problems, both employers and policymakers should be advised to start developing proactive regulations to govern technological advancements.

Keywords: *AI, big Chain of business, CII, business disruption, business change, new technologies, digital revolution, technology integration, Information processing, smart pledges, industry 4. 0*

1. Introduction

1.1. Background and Motivation

It is rather seen that the pace at which new technologies are evolving is changing the structure of the businesses and many are calling it as the Fourth Industrial Revolution. Currently, AI, Blockchain, IoT are on the frontier of this change and these are enabling major opportunities for creation of new business models and innovative delivery of services. These technologies are no longer futuristic and by the year 2019, many industries have adopted them, hence the need for further evaluation of the effects and possibilities of these technologies. Global AI market is expected to rise from $21. from $46 billion to $190 in 2018. To $ 61 billion by 2025, with a CAGR of 36%. will decrease to 62 percent during the same period of the forecast. Likewise, the blockchain market is anticipated to touch $23. Growing at a Compound Annual Growth Rate of 80% from the present $1 billion to around $3 billion by the year 2023. 2 percent points from the year 2018 to 2023. Meanwhile IoT market is expected to grow to $1,102. % in the period 2019-2024 and 19% in the period 2024-2026 reaching $ 6 billion. than 7% in the period of 2019-2026. Such gigantic number demonstrate the immense market and disruptive nature of these technologies, they precipitated this research to give a global outlook of the effect of on business offering.



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1.2. Objectives of the Research

This study aims to achieve the following objectives:

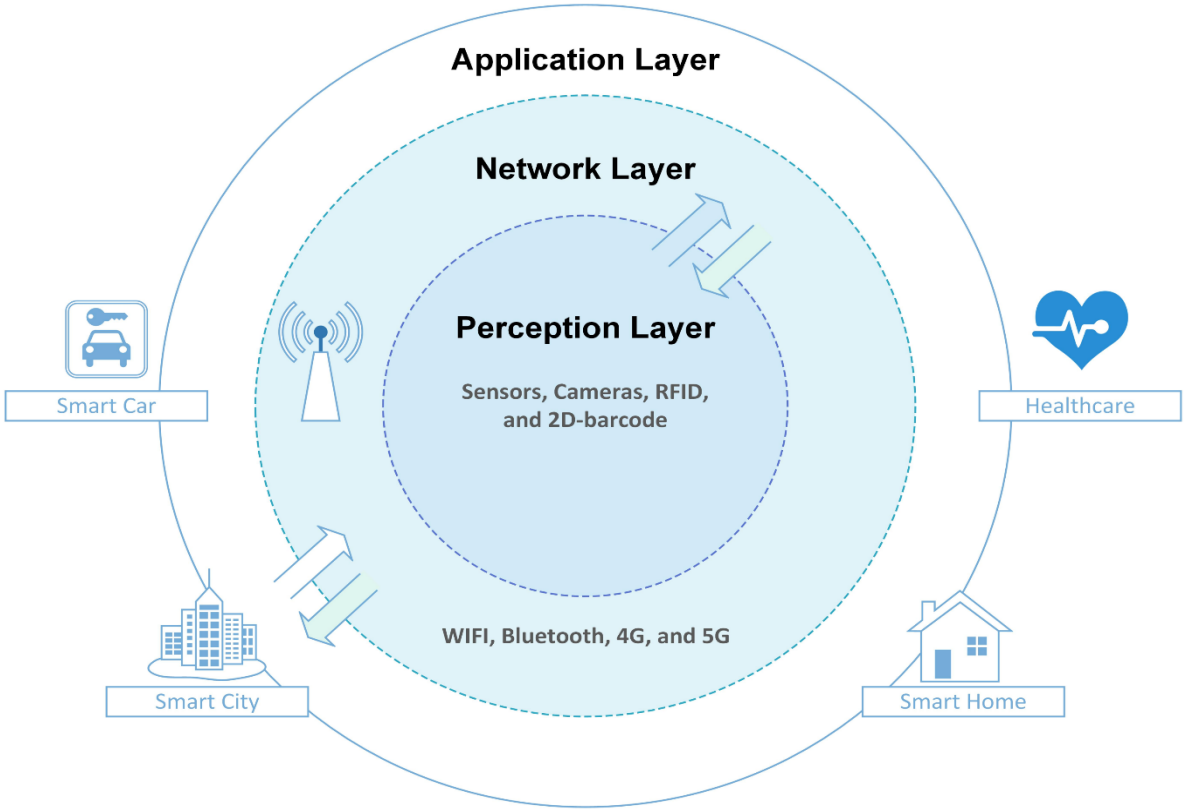
1. Assess the effects of AI, Blockchain, and IoT separately and in combination on business offerings and consider how these technologies are revolutionizing products and services as well as customers' interactions with these offerings.
2. look at how these technologies are conceptualizing new business models, analyse from where linear value chains are moving to innovative complex ecosystems.
3. This involves discovering the problems faced and possibilities in the delivery of services through the adoption of these technologies, and the technologies' technical and social implications (Accenture, 2018).
4. Offer advice on how various stakeholders – managers and policymakers alike – can respond to this technological shift, while stressing the necessity of flexibility and anticipation in today's business world.

