



# Paradigm Shifts in Management Practices in The Era of Industry 4.0

*Edited by*

**Dr. Sumanta Dutta | Dr. Arabinda Debnath  
Dr. Bidyut Jyoti Kalita**

 **Bharti Publications**

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# Integrated AI in Data Driven Marketing in Organization Performance

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## Abstract

*The organization must utilize big data to engage in (DDM) data-driven marketing for selecting the "right" customers, retaining and growing them, and maintaining "growth" as well as "profitability". Businesses are always coming up with new ways to analyze information as a result of artificial intelligence. AI is so able to analyze customer data that it can indicate the stage in the customer life cycle. The aim of the study was to explore the outcome factors of AI integrated with Data-Driven Marketing in organization performance. This paper discussed the AI advantages in general and the artificial intelligence to support or replace human decision-makers while integrated with data-driven. The five research propositions are focusing on the AI integrated Data-Driven in terms of Customer-centricity, Personalized Marketing, Tracking the Supply, Quick Decision Marking, Understanding the Demand and Opportunities.*

**Keywords:** Artificial intelligence, Customer-centricity, Data-Driven Marketing, Organization Performance, Personalized Marketing.



## Introduction

In today's competitive environment, which is more unpredictable than before, understanding the consumer behaviour is important to the organization's execution process and strategic planning. It is the most crucial aspect of establishing themselves as a market leader. The organization must utilize Big data to engage in (DDM) data-driven marketing for selecting the "right" customers, retaining and growing them, and maintaining "growth" as well as "profitability" (Grandhi, Patwa and Saleem, 2020).

The Internet, Google search engines, and the World Wide Web made connectivity and communication virtually universal. It is now less expensive to store data than paper. Global organizations are increasingly using data-driven technological innovations to enhance value and fulfill consumer expectations (Del Vecchio *et al.*, 2020; De Luca *et al.*, 2021).

Traditional marketing approaches are based on extensive research and can require trial and error. Traditional marketing methods include determining customer requirements, assuming habits and preferences, and then creating a target demographic for marketing. Consumer data is now easily available every time a consumer signs on to the internet. Marketers may develop stronger marketing tactics by obtaining legal and ethical customer data. As a result, a more current strategy is required for today's environment.

The distinction between the two types of marketing is how they reach out to customers. Traditional marketing provides for widespread coverage by delivering the same message and in the same way to millions of people. Data-driven marketing, on the other hand, allows organizations to send targeted messages to specific customers. This message is then presented in a personalized manner, transforming business-customer relationships. The phrase "data-driven" refers to a corporate condition in which data is utilized to drive real-time decision-making and other associated operations.

### AI - Data-Driven Marketing in Organization:

The Data - driven marketing defined as "the activity, collection of institutions, and processes for creating communicating,

delivering, and sharing Data-driven services marketing offers that have value for consumers, clients, partners, and society at large". By using data-driven marketing, it can optimize while carrying out the method of services activities (Kumar *et al.*, 2013). Because of the ever-evolving digital world, businesses can now collect a lot of customer data, have a greater knowledge of the customers' purchase habits, service positioning, product attributes, and provide a wide range of services suited to their demands.

Businesses can tap into market thinking, uncover consumer emotional reactions, and monitor interactions between a brand and its consumers to determine purchase motivation (Wirtz *et al.*, 2013). Since enormous data is difficult to examine, AI makes it easier, quicker, and more efficient. There are still billions of bytes of consumer data to examine, and artificial intelligence's machine learning is the greatest way to do it. As a reason, online businesses must move rapidly on the intelligence gathered through big data research.

Artificial intelligence makes big data processing less labor-intensive and more efficient. Businesses may benefit from machine learning predictive analytics by gaining better and faster insights. Businesses are always coming up with new ways to analyze information as a result of artificial intelligence. AI is so able to analyze customer data that it can indicate the stage in the customer life cycle. Businesses may use this information to customize promotions and marketing to the stage of the life cycle that a customer is in. Data-driven companies arrive at their destination sooner and more efficiently. Well-integrated, high-quality data and algorithmic automation, including artificial intelligence, are examples of data-driven qualities.

### **Objective**

- To explore the outcome factors of AI integrated with Data-Driven Marketing in organization performance.

