

## Exploring New Paradigms Of Research Practice In Developing Global Market

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### ABSTRACT

The areas of research methodologies are continually developing, driven by the quest for more profound comprehension and more successful critical thinking. This theory examines the concept of exploring new paradigms of research practice, featuring the meaning of embracing advancement in the journey for information revelation. It looks at the reasoning behind the requirement for novel methodologies, focusing on the restrictions of conventional approaches and the open doors introduced by investigating new roads. By embracing new paradigms, researchers can be liberated from the limitations of regular reasoning and procedures, opening ways to new points of view and insights. This paper explores various examples of innovative research paradigms, ranging from interdisciplinary collaborations and data-driven approaches to participatory action research and qualitative synthesis methods. It discusses how these paradigms offer unique opportunities to address complex research questions and tackle emerging challenges in diverse fields.

Besides, this paper talks about the likely advantages and difficulties related to taking on new research paradigms, including considerations connected with interdisciplinary collaboration, strategic exactness, and moral ramifications. It underscores the significance of encouraging a culture of trial and error and advancing within the research community to work with the investigation and reception of inventive methodologies.

**Keywords:** - Research, Standards, Strategy, Methodology, Investigates, Advancement, Feature, Implication

### 1.1.0 Introduction

Exploring new paradigms includes wandering past laid-out structures and methodologies to investigate innovative approaches to deal with research inside a specific field or discipline. A paradigm envelops the principal suspicions, convictions, and practices that shape how researchers approach their work. By exploring new paradigms, researchers expect to challenge customary reasoning, grow the limits of information, and cultivate development. This investigation includes a few key parts. First and foremost, it requires an eagerness to address existing standards and suppositions, recognizing that entrenched paradigms may limit the scope of inquiry and hinder progress. Researchers participate in basic reflection to recognize regions where customary methodologies might be deficient or where elective points of view could yield important insights.

Interdisciplinary joint effort frequently assumes a focal part in exploring new paradigms. By drawing on experiences from assorted disciplines, researchers can advance comprehension they might interpret complex peculiarities and foster novel ways to deal with research. Cooperative endeavors across disciplines work with the coordination of alternate points of view, methodologies, and data sources, prompting more extensive and comprehensive examinations. Mechanical headways additionally contribute fundamentally to the investigation of new paradigms. Arising innovations, for example, computerized reasoning, AI, and huge information

investigation furnish analysts with integral assets for information examination, demonstrating, and perception. These advancements empower analysts to reveal examples, patterns, and connections that may not be clear through conventional strategies, opening up new roads for investigation and disclosure.

Besides, exploring new paradigms includes a readiness to try different things with elective procedures and approaches. Researchers might utilize qualitative or quantitative methods, direct hands-on work, or participate in participatory action research to investigate various features of a research question. By embracing methodological diversity, researchers can adjust their ways of dealing with the particular necessities of their examination setting and gain new insights into complex phenomena.

#### **1.1.1 Importance of embracing Exploring new paradigms in research**

The sentence "Importance of embracing exploring new paradigms in research" includes the importance of actually embracing and exploring novel methodologies, considerations, and designs inside the domain of logical assessment. Embracing investigating new paradigms in research is vital for developing turn of events, impelling data, and keeping an eye on complex hardships. By winding into regions, experts can part away from traditional reasoning, provoking memorable exposures and noteworthy jump advances. New paradigms engage interdisciplinary joint exertion, allowing experts from various fields to solidify their capacity and perspectives, provoking new encounters and widely inclusive solutions for crushing issues.

Besides, embracing paradigm models fortifies insightful interest and advances a culture of well-established propelling inside the investigation neighbourhood. It urges experts to address spread-out hypotheses, methodology, and doubts, empowering a sensation of fundamental solicitation and insightful humility. This responsiveness to weighty considerations in like manner further develops adaptability, enabling researchers to investigate rapidly propelling fields and benefit from emerging entryways.

Furthermore, embracing new paradigms promotes inclusivity and diversity in research, enhancing voices that have been customarily underestimated or disregarded. By embracing different points of view and approaches, specialists can foster more complete and impartial arrangements that address the requirements and worries of a more extensive scope of partners.