1.3. Scope of the Study

This paper concerns developments up to 2019 and covers various fields and countries. Other emerging technologies include augmented reality (AR), virtual reality (VR), and 5G networks; however, for the purpose of specificity in this study, deep focus will be given to AI, Blockchain, and IoT since they pose a high disruptiveness and outlook trends to societies and industries. The issues in the paper are discussed in the context of B2B and B2C models that influence large organizations, SMEs, and start-ups (Bain & Company, 2018).

1.4. Structure of the Paper

The arrangement of the paper aims at ensuring that a reader is presented with a general outlook throughout the paper. Theoretical work involves carrying out a comprehensive literature review starting with the history of AI, Blockchain, and IoT. In the method section of the research, the authors describe the research approaches, data collection techniques, and analysis methods used in the study. The subsequent sections elaborate the degree and manners of technology on business offerings that are explained through cases and examples unified by industries. The paper then presents a comparative analysis involving the identification of the complementary and overlaps of the above technologies. The paper then goes further to discuss future trends and predictions of the social media marketing phenomenon and finally looks into the implications and strategic recommendations for business and policy makers (Bughin, Seong, Manyika, Chui, & Joshi, 2018).



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2. Literature Review

2.1. Overview of Emerging Technologies

2.1.1. Artificial Intelligence (AI)

Artificial Intelligence can be simply defined as the ability of a machine specifically a computer to carry out tasks in a manner that is considered intelligent by humans. They include learning – the gaining of knowledge and procedures for handling the information; reasoning – the application of procedures to reach rough or specific conclusions and self-checking. Currently, AI can be defined as such and encompasses such subfields as machine learning, deep learning, natural language processing, and computer vision as of 2019.

Technology	Global Market Size (2019)	Projected CAGR (2019-2025)	Key Players
AI	$39.9 billion	42.20%	Google, IBM, Microsoft, Amazon
Blockchain	$2.9 billion	67.30%	IBM, Microsoft, Accenture, R3
IoT	$250.7 billion	24.70%	Cisco, Intel, Siemens, Bosch

Among the most progressive branches of AI, it is possible to classify machine learning. AI adoption survey 2019 show that 37 % organization have deploy AI in enterprise in some form and that this figure is up by 270 % in the last four year. This there has been a rise in the uptake of big data due to its availability, increased computational resources and better algorithms (Cisco, 2019).

2.1.2. Blockchain Technology

Blockchain can be described as an open-source distributed ledger which remains a record of a series of transactions in various computers. It forms blocks of transactions clusters, which are connected with the help of cryptographic hash, with the previous block. Because of the key principles that dictate this structure, namely transparency, immutability, and traceability, it is especially relevant to apply it to scenarios where a lot of trust is given to the process, such as most financial operations, supply chain, etc.

