



**EHS**

**Digitalization:**

**Transforming**

**Safety &**

**Sustainability**

**Case Study**

[www.sparrowrms.in](http://www.sparrowrms.in)

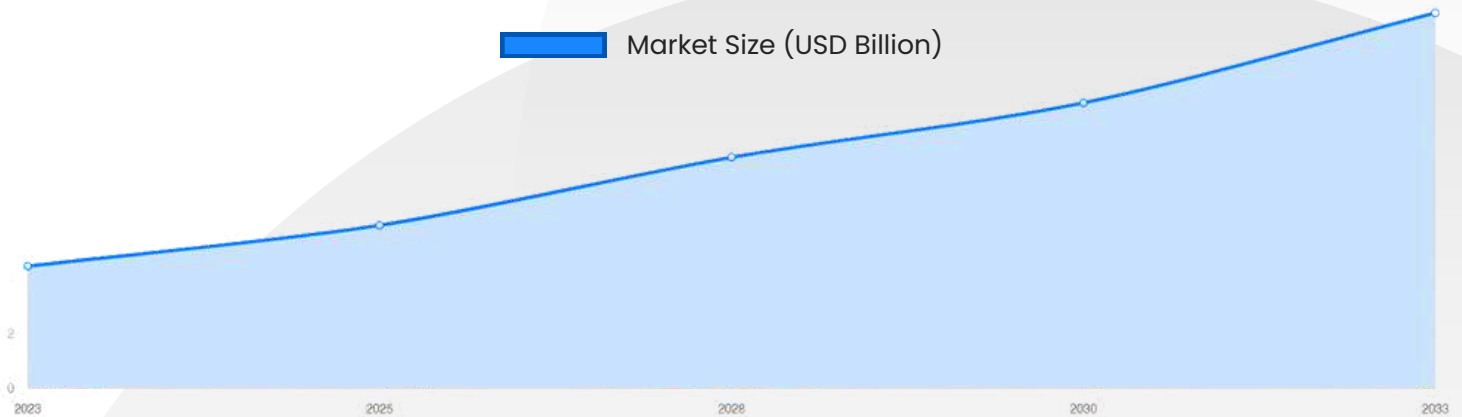
The landscape of Environment, Health, and Safety (EHS) is undergoing a seismic shift. Driven by technology, regulatory demands, and a growing focus on sustainability, EHS is evolving from a compliance checkbox to a strategic business imperative.

**6,500+**

Workers lost their lives in Indian industrial settings over five years (as of 2021) due to substandard safety protocols, highlighting the urgent need for transformation.

# The Global Surge: EHS Digitalization is Booming

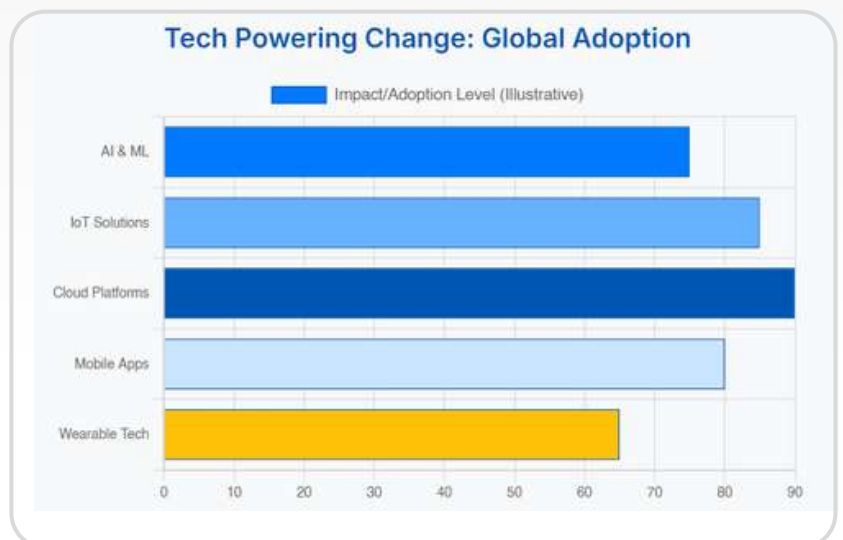
## Global EHS Software Market Growth



The global EHS software market is witnessing significant expansion. Projections vary, with one estimate (Source [4]) showing growth from USD 4.5 Billion in 2023 to USD 13.8 Billion by 2033 (CAGR 12.3%). Other sources show CAGRs ranging from 6.66% to 14.6%, underscoring strong overall growth.