In essence, embracing and exploring new paradigms in research is essential for pushing the boundaries of knowledge, fostering innovation, and creating a more inclusive and resilient scientific community.

#### **1.1.2 Evolution of Research Paradigms**

Research paradigms have changed a lot over time. At first, researchers mainly focused on gathering facts and data through observation, which was called positivism. Then, they realized that objectivity had limitations, and started considering subjective factors like people's perspectives and contexts, leading to post-positivism. Understanding research paradigms is crucial as they guide scientific discoveries through their assumptions and principles. Paradigms have been used in the study of social sciences, such as positivism versus interpretivism, quantitative versus qualitative, induction versus deduction and explanatory versus confirmatory. There are four different research paradigms - positivism, realism, critical theory, and interpretivism.

**Deshpande, (1983).** In his work he mentioned that a paradigm is a set of assumptions that provides a conceptual framework or a philosophical one for a worldview, which enables researchers to construct organized studies around the world.

**Mertens, (2012).** also noted that this paradigm contrasted with the earlier ideas that there were three "paradigms" of qualitative, quantitative, and mixed methods. These earlier "paradigms", which used terms like "Quantitative" and "Qualitative", merely denoted types of data, and not the epistemologies, methodologies, designs, and ontological assumptions that are associated with different research frameworks.

**Pius, (2020).** stated that a paradigm includes several components categorized as Ontology, Epistemology, Methodology and Methods. Accordingly, Pius (2020) outlined the critical inter-relationships between these components and asserts that the paradigms of positivism and interpretivism both consist of ontology, epistemology, methodology and methods.

In the late 20th century, critical theory emerged, challenging established power structures and advocating for social justice in research. Today, postmodernism is influential, questioning the idea of universal truths and emphasizing different viewpoints and the complexities of reality. This encourages researchers to think about how language, discourse, and power affect what we know.

Nowadays, research is becoming more interdisciplinary, meaning different fields work together, and there's more emphasis on involving people in the research process, like communities or groups affected by the research topic. Plus, technology is changing how we collect and analyse data, shaping how research is done today.

### 1.1.3 Historical overview of research paradigms

Throughout history, the quest for information has been shaped by evolving paradigms that give systems to understanding and directing examination. These paradigms, established in philosophical, epistemological, and socio-political settings, impact the inquiries scientists pose, the techniques they utilize, and the understandings they get from their discoveries. From the positivist custom of looking for genuine bits of insight to the postmodern evaluation of stupendous accounts, research paradigms ponder different points of view on the idea of the real world and the manners by which information is built. Understanding these paradigms is fundamental for researchers seeking to explore the intricacies of the exploration cycle and contribute definitively to their fields.

#### 1. Positivism:

Positivism arose in the 19<sup>th</sup> century, underscoring experimental perception, estimation, and the quest for genuine bits of insight through logical techniques. It declares that reality exists autonomously of human insight and can be caught through efficient perception and trial and error.

#### 2. Post-positivism:

Expanding upon positivism, post-positivism arose in the 20<sup>th</sup> century, recognizing the impediments of unadulterated objectivity and perceiving the job of subjectivity and setting in forming information. It consolidates reflexivity and decisive reasoning, addressing suspicions and taking into account elective points of view.

#### 3. Constructivism:

Constructivism acquired an unmistakable quality in the late 20<sup>th</sup> century, focusing on how people build importance and information through their abstract encounters and associations with the world. It features the impact of social and social settings on understanding and underlines the significance of various viewpoints in research.

#### 4. Basic Hypothesis:

Beginning from the Frankfurt School, the basic hypothesis offers an investigation of force structures and cultural standards, meaning to reveal and challenge frameworks of mistreatment and imbalance. Basic scholars advocate for social change and the strengthening of underestimated gatherings.

#### 5. Postmodernism:

Postmodernism challenges the thought of genuine truth and questions excellent accounts, stressing the variety of viewpoints and the emotional idea of the real world. It looks to dismantle progressive frameworks of information and disturb predominant talks.