The market size of the blockchain industry around the globe is estimated at $1 as of 2019. 57 bn, future predictions of its growth are indirectly suggesting explosive in the next few years (Deloitte, 2019). Formerly used as a tool for cryptocurrencies, blockchain technologies have spread in the financial world, health care, real estate, and government services provisions.

2.1.3. Internet of Things (IoT)

Internet of Things is defined as a system in which everyday objects, vehicles, home appliances, and other similar items are connected with elements of electronics, software, sensors and networking that allows them to collect and share data (Ericsson, 2019). IoT technology ensures that individuals, transactions, and objects can communicate as if they are a single entity hence forming a network of connected devices. Estimations have it that by 2019, there were 8 IoT devices connected to the internet globally. 74 billion, soon this figure is likely to cross twenty billion according to the industry experts and analysts apos estimates in 2025. The main sectors using IoT are manufacturing, health care, and smart cities where it is used to increase productivity, optimize the customer experience, and design innovative sources of income.

2.2. Historical Context and Evolution

The use of the term AI is dated back to the year 1956 with John McCarthy credited for the coming up with this term. That being said, relatively recent leviathan changes have been witnessed in the last decade driven by a hike in the computational capability, the existence of big data, and developments in the of neural network architectures. Machine learning algorithms, specifically deep learning since 2012 have achieved significant improvement in fields like image and voice recognition, text to language conversion and self-driven cars. Blockchain technology came to the public scene in 2008 when Bitcoin was launched by a person or a group that went by the name Satoshi Nakamoto. Originally, blockchain technology was created as the technical basis for cryptocurrencies, but nowadays it has more aspects. The launch of Ethereum in the year 2015 proved to be a revolution for the decentralized applications, and programmable transactions with the help of smart contracts (European Union, 2018).

The term Internet of Things was named by Kevin Ashton in 1999, yet it was developed from areas, for example, embedded frameworks, wireless sensor systems, and machine-to-machine (M2M) communication. The use of IoT

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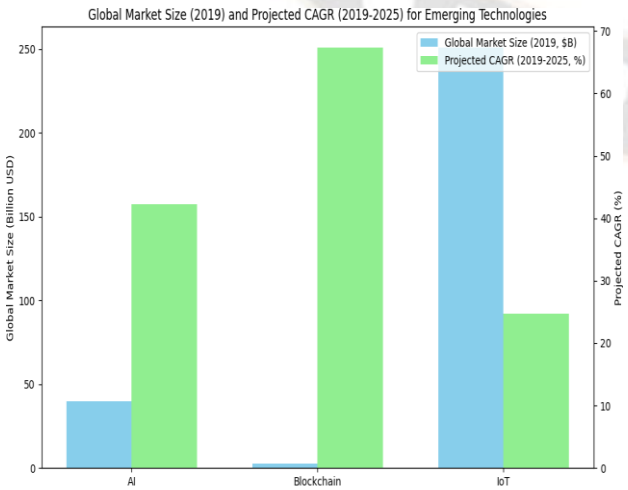
as an established concept dawned in the 2010s facilitated by enhancements in the sensor technology, growth in the internet accessibility, and the availability of smart devices such as smart phones.

2.3. Existing Research and Theoretical Frameworks

Previous research has mainly targeted the technological features of these technologies, while a rising body of scholarly works deals with their business consequences. Notable frameworks and models include:

- The AI Business Value Framework (Beghin et al., 2018): This framework that McKinsey has provided outlines three domains where AI delivers value: demand sensing or demand planning, operational value chain, and customer value chain.
- The Blockchain Technology Adoption Model (Insite and Lakhani, 2017): Harvard Business Review has detailed a process referring to the process of adopting blockchain technologies where it identifies four stages namely, single use, localization, substitution and transformation (Gartner, 2018). It lays stress on the fact that blockchain implementation is gradual and it has the potential to rethink business and economic exchange.
- The IoT Business Model Framework (Westerlund et al., 2014): This framework presents a value proposition-based view of the IoT business models with the value drivers, value nodes, and value exchanges along with the value extracts (Gartner, 2019). This supports the conception of ecosystem thinking when operating with IoT-based business models.

