

# Emotional Quotient and Industry 5.0: A Study About Work Place Ambiguity or Strategic Shift

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**Abstract:** *In the fast-paced Business and technological advancement bring the rapid transformation of workplaces as driven by digitalization, automation, and human-centric innovation. INDUSTRY 5.0 has introduced a new paradigm shift from emotional quotient to technological intelligent shift. While technology is at the forefront of this transition, Emotional Quotient (EQ) has emerged as a critical differentiator in navigating organizational ambiguity and complexity. This article explores the intersection of Emotional Intelligence and Industry HR 5.0, examining whether the current workplace evolution represents uncertainty and ambiguity or a deliberate strategic shift toward human-centric growth.*

**Keywords:** Emotional Intelligence (EI), Industry 5.0, Industry 4.0, Emotional Quotient (EQ), Inspirational motivation, Individualized consideration & Intellectual stimulation

## 1. Introduction

In the fast paced Business and technological advancement bring the rapid transformation of workplaces as driven by digitalization, automation, and human-centric innovation. **INDUSTRY HR 5.0** has introduced a new paradigm shift from emotional quotient to technological intelligent shift. While technology is at the forefront of this transition, Emotional Quotient (EQ) has emerged as a critical differentiator in navigating organizational ambiguity and complexity.

Over the past few years there has been remarkable research studies in Emotional Intelligence and its impact on organisational performance. It has been learned that since Emotional Intelligence is not a trait, appropriate intervention programmes can inculcate a combination of dynamic skills required for the organisational success. Emotional Intelligence is an essential factor to be considered in an organizational setup. In today's dynamic and highly competitive organizational environment.

Furthermore, the emergence of Industry 5.0 represents a paradigm shift from technology-centric production (Industry 4.0) to a **human-centric, sustainable, and resilient industrial model**. This transition emphasizes collaboration between humans and intelligent systems, placing emotional and social competencies at the core of workplace effectiveness.

Simultaneously, modern workplaces are increasingly characterized by **ambiguity, uncertainty, and rapid change**, making Emotional Quotient (EQ) a critical capability for employees and leaders.

## 2. Literature Review

The concept of Emotional Intelligence (EI), extended prominence through the work of Daniel Goleman, who popularized the idea that the ability to understand and manage emotions plays a significant role in personal and professional success. According to Goleman (1995), Emotional Quotient

(EQ), has become a crucial concept in organizational behaviour and human resource management

**Cooper and Sawaf (1997)** highlighted the role of emotional intelligence in **organizational leadership and decision-making**. Their study suggested that emotionally intelligent leaders are better able to manage workplace stress and build strong professional relationships within organizations.

Research of Mayer, Salovey, and Caruso (2000), emphasized the cognitive role of emotions in improving decision-making and workplace effectiveness.

Numerous empirical studies have examined the relationship between emotional intelligence and employee performance. Research shows that EI significantly contributes to employee productivity, leadership effectiveness, and job satisfaction. Employees with higher emotional intelligence tend to demonstrate improved decision-making skills, better teamwork, and enhanced communication abilities.

Basing on study of emotional intelligence and workplace outcomes, it has been found that a strong relationship between EQ and leadership effectiveness, is always being triggered a positive node towards the workplace outcomes. Leaders with high emotional intelligence demonstrate better communication, conflict management, and decision-making abilities (**George, 2000; Côté, 2014**). Furthermore, emotionally intelligent leaders foster trust, engagement, and organizational commitment among employees (**Mayer, Salovey, & Caruso, 2004**).

Emotional intelligence enhances adaptability in uncertain and changing environments by fostering psychological resilience and adaptive performance (**Carmeli, 2003**), while also promoting greater creativity and innovation through improved emotional regulation and cognitive flexibility (**Jafri, 2012**).

Industry 5.0 emphasizes collaboration between humans and machines, focusing on personalization and sustainability. The **European Commission (2021)** describes it as a shift toward integrating human creativity with advanced technologies.

According to **Nahavandi (2019)**, the future of work requires leaders to combine technological competence with emotional and social intelligence. Similarly, **Longo et al. (2020)** highlight that Industry 5.0 promotes employee well-being and human-centered design.

However, **Jordan, Ashkanasy, and Hartel (2002)** argue that emotional intelligence can mitigate Role Ambiguity and Its Effects in workplace. Japan has defined Industry 5.0 as ‘Society 5.0’ or a ‘human touch’ revolution, defining it as: “A human-centered society that balances the economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space”. The phenomenon visualizes a forward-looking society without information stagnation. Technical skills will be far less important in the future, with personal skills becoming more critical (Mohd & Abid, 2020). These personal skills are referred to as soft skills. Soft skills enhance the workforce (Neves, 2021). In addition to technology, digital, and data acumen, soft skills are also going to be increasingly in demand (Moran, 2019). Soft skills include the art of communication and also the ability to think in a creative and critical manner.