### Why the Rush? Key Drivers

- Increasing Regulatory Pressures & ESG Focus
- Need for Real-Time Data & Predictive Insights
- Operational Efficiency & Process Streamlining
- Enhanced Data Management & Centralization
- Post-Pandemic Push for Digital Health & Safety



AI, IoT, Cloud Computing, Mobile Solutions, and Wearables are key technologies revolutionizing EHS management.

# Industry Segments

Cloud Deployment

**67.5%**

Share in 2023, driven by flexibility and cost-efficiency.

Services Segment

**61.3%**

Led market share in 2023, for tailored solutions.

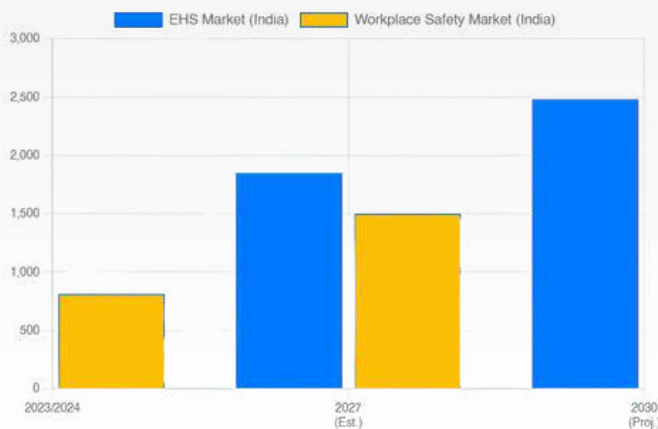
Top Industry Sector

**27.3%**

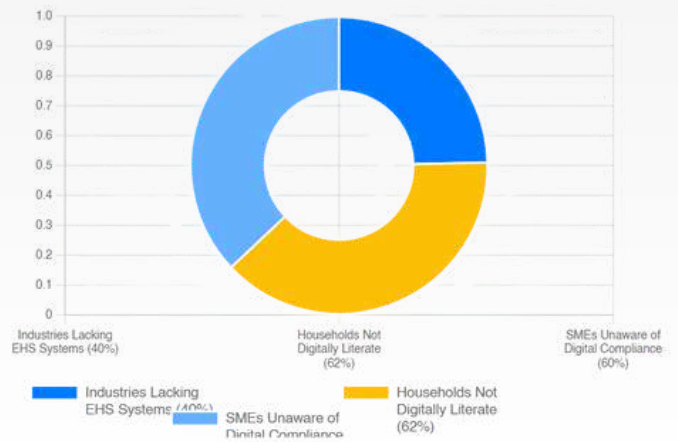
Revenue share by Chemical & Petrochemical sector.

# India's Journey: Opportunities and Hurdles

India's EHS Market Growth (USD Million)



Digital India, EHS Gaps



India's EHS market is projected to reach \$2,481.9M by 2030 (CAGR 9%), with Workplace Safety market expecting \$2,598.5M by 2030 (CAGR 22.1%).