These frameworks offer a frame of reference for comprehending the role of emerging technologies in the creation of business value and understanding the issues and prospects connected with the application of new technologies.



3. Methodology

3.1. Research Design

This research utilizes both the qualitative case studies of individuals or stakeholders and quantitative data collected from stakeholders' reports and surveys. The paper has an exploratory and descriptive research strategy since the principal goal is to identify and understand the discreet changes these three technologies have ushered in for business offerings.

3.2. Data Collection Methods

3.2.1. Primary Data Sources

The study utilizes the following primary data sources:

- The study involved 25 semi-structured interviews which were conducted with industry practitioners most of whom are CTOs, innovation managers & Technology consultants across various industries (Iansiti & Lakhani, 2017).
- An online survey covering 500 organisations that are using emerging technologies, together with their experience, issues, as well as perceived advantages.
- Three large technology event surveys in 2019 for gather information from speeches, discussions and interacting with the participants.

3.2.2. Secondary Data Sources

Secondary data sources include:

- Every paper in the industry report, white papers from consulting firms, technology companies, and research institutions.
- Official papers that are produced by the government and other regulatory bodies like strategy papers and technological development blueprints.
- Clippings collected from newspapers and journals, websites and blogs of companies that have adopted AI, Blockchain and IoT.

3.3. Data Analysis Techniques

Concerning qualitative data analysis, this research employs thematic analysis that seeks to establish the presence of themes in passages of texts, such as interview transcripts and cases (IBM, 2019). Data collected is normally in the quantitative form where descriptive statistics and correlation methods are used to analyse the data that is collected If the researcher is in a position to make conclusions on trends and/or associations between the used variables.

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For comparing the level of effect of AI, Blockchain and IoT in different industries and business functions, the comparative analysis framework is also developed.

3.4. Limitations and Delimitations

The analysis does not consider events that took place after the year 2019 and considers applications of the technologies that are now considered standard (IDC, 2019a). The time factor may also present some difficulties in the continuity of the study because technology is a continuously progressing factor. Moreover, the research mainly depends on the case studies that were used in the developed economy; therefore, this exposes predetermined findings in the emergent economy (IDC, 2019b). Thus, the fact that the technologies these companies are utilizing are intricate is not expounded upon in the study; however, there is also no discussion about basic facets of the business and the potential commercial application and opportunities.

4. Effectiveness of Business Offerings through the Use of Artificial Intelligence

4.1. AI can indeed help in the conceptualization of new business models.

AI is thus enabling new types of businesses that form on data predictiveness, customer segmentation, or that are based on automation. Lagmay 2 Thus solutions like the 'AI-as-a-Service' inevitably frees businesses from previous dependency of having to build the AI capacity from scratch (Kshetri, 2017). Big companies like IBM with Watson, Google's DeepMind, Amazon's Alexa are offering the cloud-based AI software to give the better standard of living to a wide range of population by providing them the facility of efficient and advanced machine intelligence.

AI-Driven Business Model	Description	Example Companies	Key Players
AI-as-a-Service	Offering AI capabilities through cloud-based platforms	IBM Watson, Google Cloud AI, Amazon SageMaker	Google, IBM, Microsoft, Amazon
Predictive Maintenance	Using AI to forecast equipment failures and optimize maintenance schedules	GE, Siemens, PTC	IBM, Microsoft, Accenture, R3
Personalized Recommendations	Leveraging AI to provide tailored product/content suggestions	Netflix, Amazon, Spotify	Cisco, Intel, Siemens, Bosch

The MIT Sloan Management Review and BCG management global survey received the views of the executives, and 84% of them opined that AI has the potential to deliver competitive advantage to their company. This belief is translating to massive investment on AI developments, globally, and AI spending is expected to hit $77. Information Demonstration Centre: It stays at $ 2. 9 billion in the US today, IDC has said that it will hit $6 billion by 2022.