### 3. Objectives of the Study

The primary objectives of this study are:

- 1) To examine the role of Emotional Quotient in the context of INDUSTRY 5.0.
- 2) To analyze how EQ influences workplace behavior, leadership, and decision-making.
- 3) To identify whether the increasing focus on EQ creates ambiguity in employee roles and expectations.
- 4) To evaluate whether Industry 5.0 represents a strategic shift toward human-centric organizational development.

### 4. Methodology

In order to reach the stated objectives, a systematic review of literature is conducted and data are collected about the topic “emotional quotient and industry 5.0: a study about work

place ambiguity or strategic shift from secondary sources. This article employs a methodology to review the articles cited in the databases Sage, Springer link, Research gate, Taylor and Francis Online, Science Direct, JSTOR, Wiley Online library and Emerald with the role of emotional quotient and industry 5.0: a study about work place. Hence, the study for this article becomes desk research rather than a survey or any other mode of researching.

### 5. Emotional Intelligence in the Context of Industry 5.0

Industry 5.0 represents a shift toward **human-centric and technology-integrated workplaces**, where humans collaborate with advanced technologies such as artificial intelligence and robotics. In this environment, emotional intelligence becomes increasingly important because technological advancement alone cannot address complex human interactions and workplace challenges.

Studies focusing on Industry 5.0 highlight that emotional intelligence strengthens workforce capabilities by improving communication, decision-making, and emotional regulation. Organizations operating in Industry 5.0 require employees who can manage their emotions effectively while working alongside intelligent machines and digital systems. Emotional management and emotional control have been found to significantly influence organizational performance in this new industrial environment. Industry 5.0 marks an evolution from Industry 4.0 by integrating advanced technologies such as artificial intelligence, IoT, and big data while taking a more human-oriented and sustainability-oriented approach. This new industry framework is profoundly changing operational excellence practices, driving agility, resilience, continuous innovation, and increased collaboration with customers.

Furthermore, Industry 5.0 emphasizes employee well-being, human creativity, and collaboration, which reinforces the strategic importance of emotional intelligence in human resource practices.

**Table 1: Emotional Intelligence in Industry 5.0**

Industry	Context in Industry 5.0	Emotional Intelligence Skills	Practices / Applications
HealthCare	Human + AI diagnosis and patient care	Empathy, active listening, emotional regulation	Doctors communicate AI results compassionately; nurses support patient emotions
Manufacturing (Smart Factories)	Human-robot (cobot) collaboration	Adaptability, teamwork, conflict management	Reskilling workers; reducing fear of automation through communication
IT & Software	AI-assisted development, remote global teams	Self-awareness, virtual empathy, social skills	Managing burnout; effective remote communication; cross-cultural teamwork
Education (EdTech)	AI-based learning with human teachers	Motivation, emotional awareness, empathy	Teachers personalize learning and reduce student anxiety
Customer Service & Retail	AI chatbots + human interaction	Empathy, emotional awareness, relationship management	Handling complaints; improving customer satisfaction and loyalty
Automotive (Smart Vehicles)	Autonomous systems interacting with humans	Trust-building, ethical thinking, emotional design	Designing calming interfaces; improving user confidence in automation
Leadership & Management	Managing human + AI workforce	Self-awareness, empathy, motivation	Supporting employees during digital change; improving workplace culture

Source: Own

#### 5.1 Influence of EQ on Workplace Behaviour,

Extensive research has been conducted on emotional intelligence across various fields to identify the impact of EQ on Workplace Behaviour. Empirical research consistently

demonstrates that emotional intelligence a factor with potential to contribute to more positive attitudes, behaviours and work outcomes. For instance, (Joseph & Newman, 2010) found that emotional intelligence is a key foundation of

successful job performance. EQ significantly shapes individual workplace behaviour, including emotional regulation, decision-making, and stress management.

According to **Peter Salovey and John D. Mayer (1990)**, emotionally intelligent individuals can effectively monitor and regulate their emotions, leading to more rational and adaptive behaviour.

Research by **Goleman (1998)** suggests that employees with high EQ can display self-control, switch workplace pressure effectively & also exhibit higher motivation and commitment.

Furthermore, **Law, Wong, and Song (2004)** found that EQ positively affects job performance through better emotional self-regulation.

**5.2 Influence of Industry 5.0 on Workplace Behaviour**

Industry 5.0 represents a transformative phase in industrial development that emphasizes **human-centricity, sustainability, and collaboration between humans and intelligent machines**. The concept was formally articulated by the **European Commission (2021)**, which highlighted the

need to align technological advancement with human values and well-being.

This shift significantly influences workplace behaviour by redefining how employees interact, perform tasks, and adapt to evolving organizational environments.

