# Economic Practices and Financial Performances of Pharma Company in Rural Areas

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#### Abstract:

In the heart of Europe, rural areas demanded healthcare from unskilled and sometimes improperly controlled pharmaceutical stores, which were worried about the quality and public health consequences of the goods and services rendered. The study sought to explain consumer relations in a rural retail drug market regarding the systemic conduct-performance model and the possibilities for future policy actions for better access to and secure medications. The research was carried out. Data were collected in 2012 in the Benue State Local Government District, in the northern UK, for more than 9 months from a survey of patent medicine vendors and drug purchasers. Drug sellers and prescription users were informed using semi-structured questionnaires, comprehensive interviews and comprehensive observations of purchases. In-depth interviews and the associated documented evidence gathered and analyzed were also conducted with key regional and national substance enforcement officials. To explain business performance and fair usage, the data analysis centred on the interactions between the market system and supplier behaviour, customer and

regulatory character. The study showed that patent-medicine suppliers were a significant source of primary ambulatory health treatment for citizens of the local governments. Drug sellers have been named credible suppliers of several medications sold at comparatively more reasonable rates and satisfy market criteria. Nevertheless, there have been some industry shortcomings, such as inadequate care efficiency due to insufficient understanding of diseases and medicinal goods and thus ineffective prescribing and dissemination procedures. Inappropriate and insufficient regulatory regime, which has contributed to extensive regulatory abuses, has also been shown by ineffectual legislation. Regulative strategies must be contextually applicable, manufacturers must be educated and financial and market benefits provided. Customers must acquire usable and timely clinical knowledge for informed decisions against the backdrop to accomplish a desirable public health goal of sustained increases in the quality of goods and services in patent medicine vendors.

**Keywords:** Economic Practices, Financial Performances, Pharma Company, Rural Areas, Public health

#### Introduction

The literature analyzed, and unpublished was extensively scanned to examine the subjects described as economic studies of retail pharmaceuticals in the rural areas of the United Kingdom: access extends and regulation [1]. The published literature was extracted from Science Direct, Scopus and PubMed database findings by adding controlled terms key words and limiting research to studies performed in English [2]. Normal economics, food economy and relevant healthcare books were also consulted on the necessary content. There were no time limits enforced regardless of the desire for a broad search strategy [3-5]. Unpublished documents and files of well-known foreign organizations have been compiled, such as the Public Health Organization, the World Bank, PS-Pone, ACTwatch, and DFID [6-9].

The bibliographies of chosen texts were often searched for additional literature. The most important facets of hunting included retail patent providers, specialist drug shops, grocery stores, pharmaceuticals, drug stores and consumer behaviour [10-13]. When the search and processing of the information sources have been finished, document names, abstracts, presentations and findings and relevant sources have been drawn up, based on standards studies analyzing the characteristics, conduct and efficiency of retail drug markets in the rural Kingdom. United Published studies investigating unregulated, low- and middleincome suppliers or recorded mechanisms of improved access to medical and essential medicines were also included in the report [14-19]. Traditional sector manuals were used for the research on economic market economy, price philosophy and taxes and the manufacturing organizations, and the data collection, analysis and debate structure. In particular, the literature review was organized in line with main values, subjects and constructive conclusions [20-25]. These studies and, in particular, the context for an appraisal, which forms the foundation of different meanings and approaches to knowledge processing, have widely affected the principles and themes [26].

The emphasis is on relationship entre dynamics, supplier competency, and consumer behaviour in assessing company health outcomes [27-32]. The basis for this study is these three concepts, including every issue that produces sub-topics that are further discussed and explained to conventional economic theories. The economic underpins such as business trends, customer behaviour, market domination types, and market weaknesses are also evident. That's the start of the research [33-35]. The theoretical literature presents different aspects of the situation, compares and contrasts the various views and evaluates the general utility of assumptions. The thematic areas discussed government economics, regulatory theory and access to wellness [36]. In general, the literature reflects on the theory and scientific literature and the degree to which the study issue and its metaphysical background correspond to those

concepts or subjects [37-41]. The past of a free exchange of goods and services between citizens in a commercial economy stretches back many centuries from the sale through trade to the current usage of currency and financial capital as exchange media [42].

# The Structure-Conduct-Performance (SCP) Model

The model assumes a deterministic relationship between industry dynamics (number of distributors and customers, barriers to entry and exit, business growth rates and consumer integrations, market conduct (advertising, research and development, pricing, expansion of plants, variety of goods, mixtures, merges and markets) (prices, profits, efficiency, equity, product quality and technical progress and growth). It specifically states that the activities affect the essence of the business where a company operates. and in turn. organization's conduct affects market efficiency [43-47]. The competitors of industry-related firms have been listed in four large ranks, traditionally in terms of the existing core and thus competition power over costs [48]. The different market concentration modes indicate different competition patterns, from the least conceivable concentration to the most intense monopolies [49-51]. The low incidence of monopolies and the large concentration of oligopolies were tucked between these extremes [52]. These intermediate categories may usually be viewed as incomplete rivals, and the vast majority of modern markets are in this broad group. Nevertheless, two serious forms of corporate associations are worthwhile to understand and function as useful mechanisms to examine specific economies [53-57]. Certain economies are more structurally associated with ideal competition, whereas other developments towards the monopoly model yield outcomes that the competition and the monopoly model are supposed to achieve [58-61]. The diversity of market processes in the economic literature on manufacturing organizations has been analyzed comprehensively and estimated production [63].

#### **Problem Statement**

To provide the most effective instrument for redistributing scarce resources, politicians worldwide will often prefer to depend on them to obtain economically advantageous economic effects through their outsourcing, redistribution, promotion and legislation policies [64-69]. The motivation to develop social care is enormous as we consider the demand dynamics [70]. There are two main customer perception methods: empirical approaches, which define business actors and the use of microeconomic theories of market and price. This offers a conceptual facility for analyzing and explaining market interaction dynamics and measuring solutions from the demand and supply interface [71].

## **Market Structure**

The core components of the business structure are the number of businesses competing on the markets that define the concentration of the market, obstacles to entry and departure, product details features and regulatory environment, which are further checked [72-75].

#### **Market concentration**

Company concentration measures companies' number and relative market shares in horizontal or vertical integration [76-80]. Dynamic and highly focused are tiny horizontally-oriented sectors. There were some techniques for quantifying horizontal quantities of literature, but those procedures were associated with several empirical and computational defects [81-85]. Vertical convergence describes how an organization is involved in the successive product creation and distribution processes. Integration was known as reverse (upstream) integration integration and forward (downstream) [86-89]. In the former example, the firm is interested in manufacturing raw materials and other inputs. At the same time, a company also takes an interest in selling the final commodity in future incorporation [90].

# Market entry and exit barriers

The barriers to the entrance of companies apply to conditions that enable companies to gain permanent surplus advantages in a business which could adversely impact potential entrants in the industry [91-94]. The expenses of

incumbent firms would offer great cost reduction and product differentiation at lower average rates. Admission to legislative patents, licensing and permits could be required for other obstacles [95-98]. Strong spending on capital would serve as an escape barrier, which may lead to significant losses and disruption by the re-sale of plants and equipment [99-101].

#### **Product information characteristics**

When deciding the cost of a product, buyers have major implications for market competition.

# Regulatory framework

There would be many administrative frameworks for industry or withdrawal, product criteria, pricing policies, manufacturing practice guidelines, ethical norms, fees, subsidies and accreditations [117-121]. The impact of regulation on the industry's competitiveness depends on business conditions, supply behaviour and ability to enforce it. Public initiatives are generally meant to increase market competitiveness to maximize social benefits [122-127].

# **Provider Conduct**

This includes all activities of vendors that shape or influence market outcomes and structures that are critical for understanding market behaviour, including price setting, product differentiation, factory departments, concentration and regulatory reactions [128-131]. Their key characteristics are examined, and how they affect competition is explained [132].