### **Review of Literature**

In recent years, Researchers and corporate marketers have realized that the usage of the data - drive marketing for decisions making might help marketing shift from a cost center



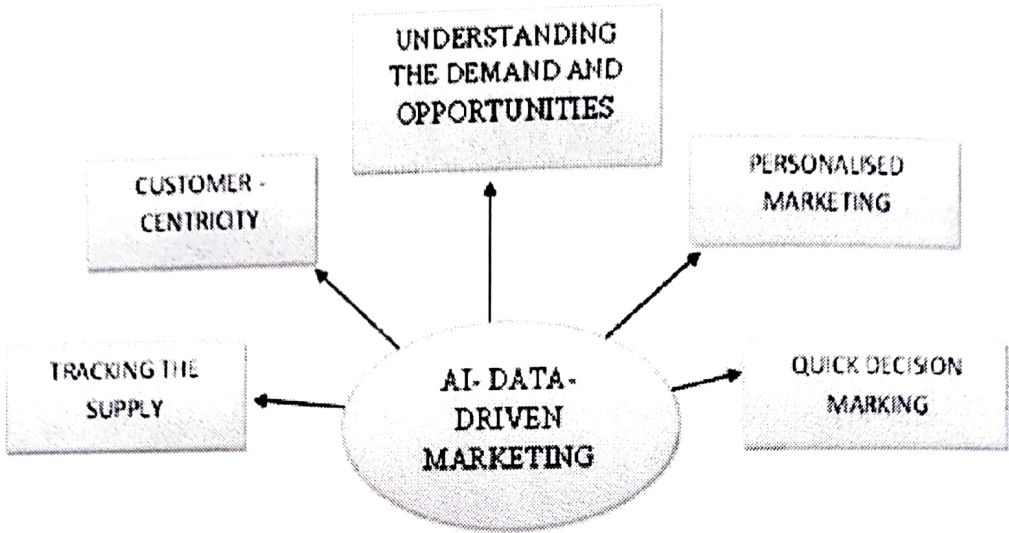
to a value generator. As more companies and organizations discovered the value of leveraging data, the concept of a “data-driven organization” evolved (Kumar *et al.*, 2013). “Analysts advise investments in data-based marketing capabilities and a customer-obsessed orientation as critical defenses against digital disruption, based on the notion that new technologies have empowered customers” (Bernoff *et al.*, 2011).

A data-driven company recognizes the significance of acquiring raw data but also realizes that raw data cannot be utilized to make choices on its own. Being data-driven, on the other hand, entails digging further into the data obtained, improving it, and figuring out how to leverage the knowledge gained from the data to generate growth and profitability (Kumar *et al.*, 2013). It entails working with the appropriate data whenever it is required, and it may be accomplished in a variety of methods, including evaluating demographic data, observing consumer behavior, collecting survey results, and so on. The proliferation of data from a variety of digital sources, including online content like blogs, podcasts, websites, e-mail marketing, social media like Twitter and Face book, mobile ads, and the internet has made it a more challenging task for marketers (Larivière *et al.*, 2013).

“The data-driven strongly relies on a dynamic approach of fulfilling changing customers’ wants, At a time when customer demand for novelty, such as quick fashion, has never been stronger”(Im, Montoya and Workman Jr, 2013). Data-driven tactics, according to Forrester Research, are critical to marketing’s current and future success (Bernoff *et al.*, 2011). When a customer uses a mobile device or a web page to access information, they leave a data trail. AI examines client behaviour, purchasing habits in the past, and the current situation. With each encounter, the systems then deliver hyper-relevant context (Sonawane and Rane, 2019).



## Research Proposition for Addressing the Opportunities:



**Figure 1: Outcome Factors of using AI integrated with Data-Driven in Organization Performance**

### Customer Centricity

The ability of a corporation to grasp its customers' views, situations, and expectations is referred to as customer-centricity. A customer-centric business prioritizes the customer and places them at the center of all decisions to create customer satisfaction, loyalty, and advocacy through the delivery of services, products, and experiences. From high-level C-suite decisions to everyday operational processes, a real customer-centric culture must pervade every part of an organization. To ensure customer satisfaction and retention, gather data about customer demographics, behavior, transactions, and finances across your firm.

A firm must thorough understanding of the consumer. Only the data collected by the firm can provide this insight. Consumer-centric data should go beyond basic contact and demographic information to represent customer interests, behavior, and involvement at all phases of the customer lifecycle. For example in the retail sector, Smaply Software was used to simulate the adoption of data-driven marketing. This software aids in the implementation of customer-centricity (Micheaux and Bosio, 2019)

**Research Proposition 1:** Adoption of AI integrated data-driven marketing will help to implement customer centricity for getting a customer focus better decision.

## PERSONALIZED MARKETING

At its core, personalization entails providing value to someone at exactly the correct time. They may enhance the customer experience by increasing visit engagement and conversion rate, improving product offerings and pricing, improving the quality of data utilized, and improving lead programs and brand preference through targeted marketing.