#### 6. Pragmatism:

Pragmatism focuses on reasonable outcomes and utility in deciding the legitimacy of information claims. It values adaptability and critical thinking, underscoring trial and error and transformation in research practice.

### 1.1.4 Traditional vs. Emerging Paradigms

The traditional paradigm refers to the assumption held by most methodologists and researchers that causal research must be defined in terms of the causal powers evident in a closed system on the other hand an emerging paradigm: is a strength-based approach to exploring mental imagery.

| Traditional Paradigms                     | Emerging Paradigms                                    |
|---|---|
| * Provides equal services to all citizens | * Provides services based on social and economic need |

|   |   |
|---|---|
| * Provides programs consisting of a series of activities selected from a restricted list of recreational pursuits | * Provides programs of human service that may go far beyond traditional recreational activities   |
| * Acts as a direct services provider  | * Acts as a community organizer and catalyst in matching community resources to citizen need  |
| * Offers programs in department facilities  | * Offers programs anywhere in the community.  |
| * Provides staff leadership in activities   | * Uses staff resources to coach citizens until they can provide their leadership  |
| * Funds basic services from tax sources   | * Funds service from a variety of sources, including fee-for-service, contract arrangements, barter, agency partnerships and cooperation with the private sector, as well as tax resources. |
| * Plans by updating the past  | * Plans by anticipating a preferred future. Plans with potential clients, community informants, other agencies, political representatives   |
| * Plans programs with the staff   | * Evaluates services in terms of human consequences   |
| * Encourages participation by publicity.  | * Develops a marketing approach to operations   |
| * Motivates the staff to work for the people  | * Motivates the staff to work with the people   |
| * Justifies budgets in terms of historical precedent  | * Justifies budgets in terms of social needs and program results  |
| * Requires financial accountability   | * Requires financial and program accountability   |
| * Achieves the ultimate goals of a fine recreation program.   | * Achieves the ultimate goal of human development and Community organization  |

In short, the traditional paradigm is about sticking to the rules and finding one right answer, while the emerging paradigm is about being open to new ideas and approaches, even if they challenge the old ways of doing things.

#### 1.1.5 Factors driving the shift in research approaches

The factors driving the change in research approaches are complex and include:

1. Innovative Progressions
2. Interdisciplinary Joint effort
3. Cultural Importance
4. Globalization
5. Subsidizing Needs
6. Change in Philosophical Points of view
7. Open Science Development

The previously mentioned factors drive the shift of research approaches which incorporate a great many impacts forming how exploration is led. One critical component is the quick progression of innovation, which has opened up additional opportunities for information assortment, investigation, and joint effort.

Additionally, cultural changes and developing social standards assume a part in driving examination toward additional interdisciplinary and socially significant subjects. Financial tensions and subsidizing patterns

likewise impact research draws near, with more noteworthy accentuation put on applied research and substantial results.

Moreover, changes in philosophical points of view, like the developing acknowledgment of the impediments of conventional standards and the significance of embracing different voices and points of view, are driving specialists to take on additional adaptable and comprehensive methodologies. Thus, worldwide difficulties, for example, environmental change, general well-being emergencies, and social imbalance are provoking specialists to team up across disciplines and draw in true issues in imaginative ways.

Overall, a blend of innovative, cultural, financial, philosophical, and worldwide elements is driving the continuous development of examination approaches toward more unique, cooperative, and socially effective undertakings.

#### 1.1.6 Definition and significance of interdisciplinary research

##### **Definition:**

Interdisciplinary research is a process of research where the researcher explores two or more academic disciplines in their studies. The word interdisciplinary refers to the involvement of more than one discipline, which is defined as a field of study or a branch of knowledge. Interdisciplinary research combines various disciplines—academic, artistic, or scientific—to better develop the perspective of the project.