# **Price fixing**

Prices mainly are set in imperfect markets in which suppliers are ready to price their earnings above production and have a certain degree of bargaining power [133-137]. Companies in fully competitive markets cannot raise prices over marginal risk, contributing to losses for customers. The strategies utilized by providers for market protection and, therefore, price autonomy involve the differentiation between goods, imperfect informative alliances, barriers to entry and collusion [138]. The prices do not often consist of price elasticity based on production but of regulations such as the

Before purchasing, search goods have to be correctly checked, and seasoned goods are obtained before assessing consistency [102-106]. Service and product recognition require consumers to use external expertise to assess their uniformity. Even manufacturers serve as experts who evaluate when the consumer can carry out a product [107-111]. As a result of competitive information and credential goods, service alerts and market defects will not be met if consumers do not cope with demand [112-116].

labelling or copying of the industry's market leader. Dominant firms 'sovereignty for markets is expressed in the first, second, and third-degree discrimination pricing policy. In the first degree, price discrimination ranges within production units and between specific buyers, whereas in the second grade, pricing distinguishing changes mainly within production units. Third-degree discrimination exists whenever the price of goods changes from individual to person [139-144].

#### **Product differentiation**

This influence arises when consumers prefer one rival offering over the next due to observable quality, auxiliary service packages or spatial segmentation [145-147]. Product distinction is product advancement that increases a company's efficiency and profits, and the product may be horizontally or vertically separated. Consumers' tastes determine product differences in a horizontally separated industry, whereas vertical differentiation enables certain brands to acquire more desirable properties than others [148]. Although consistency signals were difficult to observe, the assertion was classified as more cost-dependent and cost-insensitive customers. In any scenario, a commodity's equilibrium on the market is low, and sellers would need more indications to maintain the consistency of the market [149-151].

# Market concentration enhancing strategies

These activities emphasize organization and business strength through mergers and acquisitions. These activities can also be influenced by wishes to reduce transaction costs, prevent taxes, guarantee input of goods, secure output markets, or hurdle newcomers. The free

partnership or implied understanding between firms will be another form of limiting market competition or creating production limits.

# Provider response to regulation

Government policy is stated not always focused on strengthening social welfare, as vested interests attempt to obscure the process and implementation of legislation. The law should act systematically to raise the vested interest rather than the public interest. Technical associations, for instance, seek to encourage policymakers to increase their technical licensing and certification requirements in health markets. The strategies used to influence legislation include advocacy, promotions. investigations, indirect interactions and deliberate awareness of certain cases. The interplay between institutional and consumer elements produces the nature of competitiveness, which determines and characterizes its social efficiency.

#### **Methods of Data Collection:**

The reasoning was given for using a variety of data collection to triangulate information to ensure the validity of the contents of the study test findings. To achieve the research goals, semi-structured questionnaires, semicircular interviews, seller-buyer experience impressions, and secondary documentary evaluations have been used to collect cross-sectional details from the studied populations bv sequential triangulation of expertise. The modular, semistructured data collection tools were chosen because of the research scale, which contributed to an in-depth review of new ideas and leads during the study.

# **Qualitative interviews**

Several studies have demonstrated the significance of interpreting the ties between retail producers and consumers of qualitative approaches. Thus, semi-structured interviews were used in depth to achieve a wide volume of knowledge, varied approaches, and free inquiry in certain situations to hold the subjects addressed in each interview comparable. The literature review again offered valuable insights into the thinking understood to the systemic

efficiency economic system and the emerging concepts for access to healthcare. Additional obstacles and patterns presented new directions for more study by data collection. This included specific relationships and business problems with the official pharmacies, and supervisory agencies, especially the UK Pharmacies Council and the Food and Drug Administration and Control Department. The side variables analyzed the interviews were consumers' perceptions and desires and the opinions and aspirations of retailers on government roles and health concerns. Although the interview guide reflects on these core aspects, valuable findings have been further discussed during the interview. The main interviews with regulators are based on their role as suppliers of patent medicine, the regulatory framework and its execution, the challenges of pharmaceuticals enforcement in general, and then patent medicine suppliers and their viewpoints. The interviews were performed in English and recorded between 8:00 a.m. through digital recording. And ten o'clock at p.m. The interviews lasted from one to two hours, and notices were produced on the interviewee's actions and non-verbal language at each interview. Techniques for interviews backed up simpler interviews.

#### **Provider-consumer interaction observations**

Each customer shall be recruited before ten samples are collected to monitor and record the current mechanism of consumer transactions pharmaceutical between suppliers consumers in a targeted (highly patronized) pharmaceutical store and the systemically selected samples of pharmaceutical clients. This activity aimed to achieve a certain discrepancy since it was well known to the researchers, and after the other operations of the analysis, its presence was considered natural. It provided detailed descriptions of episodes of touch, explained the form of meetings, when the customer called, requested, or used a prescription and what the provider did and did not. The exercise has been reviewed and extended with the requisite feedback. The researchers were dedicated to providers to alternate with simulated reading in order to maintain a confidential environment, as the

former found nothing unusual even though they had to write information during meetings between providers and consumers. Factor found in the medical sales were questions concerning ill health or substance records; customers had been physically checked; final actions such as drug selling, written or verbal drug use recommendation, injury dressing, handling of injections, referrals or medical training conversations were taken into consideration. Social proximity, customer satisfaction and working conditions have also been reported. Finally, there was an example of the transaction duration.

# **Secondary data collection**

The historical evidence for this study was gathered from the secondary sources of expertise from relevant materials such as clinical care programs-intervention papers, surveys, evaluation reviews of essential drug recovery facilities and government-led health statistics. Ses documents were sought by the associated departments, NGOs, technical bodies, bilateral and multilateral agencies. These data have been developed from a wide variety of sources, including the Federal Federal Health Ministry (FMoH), the United Kingdom's Rural Farming Council (PCN), NFDAC, the Consumer Protection Council (CCP) and PATHS, two UK Rural Regions. These data are accessible from several sources. The knowledge was obtained in a variety of fields.

# **Methods of Data Analysis**

The basic approach used for data analysis involved a detailed knowledge of data, an evaluation of content, a coding system and data interpretation, all about the research problem and study objectives. The content assessment of nominal the data from semi-structured interviews was carried out to arrange and categorize the information gathered. interview details were transcribed, and the transcription comments were checked for accuracy compared to the two reviewers. In routine and line-by-line steps, the text was then re-read manually in organized groups. First, before data were obtained from the conceptual sense of research, several codes were made. The

data, novel ideas, connections and meanings of the categorizing codes such as clients' behaviour, market mechanisms and service providers' operation emerged out of inductive reasoning, which is extracted from the theoretical framework in which many smaller sub-codes such as entry obstacles, exit opportunities, interactions and regulations are advertisements. organized through structuring code has frequently been compared with the previous texts by ensuring that it is compatible with the data and aims of the analysis. The method allowed for coherent coding and guided data analysis and pattern shown. Based on the number of patent medicine suppliers on the market and the connectors, simple escape, the wholesale structure, vertical and horizontal bonding and tying in, the theoretical performance paradigm of the structural behaviour was studied. The data collection components for providers' actions are non-price, and price strategies and patient performance was evaluated by disease and medicine understanding, study strategies and provider preferences. After reviewing the laws, their implementation, and their regulatory methods, the final determinant of market performance in regulation has been studied.

#### **Ethical Issues**

The Ethical Committee was presented with ethical clarification to carry out investigation. The Benue State Health Ministry in Makurdi, UK Rural Regions, issued additional ethical advice for this report. Initially, all study participants told the purpose of the analysis and the educational institution involved in detail. They clearly explained the essence of their presence and were allowed to raise questions where there was uncertainty, and more explaining was required. The inquiries obtained only oral consent, which was seen to private health care professionals that written consents risk and discourage them and limit their presence or distorted information, owing to the nature and potential legal implications of actions in informal markets. It was, therefore, important to approve qualitative interviews. Written questions were sent to main regulators via mail for permission on permits, days, times and

places of interviews. Participants were fully informed of their rights that they did not respond, ask questions and freely withdraw from the study at all times. Before the operation was conducted, they were given the full description if anyone was interested. The data collection, data distribution through code numbers, safekeeping in the locked office of interview tapes and transcribed notes are guaranteed to the participants' privacy via utter confidentiality. A personal password with participant information was also secured from the study laptop