For customer experience, AI-Data Driven assists in the creation of customer profiles that are available to all customer-facing staff within the business, allowing the company to begin giving each customer a better experience (Artun and Levin, 2015). For example, Netflix and Amazon use chatbots for personalizing the customer shopping experience. In winter clothing shops, they combined a sales and weather database, which contained information like the time of purchase and a consumer's location, as well as meteorological data from those areas throughout the world (Carstensen, 2021).

**Research Proposition 2:** AI integrated Data-Driven marketing helps to provide automated personalized triggers to the customer because it will engage the customer with the organization.

### Tracking the Supply

They have used data-driven AI to support the marketing team in ship movements, tracking global cargo movements, demand-supply scenarios, production-consumption gaps, trade prospects, and the resulting commercial potential at Ben Line Agencies (India) Pvt Ltd (Kulkarni, 2018). Software-as-a-Service (SaaS) brands, if someone has signed up for a service but has yet to use it. The system recognized that action and sent them an immediate reminder automatically. So these are similar strategies to re-engage people (Carstensen, 2021).

Through data-driven decisions, the organization maintains its quick leadership in fulfillment capabilities. They have used data-driven AI to support the marketing team in ship movements, tracking global cargo movements, demand-supply scenarios, production-consumption gaps, trade prospects, and



the resulting commercial potential. "The data-driven strongly relies on a dynamic approach of fulfilling changing customers' wants, At a time when customer demand for novelty, such as quick fashion, has never been stronger"(Im, Montoya and Workman Jr, 2013)

**RESEARCH PROPOSITION 3:** Tracking the movement of the material in supply chain performance has more impact on AI - data-driven marketing.

### **Quick Decision Marking**

Data-driven decision-making is a critical skill for any professional, but it is especially important for those in data-driven professions. The firm began as a mail-based DVD sharing service and, after making a data-driven choice, expanded to streaming content, eventually becoming one of the most profitable businesses in the world.

The AI technology with data-driven analyses recommends foundation and concealer shades for the customer's face. Artificial intelligence (AI) helps to make the entire decision-making process easier, faster, and more personalized. The AI technology with data-driven analyses recommends foundation and concealer shades for the customer's face. Artificial intelligence (AI) helps to make the entire decision-making process easier, faster, and more personalized. The most important element of the buying decision may be aided by AI. They can be instructed by automated assistants to narrow down their options when making such a decision. This simplifies the process by recommending goods depending on the customer's preferences and fit (Sonawane and Rane, 2019).

**Research Proposition 4:** AI integrated data-driven mostly impacted both firm and customer decision making.

### **Understanding the Demand and Opportunities**

AI can help salespeople prioritize prospects and make relevant product or service recommendations using data science. This frees up salespeople's time to focus on the art of selling and building connections that lead to new business prospects. By combining data and analytics to improve sales effectiveness, (AI)-enabled sales tools have made predictive selling a reality. It helps organizations make faster decisions, especially in response to new data or rising competitive threats, allowing them to reap

the advantages of stronger market positions sooner. It helps organizations make faster decisions, especially in response to new data or rising competitive threats, allowing them to reap the advantages of stronger market positions sooner. By using social media data like comments, transactions, check-ins, updates, and photos can get customer insights, by using the insights organization can focus on new product devolvement and demands (Wieneke and Lehrer, 2016)

**Research Proposition 5:** Data-driven insights give a better understanding of the market demand and business opportunities.

### Conclusion

The organization must utilize big data to engage in (DDM) data-driven marketing for selecting the "right" customers, retaining and growing them, and maintaining "growth" as well as "profitability". Businesses are always coming up with new ways to analyze information as a result of artificial intelligence. AI is so able to analyze customer data that it can indicate the stage in the customer life cycle. This present study was to determine the outcome factors of AI integrated with Data-Driven Marketing in organization performance.

**Table 1: A summary of Research Propositions**

S. No	Factors	Research Proposition
1	Customer Centricity	Adoption of AI integrated data-driven marketing will help to implement customer centricity for getting a customer focus better decision.
2	Personalized Marketing	AI integrated Data-Driven marketing helps to provide automated personalized triggers to the customer because it will engage the customer with the organization.
3	Tracking the Supply	Tracking the movement of the material in supply chain performance has more impact on AI - data-driven marketing.
4	Quick Decision Marking	AI integrated data-driven mostly impacted both firm and customer decision making.
5	Understanding the Demand and Opportunities	Data-driven insights give a better understanding of the market demand and business opportunities.



The five research propositions are focusing on the AI integrated Data-Driven in terms of Customer-centricity, Personalized Marketing, Tracking the Supply, Quick Decision Making, Understanding the Demand and **Opportunities**. Although the propositions are aimed primarily at research in outcome Factors of using AI integrated with Data-Driven in Organization Performance.

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