##### **Significance:**

Interdisciplinary research holds significant importance for several reasons:

1. **Holistic Understanding:** Interdisciplinary research allows researchers to approach complex problems from multiple perspectives, leading to a more comprehensive understanding of the issue. By integrating insights from different disciplines, researchers can uncover new connections and relationships that might be overlooked in a single-discipline approach.
2. **Innovative Solutions:** Collaboration across disciplines often sparks creativity and innovation, leading to novel solutions to real-world problems. Drawing on diverse expertise and methodologies can result in breakthroughs and advancements that would not be possible within the confines of a single discipline.
3. **Addressing Grand Challenges:** Many of the most pressing challenges facing society today, such as climate change, public health crises, and poverty, are complex and multifaceted. Interdisciplinary research brings together experts from various fields to tackle these grand challenges holistically, offering integrated solutions that address the root causes and interconnectedness of the problems.
4. **Education and Training:** Interdisciplinary research provides valuable opportunities for education and training, fostering collaboration, critical thinking, and interdisciplinary communication skills among students and researchers. These skills are increasingly important in a rapidly changing and interconnected world.
5. **Enhanced Funding Opportunities:** Funding agencies and organizations are increasingly recognizing the value of interdisciplinary research and offering grants and support for collaborative projects that bridge disciplinary boundaries. Interdisciplinary research can thus open up new funding opportunities for researchers and institutions.

Overall, interdisciplinary research plays a crucial role in advancing knowledge, solving complex problems, and addressing the grand challenges facing society, making it an essential component of modern scientific inquiry.

#### 1.1.7 Examples of Successful Interdisciplinary Projects

Interdisciplinary research includes the incorporation of methodologies and information from various disciplines to resolve complex issues. Instances of effective interdisciplinary research include:

1. **Neuroeconomics:**

This field consolidates insights from financial aspects, brain research, and neuroscience to more readily comprehend dynamic cycles and monetary ways of behaving.

2. **Ecological Investigations:**

Researchers from different disciplines cooperate to address complex natural difficulties, for example, environmental change, by incorporating experiences from biology, geography, financial aspects, and social science.

**3. Biomedical Designing:**

Joining standards of science and designing, this field has prompted headways in clinical gadgets, prosthetics, and medication conveyance frameworks.

**4. Advanced Humanities:**

Researchers combine software engineering with humanities disciplines to dissect and save social relics, texts, and verifiable records utilizing computerized devices and procedures.

Also, we can specify the instance of bioplastics as an illustration which is an arising innovation inside the interdisciplinary field of Bioeconomy. These models feature the assorted scope of subjects and fields that are effectively profited from interdisciplinary exploration draws near.

**1.1.8 Challenges and opportunities in interdisciplinary collaboration**

Interdisciplinary research, which includes collaboration and the mixing of insights from different disciplines, is acquiring noticeable quality as researchers perceive the need to resolve mind-boggling and multi-layered issues that oppose simple order. While interdisciplinary research holds extraordinary commitment for propelling comprehension we might interpret the world, it likewise accompanies its arrangement of difficulties and open doors.

**Opportunities in interdisciplinary collaboration**

1. **Solving Complex Problems:** Interdisciplinary exploration permits specialists to handle complicated, certifiable issues that can't be tended to inside the bounds of a solitary discipline. For example, issues like environmental change, general well-being emergencies, and metropolitan arranging require insights from different fields to foster exhaustive arrangements.
2. **Innovation and Creativity:** When people from various foundations meet up, they offer one-of-a-kind viewpoints and systems that might be of some value. This variety of thought can start imagination and advancement, prompting pivotal revelations and arrangements.
3. **Holistic Understanding:** Interdisciplinary exploration empowers a comprehensive comprehension of a subject by thinking about it from different points. This can prompt more vigorous and nuanced discoveries that record a more extensive scope of elements and factors.
4. **Further developed Critical thinking Abilities:** Participating in interdisciplinary exploration improves critical thinking abilities as scientists figure out how to explore new territory, adjust to various examination strategies, and foster new ways to deal with difficulties.