# **Findings**

Patent drug providers were known as practitioners and consumers interchangeably as patients, sellers and customers in the diverse communities in which they were located. The essentials of their clients' meetings as fundamental transactions of orders, health and health reports, appraisal, counselling or referrals are differently interpreted. This includes basic purchases, appointments and therapies and also counselling. Their views were stated separately in the following quotations: "You say they sound like this or that, so you have to consider the problem and give medication to them. If the effect is gone, they will receive treatment and come and obtain medications from pharmacist." (R 01) "We do all of this through the discipline We have, which changed a lot for us; some individuals have been drawn to come here, so We are trying to see where We do not have to administer and exclude. If the explanations are unsatisfactory, they receive prescribed medication. When they come to their cause, we have to work out how long the condition takes to get the drug crisis, and when they arrive, we first investigate the disease's cause, identify it, find out before we provide treatment" (R 04)

Many respondents also talked about the general demand for medications to knowledgeable customers and client concerns. "We advise them that we know what we do because they reject my advice, but encourage them to abide by what we say to them. If the money isn't completely dosed, let it go before it's located. Although patent providers saw their place as expert guards

on pharmaceutical goods and as customers inadequately aware of drugs, market sovereignty was fully acknowledged in purchase decisions. Some reported that they would buy from other places" (R 09). No protocol was found to distribute some drugs on a routine basis. Wares had been dispensed on requests. A purchase should only exist in certain cases when the vendor had a seller's inventory and, as a consequence, the market freedom had been safeguarded in corresponding sentences. They will still insist on their views as locally nasty, like a fisherman, even though you tell the thing that's right; that is my point about the environment and the financial insufficiency." (R:02) Practice serves individual consumers of options and services in reaction to demand and has helped market medication dosage.

## First aid providers

Most interviewees described their encounters as first-aid treatment at a later or higher stage of care before completion. (R: 04) "Today in Benue State, fewer than two local governments in some areas have less than two pharmacies. The idea of first aid from patent medicines suppliers is also endorsed because it should still value. The fact of the first help of patent medicines suppliers is that the idea of first aid from patent medicines suppliers is still being supported.

# Meeting need and complementing the public system

Patent pharmaceutical products vendors recognized the financial difficulties and the shortage of availability of medicines in the formal health system and thus considered that they give consumers inexpensive alternatives and improved proximity to supplies for long and convenient hours. The organized health networks have been shown to play a complementary role by patent medicine suppliers to highlight the partnership of sensitive cases and obtain solutions from them. "Not so, the population of the whole municipal government, it's positive, is essentially focused on the grassroots market. This is the only general hospital where drugs are not accessible whether they're struck or not, for one person alone cannot tend to the whole community's

needs. I would like to say that there is no path to helping patients in the UK rural regions without patent drug providers. How many pharmacies do you tell in this municipal district? Can any of the pharmacies in this area of the local government meet all? In certain local government areas, there is no drug shop. While it emphasized its function in complementing the general health policy of the country through a public sector, the public authority, the British Rural Areas Pharmacy Council, a community primarily containing drugs, was viewed as competition rivals and industry competitors. Their role was underlined. We have pharmaceutical goods where there are no drugs." They shared their views in the quotations below: "...and though they are genuine, when we have bought from the drug shops, they are going to place power in us such that they exploit us to obtain additional profit.

#### **Practice boundaries and linkages**

The constraints on their skills and facilities appeared to be recognized by both medical vendors through their ability to refer difficult conditions to better-equipped hospitals and laboratories. Again, the researchers have recognized their knowledge and vulnerabilities specifically in practice. We are still providing drugs if the doctor prescribes them. In case of malaria, we will refer you to the lab and then set up the consultant who will recommend the medicines and then provide you with the drug. We will give you Panadol to treat your fever until we have learned that it is not urgent until we have reached it. "We are going to send medications, as we described above.

# Regulation and legitimacy

The two physicians have also admitted that the drugs distribution regulation is appropriate: "We want to avoid the uncontrolled, untrained, uncertified and unlicensed person being the physician" (R:10),but sharing disappointment with current laws, they have described them as being "corrupt, replicative and redundant," The Regulatory framework involves NDLEA, UK Rural Areas Pharmacy Council (PCN), the National Food and Administration and Control Service (NAFDAC) or the UK Rural Areas Police Force, others not explicitly defined as placed. The Regulatory regime includes a range of national drug compliance authorities. In particular, it was stated that payments received by PM suppliers were notoriously fraudulent and often indirect. "So, the little profit we offer, we exchange it with the government because there is a union. They will join the meeting to suggest something the Ministry of Health says that or that because they advise us to contribute money to search for it or provide it. We are advised to do so by the Minister of Health.

Alalthilst the majority of patented suppliers granted regulatory infringements, in their practice, the bar was unrealistic, legitimizing their practice: 'Truly, it's true eh, certain of the medicines we sell have not been subject to our licence, but since we are located at local locations where sometimes we find or not a pharmacist, there are those medicines which are essential or which we can buy.' We just supply them with drugs dependent on a doctor's prescription, so we help the community" (R: 07). The United States and the WHO finance many of these assets. (R: 02) Community approval of its good findings has been construed as further affirmation of the practice's credibility, as indicated by a single service provider: (R: 09).

# **Policy Context**

New prescription drugs have significantly reduced the mortality of most common disorders and pain relief for millions worldwide. However, many people worldwide, particularly in rural areas in the UK, do not benefit from such medical developments and cannot access accurate, effective and accessible drugs every day if essential or equal medication usage. Many patients with access to medications have often been prescribed, and inadequate medicinal drugs have been provided for their disease, insufficient medicinal products have been offered that satisfy their needs. Drugs are mostly prescribed or distributed in remote areas by untrained and unlicensed patent dealers. But these informal providers are now funded as successful health care providers in Africa and are the first in approximately 15-85% of cases, for example, childhood malaria. Thanks to their heavy

support and rising value, retail pharmacy traders are projected to be key health care suppliers for hundreds of millions of individuals in the future. Drugstores in the UK, agricultural areas and like most other Afro-African countries, are also the sole sources of healthcare for their communities. Improving access to sufficient and safe pharmaceutical drugs and equal use by distributors of patent medication are, thus, an integral public policy concern from a population maximization policy point of view.

# **Essential Medicines and Rational Drug Use**

Sensitive drugs have been described as 'indispensable and important to the health needs of the people. Both sections of the population, which are essential to primary health services, should be available at all times at an appropriate dosage pace." Moreover, the international health organization defines the use of sound drugs as "patients receive medicines appropriate to their clinical needs at doses meeting their individual needs for an adequate time at the lowest cost for them and their community." for an acceptable duration of time.

#### Contribution to Knowledge

This report is the first to consider demand and supply behaviour in rural UK regions as part of the industrial organization's economic objective. The study reveals that the failure of this model captures the vital impact of purchasers on deterministic market performance. The patent medicine shop characteristics and consumer behaviour were not previously released on this empirical forum. Therefore, in the existing scientific literature, the dissertation offers additional evidence of the important function of patented service services in delivering primary health care and increased access to vital drugs, particularly in rural and underserved areas. Patient comfort, prescription such as convenience, home approach, relative expensive medications, lengthy, flexible opening times, credit scope, and accuracy understanding, has contributed to promoting patent pharmaceutical suppliers' acceptability and performance.

In certain circumstances, they not only marketed but also consulted prescribed pharmaceutical products and gave medical advice, all of which were performed to help others. They also supplemented other formal prescription supply chains and became the largest provider of essential medicines in some communities. The patent medicine supplier's industry examines monopoly and oligopoly rivalry comparatively limited entry and exit capacities. Usually, untrained salespeople with a third party organized workout background were numerous retail vendors. Medication prices were largely steady in all submarkets surveyed, and margins tended to be high. The non-priced competition was high, but good consumer efficiency, insufficient prescription, exceeding dosage, bad markings, and ineffective contact with public health struggled to yield good market results. Consumers buy and self-medicate ineffective substances that reflect the irrational application of drugs by themselves. Gross regulatory gaps have also been and have been. Renewal of licensees was sluggish, continuing health orders for patent vendors were intermittent, regulatory failures were mostly excluded from monitoring, examination and disciplinary action because regulatory authorities tacitly approved violations. Patent medicine firms are therefore trading even generic drugs distributed outside control. Customer education environmental conservation programs also struggled to enhance health and use. This results in wider access for people to medicines in general, thus weakening the quality of products and services and the public engagement capacity. Overall, a mixed outcome for improved access but a low standard has been the link between imperfect competition and poor regulations - "the lemon market" The significant overlap between these findings and the previous literature is an addition to a more extensive dialogue on the position of retail medicines in boosting access to adequate healthcare in rural regions for low-income countries, especially the UK.