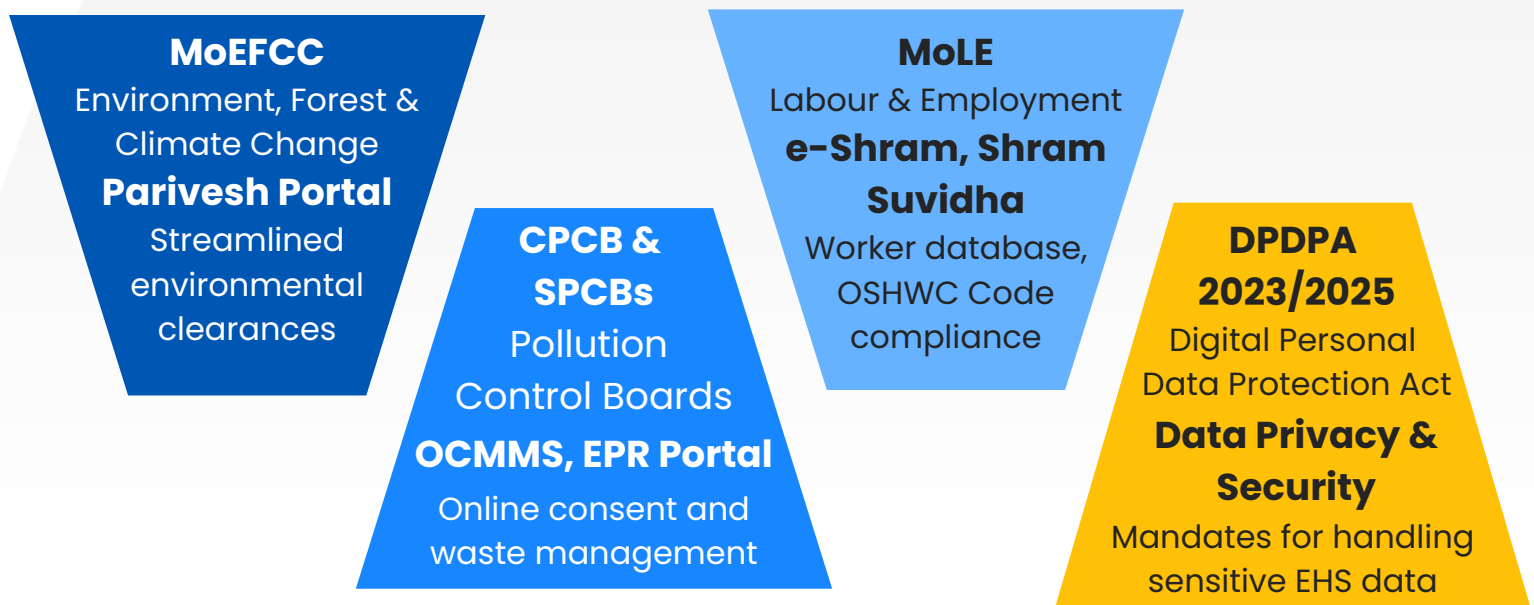
Key challenges include lack of comprehensive EHS systems, digital literacy, and SME awareness and resources.

## Forces Shaping India's EHS Tech Adoption

- Rapid Industrialization & Urbanization
- Increasing Regulatory Scrutiny & ESG Focus (SEBI Mandates)
- Government's 'Digital India' Vision
- Economic Growth & Business Continuity Needs
- Lessons from the Pandemic

# Navigating the Rules: Key Digital Mandates in India

India's regulatory framework is increasingly pushing for digital compliance through various portals and acts. This structured approach aims to enhance transparency and efficiency in EHS management.



This simplified flow illustrates key governmental bodies and their digital initiatives driving EHS compliance. Effective digitalization must navigate these regulations, especially data privacy.

# Spotlight on Sparrow Infinity: Pioneering EHS Tech in India

## Vision: Manufacturing Excellence

Sparrow Infinity empowers organizations through digital transformation, leveraging its flagship IndustryOS™, India's first digital twin platform, augmented with AI/ML.



## The Sparrow Edge: AI & Digital Twins

Unique integration of digital twins with Process, Quality, and Maintenance solutions, providing AI-backed insights, real-time data, and mobile/offline capabilities for proactive EHS management.

### 415+

Clients impacted by services & technologies  
(Technology division serving 45+ clients with customizable solutions by Oct 2024)

## Comprehensive EHS Solutions

PSM Software

HIRA Software

Incident Management

Audit Management

Compliance Software

Permit To Work (PTW)

LOTO Management

EHS KPI Dashboard

# The ROI of Digital EHS: Tangible Benefits

**\$2-\$6**

Saved for every \$1 invested in safety by preventing injuries and lost work.

**20%**

Reduction in injury and illness costs with strong EHS management.

**15%**

Drop in operational costs by automating EHS tasks.

**14%**

Increase in productivity with an EHS management system.

**20%**

Reduction in workplace incidents using AI-driven EHS solutions.

**30%**

Reduction in incidents with advanced data analytics in EHS programs.

## The Path Forward: **Embracing a Safer, Digital Future**

EHS digitalization is not just a trend; it's a fundamental transformation towards safer, more sustainable, and resilient operations globally and in India. By leveraging technology, fostering digital literacy, and prioritizing strategic EHS investments, businesses can unlock significant value while protecting their people and the planet.

This infographic is based on the "EHS Digitalization: A Global Overview and India's Strategic Roadmap, Featuring Sparrow Infinity" report. For detailed data and sources, please refer to the full report.

A worker wearing a clear hard hat is shown in profile against a blue background. A vertical bar with a color gradient from yellow at the top to green at the bottom is overlaid on the image. The word "HUB" is written in white capital letters below the bar.

**HUB**

**sparrow**  **row**

<https://infinity.sparrowrms.in/ehs-management/>