Industry 5.0 promotes employees empowerment and enhanced job

- Employee empowerment
- Personalization of work
- Enhanced job satisfaction

Employees are no longer passive participants but active contributors in value creation.

Industry 5.0 marks a significant paradigm shift from the technology-centric automation of Industry 4.0 to a **human-centric, sustainable, and resilient** model, where humans and machines work collaboratively. This evolution fundamentally alters workplace behavior, shifting roles from manual labor to supervisory, creative, and value-added tasks.

**5.3 Examples of Companies Adopting Industry 5.0 & Impact on Workplace**

Company	Workplace Behaviour
BMW Group	Has integrated collaborative robots (cobots) to work alongside human employees. These robots assist with physically demanding tasks, such as applying adhesives and assembly, enhancing productivity while allowing human workers to focus on complex tasks requiring dexterity.
SEAT (Automotive)	As a leader in digital transformation, SEAT uses cobots, AI, VR, and Big Data on assembly lines to empower workers, featuring a dedicated biomechanics lab to design ergonomic workstations, putting employee well-being at the center.
ArcelorMittal (France)	Launched the "5G Steel" project, deploying a massive private 5G network. This enables workers to use tablets for instant data collection, real-time steel composition monitoring, and safer, faster maintenance procedures.
Repsol	Implemented blockchain and robotic process automation (RPA) in its "Block Lab" project, where cobots handle logistical tasks such as waste deposition and raw material delivery, enabling employees to focus on data analysis and lab visualization.

Source: Own

**5.4 Influence of EQ on Leadership**

Emotional intelligence (EI) has emerged as a pivotal factor in shaping effective leadership and decision-making in today's complex and dynamic organizational landscape. It is widely agreed that Emotional intelligence is a vital factor that distinguishes exceptional leaders from average ones, and its influences on decision making and how handle workplace stress.

Emotional Intelligence (EQ) is a critical driver of effective leadership and sound decision-making, often surpassing IQ in determining success. It enables leaders to manage stress, foster empathy, resolve conflict, and build trust, leading to better team engagement and reduced turnover. High EQ facilitates rational, objective decisions by managing personal biases, even under pressure. **John D. Mayer, Peter Salovey, and Caruso (2004)** emphasize that emotionally intelligent leaders are better at perceiving and managing emotions, which enhances interpersonal effectiveness.

Similarly, **George (2000)** argues that EQ contributes to leadership by fostering trust, cooperation, and a positive organizational climate.

According to **Barling, Slater, and Kelloway (2000)**, leaders with higher emotional intelligence are more likely to exhibit transformational behaviours such as: Inspirational motivation, Individualized consideration & Intellectual stimulation. These behaviours enhance employee engagement and organizational performance.

**Ashkanasy and Daus (2005)** further suggest that emotionally intelligent leaders can align employee emotions with organizational goals, making them more effective in change management.

**5.5 Influence of Industry 5.0 on Leadership**

Industry 5.0 shifts leadership from pure automation (Industry 4.0) to a human-centric, sustainable, and resilient approach, balancing AI with human intuition. Leaders now focus on human-machine collaboration, fostering employee creativity, and implementing ethical, sustainable strategies to create long-term value over short-term profits.

According to research study conducted by Stijn Baas, University of Twente that Industry 5.0 has been impacted on the skillset and leadership role of middle managers in the manufacturing industry. The results of this study highlighted

that the skills and leadership style that have been adopted in Industry 4.0 are not replaced; these still are useful and are present in the new industry. This study has found that instead of focusing on profit-driven automation and efficiency improvements, like in Industry 4.0, Industry 5.0 wants middle managers to adopt a more holistic view in their job by focusing on human centricity, sustainability, and resilience in their production processes. Additionally, this study has found that Industry 5.0 requires middle managers to adopt coaching, empathy, and situational leadership into their leadership style.

**5.6 Influence of EQ on decision making**

Decision-making is not purely rational; it is significantly influenced by emotions.

**Antonio Damasio (1994)**, through his somatic marker hypothesis, demonstrated that emotions play a crucial role in guiding decision-making processes. Emotionally intelligent individuals have been recognized through integrate emotional and cognitive information and also make balanced and ethical decisions whereas avoid impulsive or biased judgments.

Similarly, **Mayer, Salovey, and Caruso (2004)** emphasize that emotional understanding enhances judgment and problem-solving abilities. In complex and uncertain environments, EQ becomes even more important for strategic decisions.

**Sadler-Smith and Shefy (2004)** argue that intuition, which is closely linked to emotional awareness, plays a vital role in managerial decision-making. Furthermore, **Cherniss (2010)** also highlights that emotional competence improves decision quality under pressure.