The present paper analyzes the performance of the patent industry analyzed in isolating the root causes of business breakdowns and presents policy recommendations for increased availability and equal usage of reliable medicines and protected medications for improving population health outcomes. The analysis aims to answer the issue of whether the government should continue spending restricted health resources in torsional oversight or find more productive forms of fixing a registered deficit on the sector in reaction to the economic purpose of the systemic success model. The policy approaches for resolving threats to the market and enforcement gaps highlighted in the report involve a variety of policies aimed at patent medical manufacturers, consumers, dealers and wholesalers and regulatory structures. Unique concerns have usually been addressed in the rural districts of the proprietor of patent medicines about enhancement of availability, affordability or acceptability of standard and secure medicines.

It introduced an integrated policy solution that included several well-established techniques. It offered a viable approach for only high-quality goods hitting the market through strict compliance with registration criteria, drug packing and registration labelling. Accreditation and franchises strategies can enhance supplier experience and technical competence by providing financial and business tools to render access to affordable, healthy and efficient pharmaceuticals more competitive in this market. The researcher has established the primary motivation for rural drug consumers to improve medicinal substance production in the short and long term, in a joint communication on health-educational preparation, which takes account of public perspectives. The findings lead to the request to update the patent license requirements for pharmaceutical transactions in the rural UK. The rules must adhere to the interests of the chosen group. Initiatives to increase access to 210 can guarantee that selling several pharmaceutical drugs, such as traditional antibiotic items, would legitimately boost the quality of the products and services offered to patent medicine vendors.

#### **Conclusions**

The technical nature of pharmaceutical goods has often been suggested that the minimum

schooling standard is insufficient reading and writing. Regulatory bodies must be improved by enhanced assistance and staff development to enforce compliance with regulations. In conclusion, research offered evidence that there is support for the possible intervention in extending access to quality and safe medicine by patent pharmaceutical firms and claimed that the only adequate delivery networks of essential drugs, especially in rural areas, will not continue through licensed drug storage companies alone. The patent discount drugstores cannot be subject to these channels' enticing features and longstanding behaviours. Therefore, the best solution is to work constructively with those suppliers to improve their ability to increase access to secure and efficient drugs, thus resolving a range of quality issues: one to boost the efficiency of retail pharmacies regularly and maintain prescription quality and service quality together with solid surveillance.

# **Study Limitations**

The accuracy of most of the information requested by the study has demonstrated that some research methods cannot accurately measure all the target variables. However, the social appropriateness of responses and sometimes vague recall have been distorted in semi-structured interviews that would permit a clear study of the issues. Retrospective tests are performed to determine the Hawthorne effect, and documents may include anomalies. including incomplete or partial details. These limits were then defined by the nature of the analysis to triangulate the data collection methods used in certain variables. Compared to the UK, the area examined is small; however, the rigorous random methods used eradicate errors or biases and increase the credibility of the evidence supplied. Their consequences are not common, and the outcomes are achieved.

#### References

1. Abuzayed, B. (2012). Working capital management and firms' performance in emerging markets: The case of Jordan. International Journal of Managerial Finance, 8(2), 155-179

 Christopher, S. B., & Kamalavalli, A. L. (2009). Sensitivity of Profitability to Working Capital Management in Indian Corporate Hospitals. Working Paper. 1331500.

- 3. Deloof, M. (2003). Does Working Capital Management Affect Profitability of Belgian Firms? Journal of Business, Finance and Accounting, 30(3-4), 573-587.
- 4. Eljelly, A. M. A. (2004). Liquidity Profitability Tradeoff: An Empirical Investigation in an Emerging Market. International Journal of Commerce and Management, 14(2), 48-61.
- N. Gupta and A. Kumar, "Deepika Store: A Dilemma of Being Sustainable or Profitable," in Socially Responsible Consumption and Marketing in Practice, Singapore: Springer Singapore, 2022, pp. 113–129.
- 6. A. Kumar, N. Gupta, A. A. Shaikh, and P. Pujari, "Milkiana Cattle feed- an entrepreneurial saga of business integration: case study," Small Enterp. Res., pp. 1–9, Nov. 2021.
- A. Kumar, N. Gupta, and P. Pujari, Educational material supplied by The Case Centre Entry of Parle Wheat Flour in Indian Market - Dilemma of Daily Needs Supermarket. 2021.
- 8. N. Vasan, S., & Gupta, "Applications of POEM Marketing," in Second International Conference on Resilience for Sustainability: Revisiting Management Practices and Strategizing for the Future, 2021, pp. 272–279.
- 9. Jalil, N.A., P Prapinit, M Melan, AB Mustaffa (2019). Adoption of Business Intelligence-Technological, Individual and Supply Chain Efficiency. Proceedings of the 2019 International Conference on Machine Learning, Big Data and Business Intelligence. Year: 2019, Volume: 1, Pages: 67-73.
- Jalil, N.A., Hwang, H.J. (2019). Technological-centric business intelligence: Critical success factors. International Journal of Innovation, Creativity and Change, Volume 5, Issue 2, August, 2019, Pages 1499 to 1516.

11. Nasir Abdul Jalil and Koay Kian Yeik. 2019. Systems, Design and Technologies Anxieties Towards Use of Self-service Checkout. In Proceedings of the 2019 3rd International Conference on Education and E-Learning. Association for Computing Machinery, New York, NY, USA, 122–127.

- 12. B. Singh, N. A. Jalil, D. K. Sharma, S. R, K. Kumar and D. Jebakumar immanuel, "Computational systems overview and Random Process with Theoretical analysis," 2021 7th International Conference on Advanced Computing and Communication Systems (ICACCS), 2021, pp. 1999-2005.
- 13. Roy Setiawan, Luigi Pio Leonardo Cavaliere, KartikeyKoti, Gabriel Ayodeji Ogunmola, N. A. Jalil, M. Kalyan Chakravarthi, S. Suman Rajest, R. Regin, Sonia Singh, "The Artificial Intelligence and Inventory Effect on Banking Industrial Performance"Turkish Online Journal of Qualitative Inquiry. Volume 12, Issue 6, July, 2021: 8100-8125.
- 14. Roespinoedji, D., Juniati, S., Hasan, H., Jalil, N.A., Shamsudin, M.F., 2019. Experimenting the long-haul association between components of consuming renewable energy: ARDL method with special reference to Malaysia. Int. J. Energy Econ. Policy 9, 453–460. https://doi.org/10.32479/ijeep.8694.
- 15. D. K. Sharma, N. A. Jalil, V. K. Nassa, S. R. Vadyala, L. S. Senthamil and T. N, "Deep learning Applications to classify Cross-Topic Natural Language Texts Based on Their Argumentative Form," 2021 2nd International Conference on Smart Electronics and Communication (ICOSEC), 2021, pp. 1580-1586.
- 16. D. K. Sharma, N. A. Jalil, R. Regin, S. S. Rajest, R. K. Tummala and T. N, "Predicting Network Congestion with Machine Learning," 2021 2nd International Conference on Smart Electronics and Communication (ICOSEC), 2021, pp. 1574-1579.
- 17. Karthik, Mamidala Vijay, Chakravarthi, M Kalyan, Yapanto, Lis M, Selvapandian, D, Harish, R, Subramani, Karthick, "Optical Analysis of the UPQC using PI Controller in Power flow System" 2021 7th International