4.2. AI in Delivery of Products and Services

AI as a domain is facilitating the transact of efficiency in service delivery through the following; chatbots, recommendation systems and maintenance systems. Intelligent recommendation system is the efficient applied technology in electronic business industry, the customers are promoted and they purchase more goods. For instance, Amazon has been in a position to say that as much as 35% of their revenue is as a result of recommendation system.

The areas of its application include diagnostics of the disease in its preliminary stages and the determination of an effective therapeutic schedule. The research also showed that an AI system had better accuracy than human radiologists of diagnosing breast cancer; the false positive rate was lowered by five percent. True positive can be reduced by 7% and False negatives by 9%. 4%.

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```python
import numpy as np
from sklearn.cluster import KMeans

# Sample customer data (features could be age, income, purchase history, etc.)
customer_data = np.array([
    [25, 30000, 5],
    [40, 60000, 15],
    [35, 45000, 8],
    [55, 75000, 20],
    [30, 35000, 3]
])

# Perform K-means clustering
kmeans = KMeans(n_clusters=3, random_state=42)
clusters = kmeans.fit_predict(customer_data)

# Print cluster assignments
for i, cluster in enumerate(clusters):
    print(f"Customer {i+1} belongs to cluster {cluster}")
```

This code demonstrates a simple customer segmentation using K-means clustering, which is a common AI application in marketing and customer relationship management.

4.3. Case Studies and Examples

- Netflix: Netflix depicts two of the major interfaces of artificial intelligence: one is for content recommendation and other is for deciding the contents to be produced (Lee & Lee, 2015). The recommendation system that the company has designed is capable of cutting the losses of the company by one billion dollars every year on the aspect of subscriber's churn and the identification of the contents, the efficient recommendation system has enhanced the efficiency of the system.
- Alibaba: AI chatbots offered by this Chinese e-commerce company also furnish replies to the 95% of repetitively asked questions; therefore, reducing the operation cost and increasing effectiveness.
- General Electric: Maintenance: Conditions of industrial devices are estimated with the help of GE's Predix, the first industrial strength AI and results its downtimes and maintenance expenses cut by 30%.

4.4. Challenges and Ethical Considerations

While AI offers significant benefits, it also presents challenges and ethical considerations:

- Data privacy concerns: Problems of AI development imply some questions concerning data collecting, storing, and using the data: AI systems require various data.
- Algorithmic bias and fairness: AI system is normally alleged to increase or repeat the roles of prejudice, particularly within a setting, which covers aspects of employment opportunities and the criminal justice system (Makridakis, 2017).
- Job displacement: According to a report published by the OEDE in 2019, of all the jobs existing in the countries adhering to this organisation, about one out of seven is considered 'high automobile', while another one out of three can be 'heavily affected'.

5. Consequence of Blockchain on Business Offerings

5.1. Blockchain-Driven Business Innovations

The blockchain is the core technology that enabled the emergence of the viral new business models based on decentralization and the subsequent disintermediation (McKinsey Global Institute, 2018). Among them, the smart contracts are the most promising practices of doubling the business processes along with the automation and security features. Gartner's business value add indication of blockchain is expected to be more than $176 billion by 2025, and then cross $3. 1 trillion by 2030.

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It is a financial management software which is transforming the financial services; the Total Value Locked in DeFi is 4 billion dollars in the middle of 2019. These applications offer people financial services such as lending and borrowing of cash, trading in virtual currencies, among other services without the intervention of third parties.

Blockchain Application	Description	Potential Impact	Key Players
Supply Chain Management	Tracking products from origin to consumer	31% reduction in product losses	Google, IBM, Microsoft, Amazon
Cryptocurrency	Digital or virtual currencies	$1.4 trillion market cap by 2024	IBM, Microsoft, Accenture, R3
Smart Contracts	Self-executing contracts with terms directly written into code	25-30% reduction in banking operating costs	Cisco, Intel, Siemens, Bosch

5.2. Improving the Clarity and Safety for Deliveries

It is, therefore, changing supply chain management and making the tracking of goods from one terminal to another possible. Research that was carried out by Capgemini showed that every year about $122 billion was chucked away through fake goods and that through a blockchain retail application the world trade finance amount could be about $962 billion.