**Challenges of Interdisciplinary Research**

1. **Communication Barriers:** Viable correspondence between specialists from various disciplines can be challenging. Language, systems, and exploration ideal models might contrast, prompting false impressions and thwarting joint effort.
2. **Resource Allocation:** Interdisciplinary exploration frequently calls for greater investment, financing, and assets than conventional, single-discipline research. Getting satisfactory help can be a hindrance for scientists.
3. **Assessment and Acknowledgment:** Numerous scholarly foundations' financing offices favor conventional, discipline-explicit exploration. Researchers who participate in interdisciplinary work might battle to get acknowledgment, residency, or financing for their endeavors.
4. **Integration of Diverse Perspectives:** Adjusting assorted viewpoints and approaches inside an interdisciplinary group can be a complicated errand. Contrasts in needs and perspectives might prompt struggles if not overseen successfully.

**1.1.9 Impact of technology on research methodologies**

Innovation has changed how researchers direct their investigations. With the web, we currently approach a mind-blowing measure of data right readily available, making it more straightforward to track down pertinent information and assets. High-level apparatuses like sensors and enormous information examination have made it conceivable to gather and investigate tremendous measures of information rapidly and precisely, uncovering

experiences that were recently covered up. Correspondence advancements permit analysts from various areas of the planet to team up consistently, sharing thoughts and discoveries continuously.

Moreover, technologies like simulations and computer-generated reality have opened up new roads for trial and error, while computerized distributing stages have made it simpler to impart research to a worldwide crowd. Notwithstanding, these headways additionally bring new moral contemplations, for example, information protection and the dependable utilization of arising advances, which specialists should explore cautiously. Generally, innovation has changed research strategies, making the interaction more proficient, cooperative, and significant.

#### **1.1.10 Artificial intelligence, machine learning, and big data in research**

##### **Artificial intelligence in research**

Artificial intelligence is transforming scientific research as well as everyday life, from communications to transportation to health care, education and more. Explore what defines artificial intelligence, how it has evolved, and what we might expect from it in the future.

The field of artificial intelligence arose from the idea that machines might be able to think like humans do. It required an analysis of how our brains process information and use it to perform new tasks and adapt to novel situations. Continuing exploration of these concepts has fuelled technological innovation and led to the development of AI applications that use data to identify patterns, carry out predictions, and make decisions. Often these applications are more efficient and precise than humans are- sometimes replacing people to perform repetitive or tedious tasks and calculations. Today, rapid advances in the field have opened new avenues for research and discovery but also raised ethical and safety questions.

##### **Machine learning in research**

Machine learning is a branch of artificial intelligence (AI) and computer science that focuses on the use of data and algorithms to imitate the way that humans learn, gradually improving its accuracy.

Machine learning is an important component of the growing field of data science. Through the use of statistical methods, algorithms are trained to make classifications or predictions and to uncover key insights in data mining projects. These insights subsequently drive decision-making within applications and businesses, ideally impacting key growth metrics. As big data continues to expand and grow, the market demand for new data scientists will increase. They will be required to help identify the most relevant business questions and the data to answer them.

##### **Big data in research**

Big data primarily refers to data sets that are too large or complex to be dealt with by traditional data-processing application software. Data with many entries (rows) offer greater statistical power, while data with higher complexity (more attributes or columns) may lead to a higher false discovery rate. Though used sometimes loosely partly due to a lack of formal definition, the best interpretation is that it is a large body of information that cannot be comprehended when used in small amounts only.

#### **1.2.0 Conclusion**

All in all, investigating new standards in research is significant for staying up with the changing scene of information and advancement. After some time, research approaches have developed from conventional techniques to arising standards, impacted by factors like globalization, mechanical progressions, and interdisciplinary coordinated effort. Embracing interdisciplinary exploration, which coordinates assorted points of view and skill, has become progressively critical in resolving complex issues and driving significant advancement. Fruitful interdisciplinary activities act as convincing instances of the force of joint effort across disciplines.

Despite that, this shift moreover presents hardships, including investigating disciplinary cut-off points and using advancement constantly. Talking about advancement, man-made awareness, simulated intelligence, and tremendous data have improved research frameworks, opening new pieces of information and possible results. In rundown, embracing new ideal models of assessment offers opportunities to drive data and tackle pressing overall troubles even more truly in the high-level period.

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