

# **INDUSTRY 4.0**

EMERGING TECHNOLOGIES IN DIGITAL ERA

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**ISBN: 978-93-7424-807-2**

**Price: ₹1310.00**

Publishing Year 2026

Acceptance Date: 05 February 2026

Publication Date: 27 February 2026

Published by:

**Crown Publishing**

Head Office: 3rd Floor, B.incube, Bilaspur,

Chhattisgarh 495006

Phones: +91 77228 14335

Email: [publish@crownpublishing.in](mailto:publish@crownpublishing.in)

Website: [www.crownpublishing.in](http://www.crownpublishing.in)

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**Editors:**

**Dr. Rajesh Kumar**

**Department of Physics,**

**Government Degree College, Nanauta, Saharanpur**

**Email- prof.rajeshgdc@gmail.com**

**Dr. Krishan Kumar**

**Department of Computer Science**

**Gurukula Kangri (Deemed to be University),**

**Haridwar, 249404, Uttarakhand, India**

**krishan.kumar@gkv.ac.in**



# Cloud Computing in Digital Marketing

Dr. Rajdeep Singh<sup>1</sup>, Dr. Amit Bhatnagar<sup>2</sup>, Dr. Sunil Kumar<sup>3</sup>  
<sup>1,2,3</sup>Assistant Professor, School of Computer Science,  
and Applications, IFTM University,  
Moradabad, U.P, India

<sup>1</sup>singh.rajdeep1@gmail.com

<sup>2</sup>amitbhatnagar1984@rediffmail.com

<sup>3</sup>skiftm@gmail.com

**Corresponding Author:** Dr Rajdeep Singh

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## Abstract

The era of "cloud computing" that I refer to has evolved from a mere effective tool into an integral element of the move from classic manufacturing to Digital Manufacturing Systems (DMS). Through flexible computation resources, low latency figures synchronicity and high performance analytics, cloud platforms make it possible for cyber-physical systems, high-fidelity digital twins, and supply chains that are horizontally integrated to merge smoothly. This chapter explores strategic deployments of cloud infrastructure within industrial contexts, in particular their potential to maximize throughput, agility and cross-disciplinary cooperation among global manufacturing ecosystems. We discuss critical use case such as Cloud-MES as Transitioning Traditional Manufacturing Execution Systems to the edge and cloud for improved visibility, Predictive Analytics as Leveraging data-driven insights to predict system breakdowns and reduce avoidable downtime, Industry 4.0 Integration as make interaction between IoT, AI and cloud storage to establish self-optimizing production loop. This chapter thus defines cloud computing as the core driver of operational quality, a driver of market competitiveness and a pillar of sustainable industrial growth in the digital age.

**Keywords:** Cloud computing, Cloud storage, Cloud computing applications, digital marketing