```
pragma solidity ^0.8.0;

contract SupplyChain {
    enum State { Created, InTransit, Delivered }

    struct Product {
        uint id;
        State state;
        address payable sender;
        address payable receiver;
    }

    mapping(uint => Product) public products;
    uint public productCount;

    event ProductCreated(uint id, address sender, address receiver);
    event ProductShipped(uint id);
    event ProductDelivered(uint id);

    function createProduct(address payable _receiver) public {
        productCount++;
        products[productCount] = Product(productCount, State.Created, payable(msg.sender),
        emit ProductCreated(productCount, msg.sender, _receiver);
    }
```

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```
function shipProduct(uint _id) public {
    require(products[_id].sender == msg.sender, "Only sender can ship");
    require(products[_id].state == State.Created, "Product must be in Created state");
    products[_id].state = State.InTransit;
    emit ProductShipped(_id);
}

function deliverProduct(uint _id) public {
    require(products[_id].receiver == msg.sender, "Only receiver can confirm delivery");
    require(products[_id].state == State.InTransit, "Product must be in InTransit state");
    products[_id].state = State.Delivered;
    emit ProductDelivered(_id);
}
```

This Solidity smart contract demonstrates a simple blockchain-based supply chain management system.

In the food industry for instance, now, with Blockchain every step of the food product that is being manufactured can be tracked which makes food less perishable and leaves no room for fraud (Nakamoto, 2008). Created by IBM to be fully operational by end of 2019, Food Trust network that track the pedigree of close to 8 million foods was created in 2018.

5.3. Case Studies and Examples

- Maersk: From this shipping firm, IBM built Trade Lens, which is a shipping solution based on blockchain technology. At the end of the year 2019, they have gathered more than 100 participants on a daily basis and the platform processes more than 10 million events and 100 thousand documents per week.
- Walmart: It opted for an implementation of a blockchain system known as the 'Grocery Traceability' that can be employed in identifying the history of the food item (OECD, 2019). Particularly in a test done with mangoes, Walmart was able to reduce the number of days it took to trace the whole origin of the fruit to merely 2 from 7. 2 seconds.
- Santander: It began the initial block chain founded worldwide money transfer service, for instance, One Pay FX minimizing charges of transfer from days to minutes.

5.4. Regulatory and Adoption Challenges

However, due to various factors blockchain is confronted with a number of challenges:

- Lack of standardization: What is more noteworthy, every blockchain has its inapplicable standards, making the process of linking blockchain platforms impossible.
- Scalability issues: Some of them have been hampered by problems in relation to the transaction rates or throughput capacity thus rendering them incapable for many of the high-band applications (PwC, 2018).
- Regulatory uncertainty: The dynamics which a decentralized network resembled by blockchain present some problems of regulation for such a network; primarily in financial field and, secondly, in regard to data protection.

6. IoT and Its Effects on Business Propositions

6.1. IoT-Enabled Business Models

IoT is playing the role of shift from product dominated economy to a service-oriented economy; hence bringing in the concept of PaaS. That sort of transition is favourable because it enables organizations offer more time in engagement with clients and develop permanent means for income generation.

The Internet of Things' total linked bazaars based on the research study conducted by Bain & Company could be almost $520bn in 2021; $235bn in the year 2017. The manufacturing and IT industries are said to be contributing to almost about 60% of the growth of the market (Russell & Norvig, 2016).