- Conference on Advanced Computing and Communication Systems (ICACCS),1 ,pp. 2006-2010, 2021.
- 18. Sathyaseelan, Mohit P, Chakravarthi, M Kalyan, Sathyaseelan, Amit P, Sudipta, Soumya, "IoT based COVID De-Escalation System using Bluetooth Low Level Energy", IEEE, 6th International Conference on Inventive Computation Technologies (ICICT), pp.174-177, 2021.
- 19. Sekhar, Chereddy, Kranthi, K, Chakravarthi, M Kalyan, "Traffic signal breach vehicle stop system using IOT", IEEE International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2), pp.296-300, 2017.
- 20. Prasad, CH Ram, Chakravarthi, M Kalyan," Failure analysis and prediction for metal jobs using fuzzy computation", IEEE, International Conference on Intelligent Computing, Instrumentation and Control Technologies (ICICICT), pp.1159-1163, 2017.
- 21. Vaishna S Kumar, M.Kalyan Chakravarthi, "MSP430 Data Logger: An Implementation for Stress Measurement in Concrete Structures", IEEE, International Conference on Intelligent Systems and Control, January 7-8, 2016
- 22. Anu Rose Jolly, M.Kalyan Chakravarthi, "A Standalone Data Logger For Fibre Optic Vibration Measurement System Using Beagle bone",IEEE, International Conference on Intelligent Systems and Control, January 7-8, 2016.
- 23. M. Kalyan Chakravarthi, Ketan Gupta, Jyoti Malik and Nithya Venkatesan, "Linearized Multimodel PI Controller for Real-Time Delay Dominant Second Order Nonlinear Systems", IEEE, International Conference on Control, Instrumentation, Communication & Computational Technologies, December 18-19,2015
- 24. M.Kalyan Chakravarthi, Bharath.B, R.Venkata Sreehari, "Implementation Of An Automated Drug Delivery System Using Linear Actuator", IEEE, International Conference on Soft Computing Techniques & Implementations, October 8-10,2015.
- 25. D.Ganesh, M.Kalyan Chakravarthi," Remote Web Based Monitoring and

- Controlling Of a Nonlinear Process Using Micro Controller", IEEE, International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT-2014) , pp:826-829, 2014..
- 26. H. Lumapenet and N. Andoy, "Influence of the Family on the Pupils' Reading Performance", 7th CEBU International Conference on Civil, Agricultural, Biological and Environmental Sciences (CABES-17) Sept. 21-22, 2017 Cebu (Philippines), page 15-19, 2017.
- 27. Ramachandran. K. K., A.ApsaraSaleth Mary., ShibaniHawladar., D.Asokk., BandiBhaskar., J.R.Pitroda., (2021). "Machine learning and role of artificial intelligence in optimizing work performance and employee behaviour". Materials Today: Proceedings.
- 28. Ramachandran. K. K., Kavitha. P. T., Tharangini. A., Tamil Maran S., (2021). "An Empirical Study of Relationship between Job Satisfactions on Organizational Commitment in Banking Sector Employees in Coimbatore". Webology, Volume 18, No. 3, 2021, pp: 151 168
- Ramachandran. K. K., (2021). "Neuro Marketing- Exploring the Brain of the Consumer: A Review". Review of International Geographical Education Online. Volume 11, Issue 7, pp: 1034-1049
- 30. S. Khan et al., "HCovBi-Caps: Hate Speech Detection Using Convolutional and Bi-Directional Gated Recurrent Unit With Capsule Network," in IEEE Access, vol. 10, pp. 7881-7894, 2022.
- 31. A. U. Haq, J. P. Li, S. Ahmad, S. Khan, M. A. Alshara, and R. M. Alotaibi, "Diagnostic Approach for Accurate Diagnosis of COVID-19 Employing Deep Learning and Transfer Learning Techniques through Chest X-ray Images Clinical Data in E-Healthcare," Sensors, vol. 21, no. 24, p. 8219, Dec. 2021.
- 32. Abbas Qaisar, Mostafa EA Ibrahim, Shakir Khan, and Abdul Rauf Baig, "Hypo-Driver: A Multiview Driver Fatigue and Distraction Level Detection System", CMC-COMPUTERS MATERIALS & CONTINUA 71, no. 1, 1999-2017, 2022.

- 33. Sultan Ahmad, Sudan Jha, Abubaker E. M. Eljialy and Shakir Khan, "A Systematic Review on e-Wastage Frameworks. International Journal of Advanced Computer Science and Applications, 12(12).
- 34. Khan, S. "Data Visualization to Explore the Countries Dataset for Pattern Creation", International Journal of Online and Biomedical Engineering (iJOE), 17(13), (Dec. 2021), pp. 4–19.
- 35. T. Kumar, "Assessing language need and proficiency of English graduates of Prince Sattam Bin Abdulaziz University for designing pre-placement training and workshops," Asian ESP Journal, vol. 16, no. 4, pp. 153-168, 2020.
- 36. T. Kumar, "Impact of motivation and group cohesion in EFL classrooms at Prince Sattam Bin Abdulaziz University, KSA," Asian EFL Journal, vol. 27, no. 4.4, pp. 116-131, 2020.
- 37. T. Kumar, "Representation of Victorian society in the poetry of Mary Howitt," Utopia y Praxis Latinoamericana, vol. 25, no. 12, pp. 215-221, 2020.
- 38. T. Kumar, "Approaches in teaching writing skills with Creative Writing: A TESOL Study for Indian learners," TESOL International Journal, vol. 15, no. 5, pp. 78-98, 2020.
- 39. T. Kumar, "A linguistic analysis of Robert Browning's 'The Grammarian's Funeral': Exploring the language of literature through the formulaic style," Asian EFL Journal, vol. 28, no. 1.3, pp. 225-240, 2021.
- 40. T. Kumar, "Desire to learn, learn to shine': Idolizing motivation in enhancing speaking skill among L2 learners," Cypriot Journal of Educational Science, vol. 16, no. 1, pp. 411-422, 2021.
- 41. T. Kumar, "The culture of patriarchy, gender bias, and class discrimination in Mahesh Dattani's Tara," Linguistics and Culture Review, vol. 5 (S1), pp. 60-69, 2021.
- 42. T. Kumar, "The impact of written visual materials in the development of speaking skills in English language among secondary level students," Journal of Language and Linguistic Studies, vol. 17, no. 2, pp. 1086-1095, 2021.

43. T. Kumar, "Social Networking Sites and Grammar Learning: The Views of Learners and Practitioners," International Journal of Early Childhood Special Education (INT-JECSE), vol. 13, no. 2, pp. 215-223, 2021.

- 44. Jothi, K.R., Vinu, W., & Eleckuvan, R.M. (2010). Effect of Concurrent Strength and Plyometric Training on Selected Biomotor Abilities. Recent Research in Science and Technology, 2, 124-126.
- 45. Vinu, W. (2020). Analyse of stress tolerance among exercising and non-exercising home makers. International Journal of Psychosocial Rehabilitation, 24(8), 6257-6260.
- 46. Vinu, W. (2021). Emotional Intelligence and Stress Tolerance of Diabetic Physical Exercising and Diabetic Nonphysical Exercising Peoples on Critics. Journal of Pharmaceutical Research International, 33(39B), 46-52.
- 47. Vinu, W. (2021). Disparities in Sportspersons' Sleep Behaviour due to COVID-19 Pandemic Lockdown in India. Asian Journal of Applied Science and Technology (AJAST), 5(2), 134-139.
- 48. Vinu, W., & Mozhi, A. A. (2019). Analyses of Subject Wellbeing on Exercising Men, Women Students and Sedentary Men, Women Students. Indian Journal of Public Health Research & Development, 10(9).
- 49. Vinu, W. (2019). Comparative study of speed variables between Private School and Government School football players. International Journal of Advance Research, Ideas and Innovations in Technology, 5 (3), 979, 982.
- 50. Vinu, W. (2021). Study on Emotional Intelligence and Stress Tolerance of Diabetic Physical Exercising and Diabetic Nonphysical Exercising Peoples on Critics. Recent Developments in Medicine and Medical Research Vol. 10, 129-136.
- 51. Vinu.W. (2021). Anthropometric aspects of South Indian volleyball players in relation to their skill performance 'Service'. Annals of the Romanian Society for Cell Biology, 20187–20192.
- 52. Vinu, W. (2021). Study on Emotional Intelligence and Stress Tolerance of Diabetic Physical Exercising and Diabetic

- Nonphysical Exercising Peoples on Critics. Recent Developments in Medicine and Medical Research Vol. 10, 129-136.
- 53. Vinu, W. (2021). Assessment of Sports, Yoga with Mind Training and Sports, Yoga Training on Students with Cigarette Addiction. Indian Journal of Public Health Research & Development . May2019, Vol. 10 Issue 5, p339-343. 5p.
- 54. Vinu, W., & Panbilnathan, A. (2021). Mobile Phone Usage on Change of Athletes Sleep Behaviour because of COVID-19 Pandemic Lockdown in India. Advances in Research, 22(5), 1-6.
- 55. Ravi, R. A., & Vinu, W. (2019). Effects of adapted physical exercise on development of reaction time among children with autism. International Journal of Yogic, Human Movement and Sports Sciences, 4(1): 1307-1309
- 56. Ravi, R. A., & Vinu, W. (2019). Outcome of physical exercises on development of motor skill in children with autism. International Journal of Physiology, Nutrition and Physical Education, 4(1): 2030-2032
- 57. Vinu, W. (2019). Efficacy of extensive interval training on Vo2 max of untrained college students. International Journal of Physiology, Nutrition and Physical Education, 4(1): 1570-1571.
- 58. Mozhi, A. A., & Vinu, W. (2019). A comparative study of aggression between men and women kabaddi and kho-kho players. International Journal of Physiology, Nutrition and Physical Education, 4(1): 380-382
- 59. Geno Peter, Anli Sherine, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, Histogram Shifting based Quick Response Steganography method for Secure Communication" Wireless Communications and Mobile Computing. vol. 2022, 10 pages, 2022.
- 60. Geno Peter, Anli Sherine, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, Design of Automated Deep Learning-based Fusion Model for Copy-Move Image Forgery Detection" Computational Intelligence and Neuroscience. vol. 2022, 9 pages, 2022.