**5.7 Influence of Industry 5.0 on decision making**

Industry 5.0 influences decision-making by transitioning from fully automated, AI-driven processes (Industry 4.0) to **human-centric collaboration**, where human creativity and critical thinking are combined with the precision of AI and robots. This shift changes decisions from focusing only on speed and cost to prioritizing sustainability, customization, and workforce well-being.

Types of Decisions	Effect
Human-in-the-Loop Decisions	Decision-making becomes collaborative rather than automated. Humans use AI to analyze large data sets but retain final authority, blending data insights with intuition and experience.
Hyper-Customization Decisions	Manufacturers shift from "mass production" to "mass customization." Decisions involve leveraging AI to customize products in real time based on specific customer needs.
Sustainability-Led Decisions	Environmental impact is now a top-level decision factor. Decisions focus on circular economy principles, such as choosing materials that can be recycled or reducing waste through AI-driven demand forecasting.
Resilience and Agility	Decisions are aimed at creating adaptable supply chains, such as shifting production closer to consumers (nearshoring) to mitigate disruptions.
Worker-Centric Optimization	Instead of asking "what can workers do with new technology," decisions are driven by "what technology can do for workers," such as adopting tools that improve safety or reduce physical fatigue.

Source: Own

**5.8 Workplace Ambiguity in the Digital Era**

Workplace ambiguity refers to unclear roles, rapid changes, shifting expectations, and decision-making uncertainty. Contributing factors include:

- Remote and hybrid work models
- AI-driven performance monitoring
- Cross-functional collaboration
- Gig economy structures
- Continuous upskilling demands

**5.9 Influence of EQ on Workplace Ambiguity**

Workplace ambiguity is an inherent feature of modern organizations characterized by unclear roles, uncertain expectations, and rapidly changing environments. Emotional intelligence has emerged as a key competency that enables individuals to navigate such uncertainty effectively. The interaction between EQ and ambiguity determines how individuals interpret and respond to uncertain situations. Several research studies have been revealed that, EQ demonstrates greater potentiality to deal with workplace ambiguity in such ways i.e Coping with Uncertainty, helping to make balanced decisions by integrating emotional and cognitive inputs. enhancing resilience and sustaining performance,

**5.10 Influence of Industry 5.0 on Workplace Ambiguity**

The influence of Industry 5.0 on workplace ambiguity is paradoxical. On one hand, it increases uncertainty due to rapid technological changes and evolving roles. On the other hand, it provides tools and frameworks that help individuals navigate complexity more effectively. Organizations must balance technological integration with clear communication and employee support systems.

Industry 5.0 significantly reshapes workplace ambiguity by introducing both challenges and opportunities. While it increases complexity in roles and decision-making, it also enhances clarity through human-centric approaches and advanced technologies. Organizations that proactively address ambiguity through training, leadership, and communication strategies will be better equipped to succeed in the Industry 5.0 era.

**5.11 Industry 5.0: Strategic Shift or Reactive Adaptation?**

The integration of EQ into Industry strategy suggests that Industry 5.0 is not merely a response to chaos but a **strategic redefinition** of organizational priorities.

**Indicators of a Strategic Shift:**

- 1) Employee Well-being as Core KPI
- 2) Human-AI Collaboration Frameworks
- 3) Emotionally Intelligent Leadership Models
- 4) Continuous Learning Culture
- 5) Diversity, Equity & Inclusion (DEI) Integration

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Organizations increasingly recognize that technological efficiency without emotional intelligence results in disengagement and high turnover. Industry 5.0 reframes people not as resources but as **strategic partners**.

**5.12 Challenges in Implementing Industry 5.0** Despite its promise, Industry 5.0 faces challenges:

- Measuring EQ objectively
- Balancing automation with empathy
- Overcoming resistance to cultural change
- Ensuring ethical AI integration
- Maintaining authentic human connections in virtual settings

These challenges often create ambiguity; however, they also signal systemic transformation rather than disorder.

## 6. Conclusion

The integration of Emotional Quotient in Industry 5.0 is not inherently problematic. While it may introduce ambiguity in roles and expectations, it ultimately represents a strategic shift toward more human-centric and resilient organizations.

The challenge lies in implementation. Organizations must ensure that EQ enhances clarity rather than obscuring it. When aligned with clear structures, EQ becomes a powerful driver of organizational success.

The convergence of Emotional Quotient and Industry 5.0 reflects a fundamental evolution in workplace philosophy. What appears as workplace ambiguity may, in fact, represent a **strategic shift toward human-centered resilience and sustainable growth**.

Industry 5.0 does not diminish the importance of technology—it repositions it as an enabler of human potential. Emotional intelligence becomes the bridge that connects digital capability with organizational purpose.

In this emerging paradigm, the future of work belongs not to the most technologically advanced organizations alone, but to those that harmonize intelligence—both artificial and emotional.

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