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IoT Business Model	Description	Industry Examples	Key Players
Product-as-a-Service	Offering products on a subscription basis with IoT-enabled features	Rolls-Royce (Power-by-the-Hour), Philips Lighting	Google, IBM, Microsoft, Amazon
Predictive Maintenance	Using IoT sensors to predict and prevent equipment failures	Caterpillar, Kone Elevators	IBM, Microsoft, Accenture, R3
Usage-Based Insurance	Tailoring insurance premiums based on IoT data	Progressive (Snapshot), Metromile	Cisco, Intel, Siemens, Bosch

6.2. Operational Efficiency and Customer Experience

The major successful application of IoT has been in processing of real time data as well as in decision making process for the purpose of preventive maintenance. McKinsey through examining the manufacturing applications of IoT pointed that predictive maintenance reduces overall maintenance costs by 10%-40% and reduces time loss by 50%.

On the retail side, IoT is enhancing the lives by adding some specifics of the purchasing process like smart shelves or personal offers and discounts (Tapscott & Tapscott, 2017). In a survey conducted by Zebra Technologies International through the Barcode & Labelling magazine in 2016, 70% of the retail decision makers are willing to establish and implement IoT for better customer experience.

```python
import random
import time

class IoTDevice:
    def __init__(self, id, type):
        self.id = id
        self.type = type
        self.data = {}

    def generate_data(self):
        if self.type == "temperature":
            self.data["temperature"] = round(random.uniform(18, 25), 2)
        elif self.type == "humidity":
            self.data["humidity"] = round(random.uniform(30, 60), 2)

    def send_data(self):
        print(f"Device {self.id} sending data: {self.data}")

def simulate_iot_network(num_devices, duration):
    devices = [IoTDevice(i, random.choice(["temperature", "humidity"])) for i in range(num

    for _ in range(duration):
        for device in devices:
            device.generate_data()
            device.send_data()
        time.sleep(1)

# Simulate IoT network with 5 devices for 10 seconds
simulate_iot_network(5, 10)
```

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This code simulates a simple IoT network with devices sending temperature and humidity data.

6.3. Case Studies and Examples

- General Electric: IoT has been implemented in GE where the company's IoT platform, Predix, has been applied to enhance the wind turbines' productivity to between 10-20% thus generating about $100 million of value.
- Nest (Google): Founded as a smart home devices maker which was taken over by Google the company has managed to sell over 11 million devices by 2019 which help customer save from 10% to 12% on heating bills and 15% on cooling bills (Westerlund, Leminen, & Rajahonka, 2014).
- Caterpillar: Another example of IoT implementation is the heavy equipment manufacturer that tracks IoT sensors in its machines and cuts its fuel expenses by 40% and maintenance expenses by 25%.

6.4. Data Privacy and Security Concerns

This is since the numerous IoT devices that connect to the internet can pose a lot of dangers when it comes to the data privacy and security. These devices will all be connected and this means that billions of devices are generating and transmitting information; this is hotbed for hackers and that is why there are data breaches. A study by Gartner shed more light on this by estimating that by the year 2019 IoT will be involved in more than a quarter of the identified attacks in enterprises and therefore security has to be tightened. However, the collection of large amounts of personal data through the IoT devices creates several issues regarding own the data, permission, and utilization. The GDPR regulates the legal incubation of data in the European Union and the European Economic Area and has become one of the most acknowledged data protection laws across the globe, which established the need for companies to seek direct or indirect permission from the users to collect and process their data through the use of cookies.

7. Future Trends and Predictions

7.1. Emerging Trends in AI

It has emerged that Explainable AI is slowly becoming a topic of focus since stakeholders such as business entities and the regulating bodies require an understanding of the decision-making process of AI. According to research conducted by Gartner, by 2023 most of large organizations will have employed the services of specialists in AI behaviour forensics, privacy and customer trust since most brands and reputations will be at risk. Specifically, the use of Edge AI, where instead of delivering machine algorithms to the central cloud and waiting for the result, the algorithms are processed immediately on the device, will expand considerably. Predicts that post-2023, more than half of new enterprise IT infrastructure investments, will incline towards the edges and not the corporate data centres which was under 10% in 2019.