- 61. Hariprasath Manoharan, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, K Venkatachalam, Acclimatization Of Nano Robots In Medical Applications Using Artificial Intelligence System With Data Transfer Approach" Wireless Communications And Mobile Computing. vol. 2022, 9 pages, 2022.
- 62. Ashok Kumar L, Ramya Kuppusamy, Yuvaraja Teekaraman, Indragandhi V, Arun Radhakrishnan, Design and Implementation of Automatic Water Spraying System for Solar Photovoltaic Module" Mathematical Problems In Engineering. vol. 2022, 9 pages, 2022.
- 63. K Veena, K Meena, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, Cybercrime Detection using C SVM and KNN Techniques" Wireless Communications and Mobile Computing. vol. 2022, 8 pages, 2022.
- 64. Yuvaraja Teekaraman, KA Ramesh Kumar, Ramya Kuppusamy, Amruth Ramesh Thelkar, SSNN Based Energy Management Strategy in Grid-Connected System for Load Scheduling and Load Sharing" Mathematical Problems In Engineering. vol. 2022, Article ID 2447299, 9 pages, 2022.
- 65. M. Bharathidasan, V. Indragandhi, Ramya Kuppusamy, Yuvaraja Teekaraman, Shabana Urooj, Norah Alwadi, 'Intelligent Fuzzy Based High Gain Non-Isolated Converter for DC Micro-Grids" CMC-Computers, Materials & Continua. Vol 71, No.2, 2022.
- 66. Hariprasath Manoharan, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, A Novel Optimal Robotized Parking System Using Advanced Wireless Sensor Network" Journal of Sensors. Volume 2021, Page 1-8, 2021.
- 67. Kamaleshwar T, Lakshminarayanan R, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, A Self-Adaptive framework for Rectification and Detection of Blackhole and Wormhole attacks in 6LoWPAN" Wireless Communications And Mobile Computing. Volume 2021, 2021. Page 1-8.
- 68. Rjoub, H., Iloka, C. B., & Venugopal, V. (2022). Changes in the Marketing

- Orientation Within the Business Model of an International Retailer: IKEA in Malaysia for Over 20 Years. In Handbook of Research on Current Trends in Asian Economics, Business, and Administration (pp. 170-190). IGI Global.
- 69. Li, M., Hamawandy, N. M., Wahid, F., Rjoub, H., & Bao, Z. (2021). Renewable energy resources investment and green finance: Evidence from China. Resources Policy, 74, 102402.
- Li, H. S., Geng, Y. C., Shinwari, R., Yangjie, W., & Rjoub, H. (2021). Does renewable energy electricity and economic complexity index help to achieve carbon neutrality target of top exporting countries?. Journal of Environmental Management, 299, 113386.
- 71. Ahmed, Z., Ahmad, M., Rjoub, H., Kalugina, O. A., & Hussain, N. (2021). Economic growth, renewable energy consumption, and ecological footprint: Exploring the role of environmental regulations and democracy in sustainable development. Sustainable Development.
- 72. Safi, A., Chen, Y., Wahab, S., Zheng, L., & Rjoub, H. (2021). Does environmental taxes achieve the carbon neutrality target of G7 economies? Evaluating the importance of environmental R&D. Journal of Environmental Management, 293, 112908.
- 73. Odugbesan, J. A., Rjoub, H., Ifediora, C. U., & Iloka, C. B. (2021). Do financial regulations matters for sustainable green economy: evidence from Turkey. Environmental Science and Pollution Research, 1-16.
- 74. Demir, M., Rjoub, H., & Yesiltas, M. (2021). Environmental awareness and guests' intention to visit green hotels: The mediation role of consumption values. Plos one, 16(5), e0248815.
- 75. Moguluwa, S. C., Odugbesan, J. A., Rjoub, H., & Iloka, C. B. (2021). Cost and competitiveness of agricultural produce in Nigeria: impact on exportation. Custos E Agronegocio On Line, 17(2), 64-86.
- 76. Yıldız, B. F., Hesami, S., Rjoub, H., & Wong, W. K. (2021). Interpretation Of Oil Price Shocks On Macroeconomic Aggregates Of South Africa: Evidence From

- SVAR. Journal of Contemporary Issues in Business and Government, 27(1), 279-287.
- 77. Al-Baghdadi, E. N., Alrub, A. A., & Rjoub, H. (2021). Sustainable Business Model and Corporate Performance: The Mediating Role of Sustainable Orientation and Management Accounting Control in the United Arab Emirates. Sustainability, 13(16), 8947.
- 78. Rjoub, H., Ifediora, C. U., Odugbesan, J. A., Iloka, B. C., Xavier Rita, J., Dantas, R. M., ... & Martins, J. M. (2021). Implications of Governance. Natural Resources. Security **Threats** on **Economic** Development: Evidence from Sub-Saharan Africa. International Journal Environmental Research and Public Health, 18(12), 6236.
- 79. Panait, M., Ionescu, R., Radulescu, I. G., & Rjoub, H. (2021). The Corporate Social Responsibility on Capital Market: Myth or Reality?. In Financial Management and Risk Analysis Strategies for Business Sustainability (pp. 219-253). IGI Global.
- 80. Ayodeji, Y., & Rjoub, H. (2021). Investigation into waiting time, self-service technology, and customer loyalty: The mediating role of waiting time in satisfaction. Human Factors and Ergonomics in Manufacturing & Service Industries, 31(1), 27-41.
- 81. Alwreikat, A. A., & Rjoub, H. (2020). Impact of mobile advertising wearout on consumer irritation, perceived intrusiveness, engagement and loyalty: A partial least squares structural equation modelling analysis. South African Journal of Business Management, 51(1), 11.
- 82. Ilkhanizadeh, S., Golabi, M., Hesami, S., & Rjoub, H. (2020). The Potential Use of Drones for Tourism in Crises: A Facility Location Analysis Perspective. Journal of Risk and Financial Management, 13(10), 246.
- 83. Alhmoud, A., & Rjoub, H. (2020). Does Generation Moderate the Effect of Total Rewards on Employee Retention? Evidence From Jordan. SAGE Open, 10(3), 2158244020957039.
- 84. Fofack, A. D., Aker, A., & Rjoub, H. (2020). Assessing the post-quantitative easing surge in financial flows to developing

- and emerging market economies. Journal of Applied Economics, 23(1), 89-105.
- 85. Rjoub, H., Aga, M., Oppong, C., Sunju, N., & Fofack, A. (2017). The Impact of FDI Inflows on Economic Growth: Evidence from Landlocked Countries in Sub-Saharan Africa. Bilig-Turk DunyasI Sosyal Bilimler Dergisi, 10(1), 153-168.
- 86. Odugbesan, J. A., & Rjoub, H. HIV/AIDS Prevalence as A Challenge for Sustainable Development: The Sub-Saharan Africa Experience.
- 87. Peterka, H., & Rjoub, H. Facility Management Based–Integrated Substantiated Portfolio Management Of The University Of Vienna.
- 88. Pavan Babu Bandla, Indragandhi Vairavasundaram, Yuvaraja Teekaraman, Srete Nikolovski, "Real Time Sustainable Power Quality Analysis of Non-Linear Load under Symmetrical Conditions" Energies 2022, 15(01).
- 89. Nimmi. C. R., Ramachandran. K. K., (2021). "The Impact of Microfinance on Women Empowerment in Palakkad District of Kerala". Turkish Online Journal of Qualitative Inquiry (TOJQI). Volume 12, Issue 3, pp: 4266-4274
- 90. Thowfeek MH, Samsudeen, SN, Sanjeetha, MBF. Drivers of Artificial Intelligence in Banking Service Sectors, Solid State Technology, (2020); 63(5): 6400 6411.
- 91. Samsudeen SN, Thowfeek MH, Rashida, MF. School Teachers' Intention to Use E-Learning Systems in Sri Lanka: A Modified TAM Approach, International Journal of Information and Knowledge Management, (2015); 5(4), 55-59.
- 92. Samsudeen, SN, Thowfeek, MH. Small Medium Entrepreneurs' Intension to Use Cloud Computing: Reference to Eastern Province of Sri Lanka, Journal of Management, (2014);11(1), 1-10.
- 93. Thowfeek, MH. Salam, MNA. Students' Assessment on the Usability of E-learning Websites. Procedia-Social and Behavioral Sciences, (2014);141; 916-922.
- 94. Samsudeen, S. N. Acceptance of cloud of things by small and medium enterprises in Sri Lanka, Journal of Advanced Research in

- Dynamical and Control Systems, (2020);12(2), 2276-2285.
- 95. Thowfeek, MH, Samsudeen SN. Readiness of Resources for Flipped Classroom. In Proceedings of the 2019 8th International Conference on Educational and Information Technology. (2019); (pp. 92-96).
- 96. Akther, T. and Xu, F. (2021), "An investigation of the credibility of and confidence in audit value: evidence from a developing country", Accounting Research Journal, Vol. 34 No. 5, pp. 488-510.
- 97. Xu, F., & Akther, T. (2019). A partial least-squares structural equation modeling approach to investigate the audit expectation gap and its impact on investor confidence: perspectives from a developing country. Sustainability, 11(20), 5798.
- 98. Akther, T., & Xu, F. (2020). Existence of the audit expectation gap and its impact on stakeholders' confidence: The moderating role of the financial reporting council. International Journal of Financial Studies, 8(1), 4.
- 99. Akther, T. Corporate Environmental Reporting and Profitability: A Study on Listed Companies in Bangladesh; Jagannath University Journal of Business Studies; Vol. 5, No. 1 &2 June 2017(99-104).
- 100. Ramachandran. K. K., (2021). "A Study on Service Quality Dimensions of Domestic Airline Industry in India". Turkish Journal of Computer and Mathematics Education. Vol.12 No. 7. pp: 1412- 1419.
- 101. Jose Jacob., Ramachandran. K. K., (2021). "ERP SYSTEM, AN OVER VIEW". International Journal of Multidisciplinary Educational Research. Volume: 10, Issue: 3(5), pp: 146-149
- 102. Ramachandran. K. K., (2021). "Preference of Social Media Vehicles for Branding Activities". Psychology and Education Journal, Vol. 58, No. 2, Page No. 2780-2784.
- 103. C. Kalipa and H. Lumapenet, "Customary Practices and Authorities in Conflict Resolution towards Peace Building of the Sultans, Rajahs, and Datus of Buayan Sultanates in Southern Philippines", International Journal of All Research Education and Scientific Methods

(IJARESM), Volume 9, Issue 12, page 155-169, 2021.

- 104. C. Virmani, A. Pillai, and D. Juneja. "Study and analysis of Social network Aggregator.", International Conference on Reliability Optimization and Information Technology (ICROIT), pp. 145-148. IEEE, 2014.
- 105. C. Virmani, A. Pillai, and D. Juneja., "Clustering in aggregated user profiles across multiple social networks." International Journal of Electrical and Computer Engineering, vol 7. No 6, pp, 3692-3699, 2017.
- 106. Aakanksha Singhal and D.K. Sharma, "Seven Divergence Measures by CDF of fitting in Exponential and Normal Distributions of COVID-19 Data", Turkish Journal of Physiotherapy and Rehabilitation, Vol.32(3), pp. 1212 1222, 2021.
- 107. D.K. Sharma and Haldhar Sharma, "A Study of Trend Growth Rate of Confirmed cases, Death cases and Recovery cases in view of Covid-19 of Top Five States of India", Solid State Technology, Vol.64(2), pp. 4526-4541, 2021.
- 108. D.K. Sharma, "Information Measure Computation and its Impact in MI COCO Dataset", IEEE Conference Proceedings, 7th International Conference on Advanced Computing and Communication Systems (ICACCS), Vol.1, pp. 2011-2014, 2021.
- 109. Aakanksha Singhal and D.K. Sharma, "Keyword extraction using Renyi entropy: a statistical and domain independent method", IEEE Conference Proceedings, 7th International Conference on Advanced Computing and Communication Systems (ICACCS), Vol.1, pp. 1970-1975, 2021.
- 110. Aakanksha Singhal and D.K. Sharma, "Generalization of F-Divergence Measures for Probability Distributions with Associated Utilities", Solid State Technology, Vol.64(2), pp. 5525-5531, 2021.
- 111. Aakanksha Singhal and D.K. Sharma, "A Study of before and after Lockdown Situation of 10 Countries through Visualization of Data along With Entropy Analysis of Top Three Countries", International Journal of Future Generation

- Communication and Networking, Vol.14(1), pp. 496-525, 2021.
- 112. Aakanksha Singhal and D.K. Sharma, "Generalized 'Useful' Rényi & Tsallis Information Measures, Some Discussions with Application to Rainfall Data", International Journal of Grid and Distributed Computing, Vol. 13(2), pp. 681-688, 2020.
- 113. Reetu Kumari and D. K. Sharma, "Generalized 'Useful non-symmetric divergence measures and Inequalities", Journal of Mathematical Inequalities, Vol. 13(2), pp. 451-466, 2019.
- 114. D.S. Hooda and D.K. Sharma, "On Characterization of Joint and Conditional Exponential Survival Entropies", International Journal of Statistics and Reliability Engineering, Vol. 6(1), pp. 29-36, 2019.
- 115. Reetu Kumari and D. K. Sharma, "Generalized 'Useful' AG and 'Useful' JS-Divergence Measures and their Bounds", International Journal of Engineering, Science and Mathematics, Vol. 7 (1), pp. 441-450, 2018.
- 116. D.S. Hooda, Reetu Kumari and D. K. Sharma, "Intuitionistic Fuzzy Soft Set Theory and Its Application in Medical Diagnosis", International Journal of Statistics in Medical Research, Vol. 7, pp. 70-76, 2018.
- 117. D.K. Sharma and Sonali Saxena, "Generalized Coding Theorem with Different Coding Schemes", Source International Journal on Recent Innovation Trends in Computing and Communication, Vol. 5(6), pp. 253 – 257, 2017.
- 118. C. Virmani, A. Pillai, and D. Juneja., "Extracting information from social network using nlp." International Journal of Computational Intelligence Research, vol. 13, No.4, pp. 621-630, 2017.
- 119. T. Choudhary, C. Virmani, and D. Juneja. "Convergence of Blockchain and IoT: An Edge Over Technologies." Toward Social Internet of Things (SIoT): Enabling Technologies, Architectures and Applications. Springer, Cham, pp. 299-316, 2020.