7.2. Future Directions in Blockchain

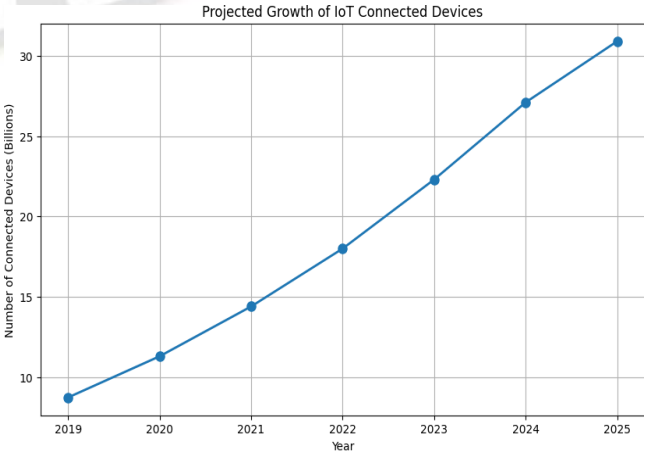
Integration of multiple blockchains is another major research area of interest. Today such projects as Polka dot and Cosmos are developing 'internets of blockchains' that enabler the interaction of different blockchain networks (World Economic Forum, 2018). The combined use of blockchain with other advanced technologies is envisaged to continue. For example, blockchain integration with AI is being considered for the use in the supply chain mechanism, healthcare and financial sectors.

7.3. Evolution of IoT

5G networks are expected to play a major enhancement to IoT as it unfolds; it will make the IoT systems more complex and with real-time characteristics. According to predictions by Ericsson, in mobile data traffic, overall; 5G networks are expected to offload about 35 percent by 2024 and provide connections to 65 percent of the total world population. Expectations for the IoT security and IoT standards to rise as seen by the signing of the IoT Cybersecurity Improvement Act in the United States which provides IoT device security requirements.

7.4. Merging of Technologies and its Effect on the Firm

Combined with the integration of AI, Blockchain, IoT are expected to become the next driver of Digital Transformation. McKinsey says that the total business value benefit of these technologies may be at least $15. A number of people Using social media Every day is projected to reach 2. 74 billion in 2018 and hit and 3.01 billion in 2021 and by 2025 the spending on advertising through social media is likely to reach 16. 7 billion to 7 trillion (Zheng, Xie, Dai, Chen, & Wang, 2017).



AI-based smart contracts relying on the IoT data are predicted to propel automated and intricate business outcomes across multiple sectors. For instance, in the insurance industry this could mean the ability to process insurance claims within the insurance firm using data from IoT devices on the client in real time.

8. Conclusion

8.1. Summary of Findings

It has been concluded from this research that AI, Blockchain, and IoT have transformed the nature of business offerings significantly. They do not only deepen the current ways of doing business but also create completely new ones. AI is changing decision making and personalization, seen in applications like, customer service using chatbots and or using AI for predictive maintenance for industrial manufacturing. Blockchain is rapidly changing the ways how and when trust and transparency affects transactions, especially in the supply chain and finance. IoT is linking the physical and digital domains in a way that has never been seen before to monitor and enhance production and the customer experience in real-time.

8.2. Contributions to the Field

Hence, this research work adds value to the body of academic writings by offering a detailed, cross-sectional investigation of these three fundamental technologies and their impact on business. This creates the need to think of these technologies not singularly, but in terms of the overall technological topography. The study also brings into perspective the fact that it is imperative to understand that in incorporating the technical features of the system, there are equally organizational, ethical, and regulatory aspect of the adopting technology that must be addressed.

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