- 120. C. Virmani, D. Juneja, and A. Pillai, "Design of query processing system to retrieve information from social network using NLP.", KSII Transactions on Internet and Information Systems (TIIS), vol. 12, No.3, pp: 1168-1188, 2018.
- 121. C. Virmani, and A. Pillai. "Internet of Things and Cyber Physical Systems: An Insight." Recent Advances in Intelligent Systems and Smart Applications. Springer, Cham, pp: 379-401, 2021.
- 122. T. Guiamalon and P. Hariraya, "The K-12 Senior High School Program: The Case of Laboratory High School, Cotabato City State Polytechnic College, South Central Mindanao, Philippines", International Journal of Advances in Social Sciences, Volume 7, Issue 19, page 391-399, 2021.T
- 123. T. Guiamalon, S.A.Alon, and S. Camsa, "Teachers Issues and Concerns on the Use of Modular Learning Modality", IJASOS-International E-Journal of Advances in Social Sciences, Vol. VII, Issue 20, page 457-469, 2021.
- 124. R.Venkata Sreehari, M.Kalyan Chakravarthi," Industrial Pollution Monitoring GUI System using Internet, LabVIEW AND GSM", IEEE, International Conference on Control, Instrumentation, Communication and Computational Technologies, pp:846-850, 2014.
- 125. U. Zulfiqar, S. Mohy-Ul-Din, A. Abu-Rumman, A. E. M. Al-Shraah, And I. Ahmed, "Insurance-Growth Nexus: Aggregation and Disaggregation," The Journal of Asian Finance, Economics and Business, vol. 7, no. 12, pp. 665–675, Dec. 2020.
- 126. Al-Shqairat, Z. I., Al Shraah, A. E. M., Abu-Rumman, A., "The role of critical success factors of knowledge stations in the development of local communities in Jordan: A managerial perspective," Journal of management Information and Decision Sciences, vol. 23, no.5, pp. 510-526, Dec. 2020.
- 127. Abu-Rumman, Ayman.
  "Transformational leadership and human capital within the disruptive business environment of academia." World Journal

- on Educational Technology: Current Issues 13, no. 2 (2021): 178-187.
- Almomani, Reham Zuhier Qasim, Lina 128. Hamdan Mahmoud Al-Abbadi, Amani Rajab Abed Alhaleem Abu Rumman, Ayman Abu-Rumman, Khaled and Banyhamdan. "Organizational Memory, Knowledge Management, Marketing Innovation and Cost of Quality: Empirical Effects from Construction Industry in Jordan." Academy of Entrepreneurship Journal 25, no. 3 (2019): 1528-2686.
- 129. Alshawabkeh, Rawan, Amani Abu Rumman, Lina Al-Abbadi, and Ayman Abu-Rumman. "The intervening role of ambidexterity in the knowledge management project success connection." Problems and Perspectives in Management 18, no. 3 (2020): 56.
- 130. Abu-Rumman, Ayman. "Gaining competitive advantage through intellectual capital and knowledge management: an exploration of inhibitors and enablers in Jordanian Universities." Problems and Perspectives in Management 16, no. 3 (2018): 259-268.
- 131. Abu-Rumman, A. Al Shraah, F. Al-Madi. "Entrepreneurial T. Alfalah, networks, entrepreneurial orientation, and performance of small and medium enterprises: are dynamic capabilities the missing link?" Journal of Innovation and Entrepreneurship. Vol 10 Issue 29, pp 1-16. Jul 2021.
- 132. A.Al Shraah, A. Abu-Rumman, F. Al Madi, F.A. Alhammad, A.A. AlJboor, "The impact of quality management practices on knowledge management processes: a study of a social security corporation in Jordan" The TQM Journal. Vol. ahead-of-print No. Issue ahead-of- print. Apr 2021.
- 133. Abu-Rumman, A. Al Shraah, F. Al-Madi, T. Alfalah, "The impact of quality framework application on patients' satisfaction", International Journal of Human Rights in Healthcare, DOI: <a href="https://doi.org/10.1108/IJHRH-01-2021-0006">https://doi.org/10.1108/IJHRH-01-2021-0006</a>.
- 134. Zafar, S.Z., Zhilin, Q., Malik, H., Abu-Rumman, A., Al Shraah, A., Al-Madi, F. and Alfalah, T.F. (2021), "Spatial spillover

- effects of technological innovation on total factor energy efficiency: taking government environment regulations into account for three continents", Business Process Management Journal, Vol. 27 No. 6, pp. 1874-1891.
- 135. Rao, A. N., Vijayapriya, P., Kowsalya, M., & Rajest, S. S. (2020). Computer Tools for Energy Systems. In International Conference on Communication, Computing and Electronics Systems (pp. 475-484). Springer, Singapore.
- 136. Gupta J., Singla M.K., Nijhawan P., Ganguli S., Rajest S.S. (2020) An IoT-Based Controller Realization for PV System Monitoring and Control. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. EAI/Springer Innovations in Communication and Computing. Springer, Cham
- 137. Sharma M., Singla M.K., Nijhawan P., Ganguli S., Rajest S.S. (2020) An Application of IoT to Develop Concept of Smart Remote Monitoring System. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. EAI/Springer Innovations in Communication and Computing. Springer, Cham
- 138. Ganguli S., Kaur G., Sarkar P., Rajest S.S. (2020) An Algorithmic Approach to System Identification in the Delta Domain Using FAdFPA Algorithm. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. EAI/Springer Innovations in Communication and Computing. Springer, Cham
- 139. Singla M.K., Gupta J., Nijhawan P., Ganguli S., Rajest S.S. (2020) Development of an Efficient, Cheap, and Flexible IoT-Based Wind Turbine Emulator. In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. EAI/Springer Innovations in Communication and Computing. Springer, Cham
- 140. Rajasekaran R., Rasool F., Srivastava S., Masih J., Rajest S.S. (2020) Heat Maps for Human Group Activity in Academic Blocks.

- In: Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise Internet of Things. EAI/Springer Innovations in Communication and Computing. Springer, Cham
- 141. S. Suman Rajest, D.K. Sharma, R. Regin and Bhopendra Singh, "Extracting Related Images from E-commerce Utilizing Supervised Learning", Innovations in Information and Communication Technology Series, pp. 033-045, 28 February, 2021.
- 142. Souvik Ganguli, Abhimanyu Kumar, Gagandeep Kaur, Prasanta Sarkar and S. Suman Rajest, "A global optimization technique for modeling and control of permanent magnet synchronous motor drive", Innovations in Information and Communication Technology Series, pp. 074-081, 28, 2021.
- Jappreet Kaur, Tejpal Singh Kochhar, 143. Souvik Ganguli and S. Suman Rajest, "Evolution of Management System Certification: An overview", Innovations in Information and Communication Technology Series, 082-092, pp. February, 2021.
- 144. R. Regin, S. Suman Rajest and Bhopendra Singh, "Spatial Data Mining Methods Databases and Statistics Point of Views", Innovations in Information and Communication Technology Series, pp. 103-109, 28 February, 2021.
- 145. D. K. Sharma, B. Singh, E. Herman, R. Regine, S. S. Rajest and V. P. Mishra, "Maximum Information Measure Policies in Reinforcement Learning with Deep Energy-Based Model," 2021 International Conference on Computational Intelligence and Knowledge Economy, 2021, pp. 19-24.
- 146. F. Arslan, B. Singh, D. K. Sharma, R. Regin, R. Steffi and S. Suman Rajest, "Optimization Technique Approach to Resolve Food Sustainability Problems," 2021 International Conference on Computational Intelligence and Knowledge Economy, 2021, pp. 25-30.
- 147. G. A. Ogunmola, B. Singh, D. K. Sharma, R. Regin, S. S. Rajest and N. Singh, "Involvement of Distance Measure in Assessing and Resolving Efficiency

- Environmental Obstacles," 2021 International Conference on Computational Intelligence and Knowledge Economy, 2021, pp. 13-18.
- 148. D. K. Sharma, B. Singh, M. Raja, R. Regin and S. S. Rajest, "An Efficient Python Approach for Simulation of Poisson Distribution," 2021 7th International Conference on Advanced Computing and Communication Systems, 2021, pp. 2011-2014.
- 149. Srivastava Y., Ganguli S., Suman Rajest S., Regin R. (2022) Smart HR Competencies and Their Applications in Industry 4.0. In: Kumar P., Obaid A.J., Cengiz K., Khanna A., Balas V.E. (eds) A Fusion of Artificial Intelligence and Internet of Things for Emerging Cyber Systems. Intelligent Systems Reference Library, vol 210. Springer, Cham.
- 150. D. Hemavathi, V. R. Kumar, R. Regin, S. S. Rajest, K. Phasinam and S. Singh, "Technical Support for Detection and Prediction of Rainfall," 2021 2nd International Conference on Smart Electronics and Communication, 2021, pp. 1629-1634.
- 151. Jayakumar P., Suman Rajest S., Aravind B.R. (2022) An Empirical Study on the Effectiveness of Online Teaching and Learning Outcomes with Regard to LSRW Skills in COVID-19 Pandemic. In: Hamdan A., Hassanien A.E., Mescon T., Alareeni B. (eds) Technologies, Artificial Intelligence and the Future of Learning Post-COVID-19. Studies in Computational Intelligence, vol 1019. Springer, Cham. https://doi.org/10.1007/978-3-030-93921-2\_27.